PRIMERS

ADHESIVES FOR TILES

FAÇADE PAINTS

INTERIOR PAINTS

WASHING AND MODIFYING AGENTS

ATLAS GOLDEN AGE

ADHESIVES FOR INSULATION SYSTEMS

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TUBĄDZIN
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ADHESIVES FOR TILES

ADHESIVES FOR TILES

Classification of adhesives for tiles

Adhesives for tiles are classified and labelled in accordance to PN-EN 12004+A1:2012 standard. The standard lists 3 types of adhesives:
C – cement adhesives
D – dispersion adhesives
R – adhesives based on reactive resins

Each of three types of adhesives can be offered in various types (classes), referring to additional requirements:
1 – **standard setting adhesives;** adhesion after 28 days ≥ 0.5 N/mm^2
2 – **adhesives of improved parameters;** adhesion after 28 days ≥ 1.0 N/mm^2
F – **fast-setting adhesives;** adhesion after 6 hours ≥ 0.5 N/mm^2
T – **adhesives with reduced slip;** slip not exceeding 0.5 mm
E – **adhesives with extended open time;** adhesion after 28 days ≥ 0.5 N / mm^2, despite the fact that time between application of adhesive and placing a tile is not longer than 30 minutes

Adhesive class also shows its reaction to fire in accordance to PN-EN 13501-1 standard. All ATLAS adhesives are of A class, which means they do not have or have insignificant impact on fire spread.

Adhesives types and classes are shown in the form of pictograms:
Cement adhesive, fast-setting, of reduced slip and extended open time.
Example: ATLAS MIG 2
Type and class: C1FTE

The second parameter describing an adhesive is its transverse deformability in accordance to PN-EN 12002 standard.
This class specifies permissible level of deflection of surface with set adhesive causing no damage to it. Class S1 assumes permissible deflection within 2.5-5 mm range, S2 – above 5 mm.
Example: ATLAS PLUS
Type and class: C2TE
Deformability: S1

Adhesive selection

Before fixing ceramic or natural stone cladding, one should pay particular attention to a few elements significant for proper selection of an adhesive.

They are as follows:
substrate – material which it is made of, its absorptiveness, bonding, cleanliness, stabilization degree and possible deformability,
tiles – type (gres-porcelain, terracotta, glazed, stone), size (mosaic, large size), absorptiveness and resistance to discolouration,
conditions of cladding use – influence of atmospheric factors (indoors or outdoors), location (wall or floor), type and range of live load (foot or vehicle traffic), frequency and range of temperature changes.

TABLE 1.1

											
PRODUCT	ATLAS ATUT	ATLAS ELASTIFIED ADHESIVE/ AVAL KM 11 Plus	ATLAS MIG 2	ATLAS STANDARD WHITE	ATLAS ELASTYK/ AVAL KM 16	ATLAS GEOFLEX	ATLAS PLUS/ AVAL KM 17	ATLAS PLUS WHITE/ AVAL KM 15	ATLAS PLUS EXPRESS	ATLAS PLUS MEGA	ATLAS PLUS MEGA WHITE
	Adhesive for indoor and outdoor use	General purpose adhesive	Fast setting adhesive	White adhesive	Flexible adhesive	Flexible adhesive	Deformable S1 adhesive	Deformable S1 white adhesive	Deformable S1 fast setting adhesive	Deformable S1 adhesive for large size floor tiles	White, deformable S1 adhesive for large size floor tiles
Reference document	PN-EN 12004+A1:2012										
Adhesive type and class	C1T	C1TE	C1FTE	C1T	C2TE	C2TE	C2TES1	C2TES1	C2FTES1	C2ES1	C2ES1
TECHNICAL DATA											
Mixing ratio water/dry mix [l/kg]	0.21-0.24	0.21-0.24	approx. 0.22	0.26-0.28	0.25-0.27	0.26-0.33	0.31-0.33	0.26-0.28	0.21-0.23	0.21-0.24	0.21-0.24
Min/max adhesive thickness [mm]	2-10	2-10	2-5	2-10	2-10	2-15	2-10	2-10	2-5	4-20	4-20
Temperature of application [°C]	5-25	5-25	5-25	5-25	5-25	5-35	5-25	5-25	5-25	5-25	5-25
Maturing time [min]	5	5	5	5	5	5	5	5	5	5	5
Pot life [h]	4	4	1	3	4	4	5	4	1	4	4
Open time [min]	20	30	30	20	30	30	30	30	30	30	30
Adjustability time [min]	10	10	10	10	10	20	10	10	10	10	10
Floor access [h]	after ca. 24	after ca. 24	after ca. 4	after ca. 24	after ca. 24	after ca. 12	after ca. 24	after ca. 24	after ca. 4	after ca. 24	after ca. 24
Grouting [h]	after ca. 24	after ca. 24	after ca. 4	after ca. 24	after ca. 24	after ca. 12	after ca. 24	after ca. 24	after ca. 4	after ca. 24	after ca. 24
Full load	after ca. 3 days	after ca. 3 days	after ca. 3 days	after ca. 3 days	after ca. 3 days	after ca. 3 days	after ca. 3 days	after ca. 3 days	after ca. 3 days	after ca. 3 days	after ca. 3 days
TYPE OF SUBSTRATE											
Cement or gypsum plasters or screeds	✓	✓	✓	✓	✓	✓	✓	✓	✓	only on screeds	only on screeds
Damp proofing course					✓	✓	✓	✓	✓	✓	✓
OSB, chip boards, plywood (require priming)						✓	✓	✓	✓	✓	✓
Plasterboards, cement-fibre boards					✓	✓	✓	✓	✓		
Terrazzo primed with Cerplast/Aval KT 16						✓	✓	✓	✓	✓	✓
Old tiles primed with Cerplast/Aval KT 16						✓	✓	✓	✓	✓	✓
TYPE OF TILES TO BE FIXED											
Glazing tiles/ terracotta	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Gres-porcelain	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Clinker		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mosaic		✓	✓	✓	✓		✓	✓	✓		
Absorbable stone tiles, polished gres				✓	✓**	✓	✓**	✓	✓**	✓**	✓
SPECIAL USAGE CONDITIONS											
Floor heating					✓	✓	✓	✓	✓	✓	✓
Terraces/balconies					✓*	✓ *	✓	✓	✓	✓	✓
Bath- and shower-tub casing					✓	✓	✓	✓	✓		
Fireplace casing							✓	✓	✓		
Swimming pools basins							✓	✓	✓	✓	✓

* S1 adhesive is recommended for terraces
** if in doubt conduct an application test

ATLAS ATUT
adhesive for tiles 2-10 mm

- for small and medium size ceramic tiles, incl. gres-porcelain ones
- reduced slip
- layer thickness 2-10 mm
- for indoor and outdoor use

C1T
PRODUCT CONFORMS TO THE EUROPEAN STANDARD

Properties

ATLAS ATUT is manufactured as a dry mix of high quality cement binder, aggregates and specially selected modifiers.
Owing to the improved formula the product offers:
- **wide range of layer thickness (2-10 mm),** therefore enables thin coat installation of the cladding, also on uneven substrates, as well as mineral substrates levelling,
- **reduced slip**, therefore enables fixing the cladding "from the top", which helps to avoid cut-to-size tiles on exposed wall zones.

Use

Fixing ceramic cladding – glazed tiles, terracotta, porcelain-gres tiles, ceramic mosaic.
Fixing small and medium size claddings (< 0.1 m²).
Fixing tiles on horizontal and vertical surfaces, indoors and outdoors:
- in residential buildings,
- in kitchens, bathrooms, laundries, garages,
- on surfaces exposed to low traffic.

Fixing cladding on standard substrates – concrete, cement screeds and mortars, anhydrite screeds, cement, cement-lime and gypsum plasters, walls made of cellular concrete, silicate brick or hollow blocks, ceramic brick or hollow blocks, gypsum blocks.
Note. Check the product sheet on www.atlas.com.pl/en for more detailed info on the range of use.

Technical data

Mass bulk denisty (after mixing)	approx. 1.5 kg/dm^3
Mixing ratio (water/dry mix)	0.21 – 0.24 l / 1 kg 4.7 - 5.4 l / 22.5 kg
Min./max. adhesive thickness	2 mm / 10 mm
Adhesive preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Maturing time*	approx. 5 minutes
Pot life*	approx. 4 hours
Open time*	min. 20 minutes
Adjustability time*	10 minutes
Full operation load – foot traffic*	after approx. 3 days

*The time shown in the table is recommended for the application in the temperature 23°C and humidity 55% (approx.).

Technical requirements

The product conforms to PN-EN 12004+A1:2012 standard for C1T class adhesive.
EC Declaration of Performance No. 180/CPR.

CE 0767	PN-EN 12004+A1:2012 (EN 12004:2007+A1:2012)
Cement adhesive for tiles, normal setting, of reduced slip, C1T type	**for indoor and outdoor use, for walls and floors**
Reaction to fire – class	A1 $A1_{fl}$
Bonding strength - initial bonding	**≥ 0.5 N/mm²**
Durability - bonding after: - heat exposure - immersion in water - freeze-thaw cycles	 **≥ 0.5 N/mm²** **≥ 0.5 N/mm²** **≥ 0.5 N/mm²**
Open time - tensile adhesion after time not shorter than 20 minutes	**≥ 0.5 N/mm²**
Slip	≤ 0.5 mm
Release/content of hazardous substances	See: Safety Data Sheet

The product has been given the Radiation Hygiene Certificate.

Application

Substrate preparation
The substrate should be:

- **stable** – sufficiently sound, resistant to deformation, free from materials which would impair adhesion, stabilized.
- **even** – maximum adhesive thickness is 10 mm, in case of larger irregularities use, e.g. ATLAS ZW 330 mortar, screeds ATLAS SMS, SAM or POSTAR.
- **clean** – free from layers which can impair adhesion, especially dust, dirt, lime, oils, greases, wax, residues of oil and emulsion paints. The substrate coated with algae, fungi, etc. must be cleaned and protected with ATLAS MYKOS agent.
- **primed with:**

-ATLAS UNI-GRUNT or ATLAS UNI-GRUNT PLUS – substrates of excessive or heterogenous absorptiveness,
–ATLAS GRUNTO-PLAST – if the substrate absorptivity is low, or it is coated with layers limiting the adhesion.

Detailed guidelines concerning the substrate preparation, depending on its type, are available in the product sheet on www.atlas.com.pl/en.

Adhesive preparation

Pour the adhesive from the bag into a container with the suitable amount of water (see Technical Data for ratio) and mix, using a low speed mixer with a drill for mortars, until homogenous. The dispersed adhesive should be left to rest for 5 minutes and then remixed. So prepared adhesive should be used up within approx. 4 hours.

Adhesive application

The adhesive should be applied onto the surface with a steel trowel and then distributed evenly and shaped (possibly in one direction) using a notched trowel. It is advisable to spread a thin adhesive coat first and then apply the coat of desired thickness and shape it with a notched trowel. It is recommended to lead a notched trowel in one direction. On walls, it's recommended to shape the adhesive in vertical direction.

Installing the tiles

After the application, the adhesive retains its properties for approx. 30 minutes (in temperature approx. 23 °C and 55 % humidity). Within this time, the tile must be placed and pressed well (the contact surface between the adhesive and the tile should be uniform and as large as possible – min. 2/3 of tile surface). Remove the excess of the adhesive pressed into the joints immediately. In case of floor tiles or tiling outdoors it is advisable to keep the full bonding surface (use the mixed method consisting in application of the adhesive on the substrate and the back of a tile, if needed). Keep the joint width appropriate for the tile size and operation conditions (check data in the sheets of ATLAS grouts).

Tile adjustment

The position of a tile can be adjusted with delicate moves along the bonding plane. It can be done within approximately 10 minutes since the tile is pressed (in temperature approx. 23 °C and 55 % humidity).

Grouting and cladding use

Foot traffic and grouting with ATLAS GROUT, ATLAS ARTIS GROUT, ATLAS DECORATIVE GROUT or ATLAS EPOXY GROUT can start after approx. 24 hours since the tiles fixing. The mortar reaches the operational strength after 3 days (check the Technical Data). Expansion joints, joints along the wall corners, at sanitary equipment, etc. should be filled with sanitary silicone ATLAS SILTON S or ATLAS ARTIS.

Consumption

Average consumption: approx. 1.5 kg of dry mix / 1 m^2 / 1 mm adhesive layer – for complete filling the space beneath the tile. It depends on the smoothness of the surface and the back side of the tile.

Tile size	Trowel notch size [mm]	Thickness of adhesive coat [mm]	2/3 surface contact [kg/m^2]	Full surface contact [kg/m^2]
mosaic up to 2 x 2 cm	4.0	2	from 2.0	from 3.0
small size up to 10 x 10 cm	≥ 6.0	2÷2.5	from 2.0	from 3.0
medium size up to 30 x 30 cm	≥ 8.0	3÷3.5	from 3.0	from 4.5

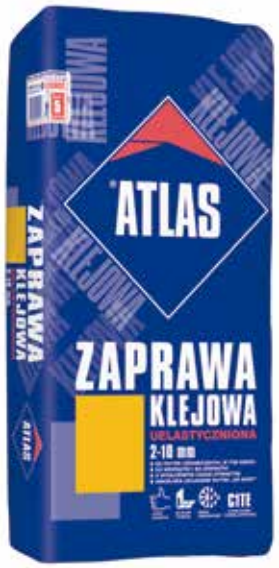
Important additional information

- The tiles must not be soaked before fixing. When determining the adhesive thickness under the cladding, one should consider the geometric deviation of tiles shape, e.g. plane warpage.
- When fixing the tiles on weak substrates which bearing capacity is difficult to establish (e.g. dusty, difficult to clean), it is recommended to perform an adhesion test by fixing a tile and checking the bond after 48 hours.
- Open time – from the moment of application of the adhesive to the moment of placing the tiles upon it – is limited. In order to check if it is still possible to fix tiles, performing a test is recommended. It consists in pressing your fingers against the adhesive. If the adhesive remains on the fingers, you may fix the tiles. If the fingers are clean, the old layer of the adhesive has to be removed and a new one applied.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set adhesive can be removed with the ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The adhesive must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Paper bags: 22.5 kg
Pallet: 1,080 kg in 22.5 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-03-31



ELASTIFIED ADHESIVE MORTAR ATLAS

general-use adhesive 2-10 mm

- for small and medium size ceramic tiles, incl. gres-porcelain and concrete ones
- for bathrooms, kitchens, corridors, laundries, garages
- for walls and floors
- extended open time – possibility of bonding up to 30 minutes since the adhesive application on the substrate
- layer thickness 2-10 mm
- for mineral substrates floating
- for indoor and outdoor use, at low and average operation load

C1TE
PRODUCT CONFORMS TO THE EUROPEAN STANDARD

Elastified formula

Improvement of the adhesive working parameters makes use of the mortar more pleasant and easier.
Enhancing the adhesive with plasticizing additives makes it to meet the expectation of a tiler at each stage of work.
Mixing. The adhesive is less susceptible to aeration and forms homogenous mixture – uniform in terms of distribution of the components within the whole mass volume. This property, backed up with the perfect selection of the aggregate composition guarantees the highest durability of the adhesive layer.
Scooping with trowel. The adhesive is characterized by optimum viscosity guaranteeing lossless transfer from the container onto the trowel and from the trowel onto the substrate.
Application onto the substrate. The adhesive spreads perfectly upon the surface – the bonding strength of the mortar is high enough to prevent the adhesive from "rolling" onto the trowel (for properly primed substrate).
Fixing the tile. The ideally selected viscosity allows for easier handling of the fixed tile.

Properties

ELASTIFIED ADHESIVE MORTAR ATLAS is manufactured as a dry mix of high quality cement binder, aggregates and special composition of modifiers, including the polymers. Improved formula makes the product to reach the highest technical parameters within its class and is widely used in residential housing. Its technology offers:

- **wide range of layer thickness (2-10 mm),** therefore enables thin coat installation of the cladding, also on uneven substrates, as well as mineral substrates levelling,
- **extended open time** - allows placing the tiles even 30 minutes since the mortar application – it can be once applied onto larger surface and therefore minimize the time of work,
- **reduced slip,** therefore enables fixing the cladding "from the top", which helps to avoid cut-to-size tiles on exposed wall zones,
- **wide range of use in residential housing:** bathrooms, kitchens, corridors, garages, staircases, walls and floors.

Use

Fixing ceramic cladding - glazed tiles, terracotta, porcelain-gres tiles, ceramic mosaic, concrete and cement tiles.
Fixing small and medium size claddings (< 0.1 m²).
Fixing tiles on horizontal and vertical surfaces, indoors and outdoors:
- in residential buildings,
- in kitchens, bathrooms, laundries, garages,
- rooms of small and medium operational loads in any building type.

Fixing cladding on standard substrates – concrete, cement screeds and mortars, anhydrite screeds, cement, cement-lime and gypsum plasters, walls made of cellular concrete, silicate brick or hollow blocks, ceramic brick or hollow blocks, gypsum blocks.
Note. Check the product sheet on www.atlas.com.pl/en for more detailed info on the range of use.

Technical data

Mass bulk denisty (after mixing)	approx. 1.75 kg/dm³
Mixing ratio (water/dry mix)	0.21 – 0.24 l / 1 kg 1.05 – 1.20 l / 5 kg 2.10 – 2.40 l / 10 kg 5.25 - 6.00 l / 25 kg
Min./max. adhesive thickness	2 mm / 10 mm
Adhesive preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Maturing time*	approx. 5 minutes
Pot life*	approx. 4 hours
Open time*	min. 30 minutes
Adjustability time*	10 minutes
Floor access/ grouting*	after approx. 24 hours
Full operation load – foot traffic*	after approx. 3 days

The time shown in the table is recommended for the application in the temperature 23°C and humidity 55% (approx.).

Technical requirements

The product conforms to PN-EN 12004+A1:2012 standard for C1TE class adhesive. EC Declaration of Performance No. 001-1/CPR.

CE 2007	PN-EN 12004+A1:2012 (EN 12004:2007+A1:2012)
Cement adhesive for tiles, normal setting, of extended open time and reduced slip, C1TE type	for indoor and outdoor use, for walls and floors
Reaction to fire – class	A1 WT $A1_{fl}$ WT
Bonding strength - initial bonding	≥ 0.5 N/mm²
Durability - bonding after: - heat exposure - immersion in water - freeze-thaw cycles	 ≥ 0.5 N/mm² ≥ 0.5 N/mm² ≥ 0.5 N/mm²
Open time - tensile adhesion after time not shorter than 30 minutes	≥ 0.5 N/mm²
Slip	≤ 0.5 mm
Release/content of hazardous substances	See: Safety Data Sheet

Application

Substrate preparation
The substrate should be:

- **stable** – sufficiently sound, resistant to deformation, free from materials which would impair adhesion, stabilized.
- **even** – maximum adhesive thickness is 10 mm, in case of larger irregularities use, e.g. ATLAS ZW 330 mortar, screeds ATLAS SMS, SAM or POSTAR.
- **clean** – free from layers which can impair adhesion, especially dust, dirt, lime, oils, greases, wax, residues of oil and emulsion paints. The substrate coated with algae, fungi, etc. must be cleaned and protected with ATLAS MYKOS agent.
- **primed with:**

- ATLAS UNI-GRUNT or ATLAS UNI-GRUNT PLUS – substrates of excessive or heterogenous absorptiveness,
- ATLAS GRUNTO-PLAST – if the substrate absorptivity is low, or it is coated with layers limiting the adhesion.

Detailed guidelines concerning the substrate preparation, depending on its type, are available in the product sheet on www.atlas.com.pl/en.

Adhesive preparation

Pour the adhesive from the bag into a container with the suitable amount of water (see Technical Data for ratio) and mix, using a low speed mixer with a drill for mortars, until homogenous. The dispersed adhesive should be left to rest for 5 minutes and then remixed. So prepared adhesive should be used up within approx. 4 hours.

Adhesive application

The adhesive should be applied onto the surface with a steel trowel and then distributed evenly and shaped (possibly in one direction) using a notched trowel. It is advisable to spread a thin adhesive coat first and then apply the coat of desired thickness and shape it with a notched trowel. It is recommended to lead a notched trowel in one direction. On walls, it's recommended to shape the adhesive in vertical direction.

Installing the tiles

After the application, the adhesive retains its properties for approx. 30 minutes (in temperature approx. 23 °C and 55 % humidity). Within this time, the tile must be placed and pressed well (the contact surface between the adhesive and the tile should be uniform and as large as possible – min. 2/3 of tile surface). Remove the excess of the adhesive pressed into the joints immediately.
In case of floor tiles or tiling outdoors it is advisable to keep the full bonding surface (use the mixed method consisting in application of the adhesive on the substrate and the back of a tile, if needed). Keep the joint width appropriate for the tile size and operation conditions (check data in the sheets of ATLAS grouts).

Tile adjustment

The position of a tile can be adjusted with delicate moves along the bonding plane. It can be done within approximately 10 minutes since the tile is pressed (in temperature approx. 23 °C and 55 % humidity).

Grouting and cladding use

Foot traffic and grouting with ATLAS GROUT, ATLAS ARTIS GROUT, ATLAS DECORATIVE GROUT or ATLAS EPOXY GROUT can start after approx. 24 hours since the tiles fixing. The mortar reaches the operational strength after 3 days (check the Technical Data). Expansion joints, joints along the wall corners, at sanitary equipment, etc. should be filled with sanitary silicone ATLAS SILTON S or ATLAS ARTIS.

Coverage

Average coverage: approx. 1.5 kg of dry mix / 1 m^2 / 1 mm adhesive layer – for complete filling the space beneath the tile. It depends on the smoothness of the surface and the back side of the tile.

Tile size	Trowel notch size [mm]	Thickness of adhesive coat [mm]	2/3 surface contact [kg/m^2]	Full surface contact [kg/m^2]
mosaic up to 2 x 2 cm	4.0	2	from 2.0	from 3.0
small size up to 10 x 10 cm	≥ 6.0	2÷2.5	from 2.0	from 3.0
medium size up to 30 x 30 cm	≥ 8.0	3÷3.5	from 3.0	from 4.5

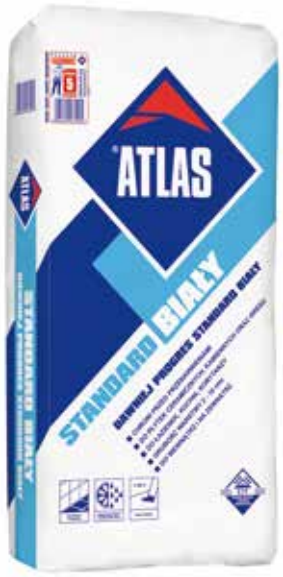
Important additional information

- The tiles must not be soaked before fixing. When determining the adhesive thickness under the cladding, one should consider the geometric deviation of tiles shape, e.g. plane warpage. Tiles subject to discolouration in contact with grey cement should be applied with the use of adhesives based on white cement binder.
- When fixing the tiles on weak substrates which bearing capacity is difficult to establish (e.g. dusty, difficult to clean), it is recommended to perform an adhesion test by fixing a tile and checking the bond after 48 hours.
- Open time – from the moment of application of the adhesive to the moment of placing the tiles upon it – is limited. In order to check if it is still possible to fix tiles, performing a test is recommended. It consists in pressing your fingers against the adhesive. If the adhesive remains on the fingers, you may fix the tiles. If the fingers are clean, the old layer of the adhesive has to be removed and a new one applied.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set adhesive can be removed with the ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The adhesive must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Paper bags: 5 kg, 10 kg, 25 kg.
Pallet: 1,100 kg in 5 kg bags, 1,100 kg in 10 kg bags, 1,200 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-03-31



ATLAS STANDARD WHITE

white adhesive for gres-porcelain 2-10 mm

- for stone tiles, polished gres-porcelain
- does not cause discolouration of absorbable tiles
- reduced slip
- layer thickness 2-10 mm

C1T
PRODUCT CONFORMS TO THE EUROPEAN STANDARD

FOR WALLS AND FLOORS | INDOORS AND OUTDOORS | EASY IN USE | APPLY WITH NOTCHED TROWEL | 2-10 mm LAYER THICKNESS | FOOT TRAFFIC AFTER 24 H

Properties

ATLAS ATUT is a general-use adhesive mortar based on cement binder, selected aggregates and special modifiers. It contains white cement and does not cause cladding discolouration, which can occur in contact with grey cement. Owing to the special recipe ATLAS STANDARD WHITE offers:

- **wide range of layer thickness (2-10 mm),** therefore enables thin coat installation of the cladding, also on uneven substrates, as well as mineral substrates levelling,
- **reduced slip**, therefore enables fixing the cladding "from the top", which helps to avoid cut-to-size tiles on exposed wall zones,
- **no discolouration of tiles of high absorbability**, therefore enables use of cladding made of polished gres-porcelain and natural stone.

Use

Fixing ceramic and stone cladding - glazed tiles, terracotta, porcelain-gres tiles, ceramic mosaic, concrete and cement tiles, marble and natural stone tiles.
Fixing small and medium size claddings (< 0.1 m²).
Fixing tiles on horizontal and vertical surfaces, indoors and outdoors:
- in residential buildings,
- in kitchens, bathrooms, laundries, garages,
- on surfaces exposed to low traffic.

Fixing cladding on standard substrates – concrete, cement screeds and mortars, anhydrite screeds, cement, cement-lime and gypsum plasters, walls made of cellular concrete, silicate brick or hollow blocks, ceramic brick or hollow blocks, gypsum blocks.
Note. Check the product sheet on www.atlas.com.pl/en for more detailed info on the range of use.

Technical data

Mass bulk denisty (after mixing)	approx. 1.7 kg/dm³
Mixing ratio (water/dry mix)	0.26 – 0.28 l / 1 kg 6.5 - 7.0 l / 22.5 kg
Min./max. adhesive thickness	2 mm / 10 mm
Adhesive preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Maturing time*	5 minutes
Pot life*	approx. 3 hours
Open time*	min. 20 minutes
Adjustability time*	10 minutes
Floor access/ grouting*	after approx. 24 hours
Full operation load – foot traffic*	after approx. 3 days

The time shown in the table is recommended for the application in the temperature 23°C and humidity 55% (approx.).

Technical requirements

The product conforms to PN-EN 12004+A1:2012 standard for C1T class adhesive.
EC Declaration of Performance No. 180/CPR

CE 0767	PN-EN 12004+A1:2012 (EN 12004:2007+A1:2012)
Cement adhesive for tiles, normal setting, of reduced slip, C1T type	for indoor and outdoor use, for walls and floors
Reaction to fire – class	A1 $A1_{fl}$
Bonding strength - initial bonding	≥ 0.5 N/mm²
Durability - bonding after: - heat exposure - immersion in water - freeze-thaw cycles	 ≥ 0.5 N/mm² ≥ 0.5 N/mm² ≥ 0.5 N/mm²
Open time - tensile adhesion after time not shorter than 20 minutes	≥ 0.5 N/mm²
Slip	≤ 0.5 mm
Release/content of hazardous substances	See: Safety Data Sheet

The product has been given the Radiation Hygiene Certificate.

Application

Substrate preparation
The substrate should be:
- **stable** – sufficiently sound, resistant to deformation, free from materials which would impair adhesion, stabilized.
- **even** – maximum adhesive thickness is 10 mm, in case of larger irregularities use, e.g. ATLAS ZW 330 mortar, screeds ATLAS SMS, SAM or POSTAR.
- **clean** – free from layers which can impair adhesion, especially dust, dirt, lime, oils, greases, wax, residues of oil and emulsion paints. The substrate coated with algae, fungi, etc. must be cleaned and protected with ATLAS MYKOS agent.
- **primed with:**

- ATLAS UNI-GRUNT or ATLAS UNI-GRUNT PLUS – substrates of excessive or heterogenous absorptiveness,
- ATLAS GRUNTO-PLAST – if the substrate absorptivity is low, or it is coated with layers limiting the adhesion.

Detailed guidelines concerning the substrate preparation, depending on its type, are available in the product sheet on www.atlas.com.pl/en.

Adhesive preparation

Pour the adhesive from the bag into a container with the suitable amount of water (see Technical Data for ratio) and mix, using a low speed mixer with a drill for mortars, until homogenous. The dispersed adhesive should be left to rest for 5 minutes and then remixed. So prepared adhesive should be used up within approx. 4 hours.

Adhesive application

The adhesive should be applied onto the surface with a steel trowel and then distributed evenly and shaped (possibly in one direction) using a notched trowel. It is advisable to spread a thin adhesive coat first and then apply the coat of desired thickness and shape it with a notched trowel. It is recommended to lead a notched trowel in one direction. On walls, it's recommended to shape the adhesive in vertical direction.

Installing the tiles

After the application, the adhesive retains its properties for approx. 20 minutes (in temperature approx. 23 °C and 55 % humidity). Within this time, the tile must be placed and pressed well (the contact surface between the adhesive and the tile should be uniform and as large as possible – min. 2/3 of tile surface). Remove the excess of the adhesive pressed into the joints immediately.

In case of floor tiles or tiling outdoors it is advisable to keep the full bonding surface (use the mixed method consisting in application of the adhesive on the substrate and the back of a tile, if needed). Keep the joint width appropriate for the tile size and operation conditions (check data in the sheets of ATLAS grouts).

Tile adjustment

The position of a tile can be adjusted with delicate moves along the bonding plane. It can be done within approximately 10 minutes since the tile is pressed (in temperature approx. 23 °C and 55 % humidity).

Grouting and cladding use

Foot traffic and grouting with ATLAS GROUT, ATLAS ARTIS GROUT, ATLAS DECORATIVE GROUT or ATLAS EPOXY GROUT can start after approx. 24 hours since the tiles fixing. The mortar reaches the operational strength after 3 days (check the Technical Data). Expansion joints, joints along the wall corners, at sanitary equipment, etc. should be filled with sanitary silicone ATLAS SILTON S or ATLAS ARTIS.

Consumption

Average consumption: approx. 1.5 kg of dry mix / 1 m^2 / 1 mm adhesive layer – for complete filling the space beneath the tile. It depends on the smoothness of the surface and the back side of the tile.

Tile size	Trowel notch size [mm]	Thickness of adhesive coat [mm]	2/3 surface contact [kg/m^2]	Full surface contact [kg/m^2]
mosaic up to 2 x 2 cm	4.0	2	from 2.0	from 3.0
small size up to 10 x 10 cm	≥ 6.0	2÷2.5	from 2.0	from 3.0
medium size up to 30 x 30 cm	≥ 8.0	3÷3.5	from 3.0	from 4.5

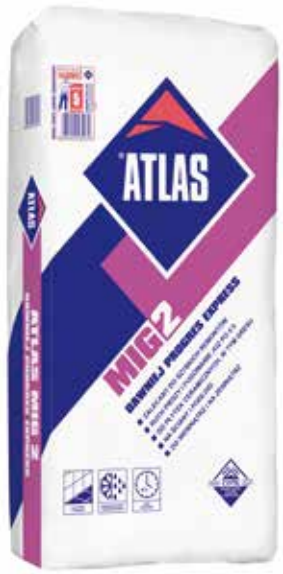
Important additional information

- The tiles must not be soaked before fixing. When determining the adhesive thickness under the cladding, one should consider the geometric deviation of tiles shape, e.g. plane warpage.
- When fixing the tiles on weak substrates whose bearing capacity is difficult to establish (e.g. dusty, difficult to clean), it is recommended to perform an adhesion test by fixing a tile and checking the bond after 48 hours.
- Open time – from the moment of application of the adhesive to the moment of placing the tiles upon it – is limited. In order to check if it is still possible to fix tiles, performing a test is recommended. It consists in pressing your fingers against the adhesive. If the adhesive remains on the fingers, you may fix the tiles. If the fingers are clean, the old layer of the adhesive has to be removed and a new one applied.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set adhesive can be removed with the ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The adhesive must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Foil bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-03-31



C1FTE
PRODUCT CONFORMS TO THE EUROPEAN STANDARD

ATLAS MIG 2

fast-setting adhesive for gres-porcelain 2-5 mm

- foot traffic and grouting just after 4 hours
- for small and medium size ceramic tiles, incl. gres-porcelain ones
- extended open time – possibility of bonding up to 30 minutes since the adhesive application on the substrate
- for bathrooms, kitchens, corridors
- for indoor and outdoor use

Properties

ATLAS MIG 2 is manufactured as a dry mix of high quality cement binder, aggregates and specially selected modifiers.
Owing to the improved formula the product offers:

- **short setting time** – foot traffic and grouting just after 4 hours since the tiles fixing, which is expected wherever excluding the renovated surface from usage is problematic or impossible – banks, shops, railway stations, restaurants, outpatient clinics, corridors, communication routes; combination of the fast drying ATLAS UNI-GRUNT priming emulsion (drying time 2 h), ATLAS MIG 2 adhesive (setting time 4 h) and ATLAS ARTIS grout (setting time 3 h), allows pedestrian access already after approx. 9 hours since the substrate priming,
- **extended open time** - allows placing the tiles even 30 minutes since the mortar application – it can be once applied onto larger surface and therefore minimize the time of work,
- **reduced slip,** therefore enables fixing the cladding "from the top", which helps to avoid cut-to-size tiles on exposed wall zones,

Use

Fixing ceramic cladding – glazed tiles, terracotta, porcelain-gres tiles, ceramic mosaic, concrete and cement tiles.
Fixing small and medium size claddings (< 0.1 m²).
Fixing tiles on horizontal and vertical surfaces, indoors and outdoors:
- in residential buildings,
- in kitchens, bathrooms, laundries, garages,
- in rooms of small and medium operation load in any building type.

Fixing cladding on standard substrates – concrete, cement screeds and mortars, anhydrite screeds, cement, cement-lime and gypsum plasters, walls made of cellular concrete, silicate brick or hollow blocks, ceramic brick or hollow blocks, gypsum blocks.
Note. Check the product sheet on www.atlas.com.pl/en for more detailed info on the range of use.

Technical data

Mass bulk density (after mixing)	approx. 1.65 kg/dm³
Mixing ratio (water/dry mix)	0.22 l / 1 kg 5.5 l / 25 kg
Min./max. adhesive thickness	2 mm / 5 mm
Adhesive preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Maturing time*	5 minutes
Pot life*	approx. 1 hour
Open time*	min. 30 minutes
Adjustability time*	10 minutes
Floor access/ grouting*	after approx. 4 hours
Full operation load – foot traffic*	after approx. 3 days

*The time shown in the table is recommended for the application in the temperature 23°C and humidity 55% (approx.).

Technical requirements

The product conforms to PN-EN 12004+A1:2012 standard. EC Declaration of Performance No. 087/CPR.

CE 0767	PN-EN 12004+A1:2012 (EN 12004:2007+A1:2012)
Cement adhesive for tiles, fast-setting, of reduced slip and extended open time, C1FTE type	**for indoor and outdoor use, for walls and floors**
Reaction to fire – class	A1 $A1_{fl}$
Bonding strength - initial bonding - early bonding (after ≤ 6 hours)	 **≥ 0.5 N/mm²** **≥ 0.5 N/mm²**
Durability - bonding after: - heat exposure - immersion in water - freeze-thaw cycles	 **≥ 0.5 N/mm²** **≥ 0.5 N/mm²** **≥ 0.5 N/mm²**
Open time - tensile adhesion after time not shorter than 20 minutes	**≥ 0.5 N/mm²**
Slip	≤ 0.5 mm
Release/content of hazardous substances	See: Safety Data Sheet

Application

Substrate preparation
The substrate should be:

- **stable** – sufficiently sound, resistant to deformation, free from materials which would impair adhesion, stabilized.
- **even** – maximum adhesive thickness is 5 mm, in case of larger irregularities use, e.g. ATLAS ZW 330 mortar, screeds ATLAS SMS, SAM or POSTAR.
- **clean** – free from layers which can impair adhesion, especially dust, dirt, lime, oils, greases, wax, residues of oil and emulsion paints. The substrate coated with algae, fungi, etc. must be cleaned and protected with ATLAS MYKOS agent.
- **primed with:**

- ATLAS UNI-GRUNT or ATLAS UNI-GRUNT PLUS – substrates of excessive or heterogenous absorptiveness,
- ATLAS GRUNTO-PLAST – if the substrate absorptivity is low, or it is coated with layers limiting the adhesion.

Detailed guidelines concerning the substrate preparation, depending on its type, are available in the product sheet on www.atlas.com.pl/en.

Adhesive preparation

Pour the adhesive from the bag into a container with the suitable amount of water (see Technical Data for ratio) and mix, using a low speed mixer with a drill for mortars, until homogenous. The dispersed adhesive should be left to rest for 5 minutes and then remixed. So prepared adhesive should be used up within approx. 1 hour.

Adhesive application

The adhesive should be applied onto the surface with a steel trowel and then distributed evenly and shaped (possibly in one direction) using a notched trowel. It is advisable to spread a thin adhesive coat first and then apply the coat of desired thickness and shape it with a notched trowel. It is recommended to lead a notched trowel in one direction. On walls, it's recommended to shape the adhesive in vertical direction.

Installing the tiles

After the application, the adhesive retains its properties for approx. 30 minutes (in temperature approx. 23 °C and 55 % humidity). Within this time, the tile must be placed and pressed well (the contact surface between the adhesive and the tile should be uniform and as large as possible – min. 2/3 of tile surface). Remove the excess of the adhesive pressed into the joints immediately.
In case of floor tiles or tiling outdoors it is advisable to keep the full bonding surface (use the mixed method consisting in application of the adhesive on the substrate and the back of a tile, if needed). Keep the joint width appropriate for the tile size and operation conditions (check data in the sheets of ATLAS grouts).

Tile adjustment

The position of a tile can be adjusted with delicate moves along the bonding plane. It can be done within approximately 10 minutes since the tile is pressed (in temperature approx. 23 °C and 55 % humidity).

Grouting and cladding use

Foot traffic and grouting with ATLAS GROUT, ATLAS ARTIS GROUT, ATLAS DECORATIVE GROUT or ATLAS EPOXY GROUT can start after approx. 4 hours since the tiles fixing. The mortar reaches the operational strength after 3 days (check the Technical Data). Expansion joints, joints along the wall corners, at sanitary equipment, etc. should be filled with sanitary silicone ATLAS SILTON S or ATLAS ARTIS.

Consumption

Average consumption: approx. 1.5 kg of dry mix / 1 m^2 / 1 mm adhesive layer – for complete filling the space beneath the tile. It depends on the smoothness of the surface and the back side of the tile.

Tile size	Trowel notch size [mm]	Thickness of adhesive coat [mm]	2/3 surface contact [kg/m^2]	Full surface contact [kg/m^2]
mosaic up to 2 x 2 cm	4.0	2	from 2.0	from 3.0
small size up to 10 x 10 cm	≥ 6.0	2÷2.5	from 2.0	from 3.0
medium size up to 30 x 30 cm	≥ 8.0	3÷3.5	from 3.0	from 4.5

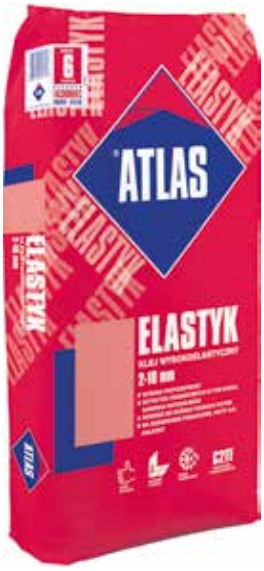
Important additional information

- The tiles must not be soaked before fixing. When determining the adhesive thickness under the cladding, one should consider the geometric deviation of tiles shape, e.g. plane warpage. Tiles subject to discolouration in contact with grey cement should be applied with the use of adhesives based on white cement binder.
- When fixing the tiles on weak substrates whose bearing capacity is difficult to establish (e.g. dusty, difficult to clean), it is recommended to perform an adhesion test by fixing a tile and checking the bond after 48 hours.
- Higher air humidity or low temperature extend the setting time of the adhesive.
- Open time – from the moment of application of the adhesive to the moment of placing the tiles upon it – is limited. In order to check if it is still possible to fix tiles, performing a test is recommended. It consists in pressing your fingers against the adhesive. If the adhesive remains on the fingers, you may fix the tiles. If the fingers are clean, the old layer of the adhesive has to be removed and a new one applied.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set adhesive can be removed with the ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The adhesive must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Foil bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-03-17



ATLAS ELASTYK
highly flexible adhesive 2-10 mm

- for various types of ceramic, stone, concrete cladding and glass mosaic
- for small, medium and large size tiles
- for residential, commercial, public access buildings
- high bonding and flexibility
- for standard substrates – walls, plasters, screeds
- for plasterboards
- for floor and wall heating systems, sealing coats, façades

C2TE
PRODUCT CONFORMS TO THE EUROPEAN STANDARD

Optimum formula

ATLAS ELASTYK is a standard cement adhesive of improved bonding to be used with ceramic, stone and glass cladding of any type. Owing to the special recipe ATLAS ELASTYK offers:

- **wide range of use** – owing to bonding additives, the adhesive is characterized by high bonding to various tile types (also large size ones) and substrates,
- **easy and quick application** – more effective tiling owing to extended open time and reduced slip,
- **durability** – owing to flexibility, the adhesive is characterized by improved resistance to thermal and mechanical loads (e.g. with floor and wall heating system, plasterboards, elastic damp proofing of WODER E, WODER W or WODER DUO type).

Properties

ATLAS ELASTYK is manufactured as a dry mix of high quality cement binder, aggregates and special composition of modifiers.
With improved bonding – minimum bonding to the substrate is 1.0 N/mm^2.
Range of adhesive thickness (2-10 mm) enables:
- thin-coat cladding fixing on even substrates,
- thin-coat cladding fixing on uneven substrates, preceded by substrate floating,

Extended open time - allows placing the tiles even 30 minutes since the mortar application – it can be once applied onto larger surface and therefore minimize the time of work.
Reduced slip - enables fixing the cladding "from the top" – proper consistency and layer thickness eliminate the adhesive slip. Therefore one can tile from the wall top and avoid cut-to-size tiles on exposed wall zones.

Use

Fixing ceramic and stone cladding of any type - glazed tiles, terracotta, porcelain-gres tiles, clinker, stone, ceramic mosaic, concrete and cement tiles, marble / natural stone cladding insusceptible to discolouration, glass mosaic and tiles. If in doubt conduct an application test.
Fixing small, medium and large size claddings - small and medium size tiles (< 0.1 m^2), large size tiles (< 0.25 m^2).
Fixing cladding on horizontal and vertical surfaces, indoors and outdoors:
- in residential, public access, healthcare, commercial and service, sacral buildings,
- in kitchens, bathrooms, laundries, offices, garages, communication routes, in rooms of small and medium operation load, on façades.

Fixing cladding on standard substrates - cement screeds and mortars, anhydrite screeds, cement, cement-lime and gypsum plasters, walls made of cellular concrete, silicate brick or hollow blocks, ceramic brick or hollow blocks, gypsum blocks.
Fixing cladding on deformable substrates or, so called, difficult substrates – concrete, elastic and rigid damp proofing (e.g. WODER S, WODER E, WODER W or WODER DUO), mineral, dispersion and reactive sealing coats, screeds (cement and anhydrite) with water and electric heating system or with heating mats embedded, plasters with wall heating system, plasterboards, gypsum-fibre boards, cement-fibre boards.

Technical data

Mass bulk density (after mixing)	approx. 1.6 kg/dm^3
Mixing ratio (water/dry mix)	0.25 ÷ 0,27 l / 1 kg 6.25 ÷ 6,75 l / 25 kg
Min./max. adhesive thickness	2 mm / 10 mm
Adhesive preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Maturing time	5 minutes
Pot life*	approx. 4 hours
Open time*	min. 30 minutes
Adjustability time*	10 minutes
Floor access/ grouting*	after 24 hours
Full operation load – foot traffic*	after 3 days
Full operation load – vehicle traffic*	after 14 days
Floor heating (warm surface)*	after 14 days

The time shown in the table is recommended for the application in the temperature 23°C and humidity 55% (approx.).

Technical requirements

The product conforms to PN-EN 12004 + A1:2012 standard for C2TE class adhesive. EC Declaration of Performance No. 100/CPR.

CE 2007, 0767	PN-EN 12004+A1:2012 (EN 12004:2007+A1:2012)
Cement adhesive for tiles of enhanced parameters, extended open time and reduced slip C2TE type	for indoor and outdoor use, for walls and floors
Reaction to fire – class	A1 A1$_{fl}$
Bonding strength - initial bonding	≥ 1.0 N/mm^2
Durability - bonding after: - heat exposure - immersion in water - freeze-thaw cycles	 ≥ 1.0 N/mm^2 ≥ 1.0 N/mm^2 ≥ 1.0 N/mm^2
Open time - tensile adhesion after time not shorter than 30 minutes	≥ 0.5 N/mm^2
Slip	≤ 0.5 mm
Release/content of hazardous substances	See: Safety Data Sheet

The product has been given the Radiation Hygiene Certificate.

Application

Substrate preparation
The substrate should be:

- **stable** – sufficiently sound, resistant to deformation, free from materials which would impair adhesion, stabilized.
- **even** – maximum adhesive thickness is 10 mm, in case of larger irregularities use, e.g. ATLAS ZW 330 mortar, screeds ATLAS SMS, SAM, POSTAR.
- **clean** – free from layers which can impair adhesion, especially dust, dirt, lime, oils, greases, wax, residues of oil and emulsion paints. The substrate coated with algae, fungi, etc. must be cleaned and protected with ATLAS MYKOS agent.
- **primed with:**

- ATLAS UNI-GRUNT or ATLAS UNI-GRUNT PLUS – substrates of excessive or heterogenous absorptiveness,
- ATLAS GRUNTO-PLAST – if the substrate absorptivity is low, or it is coated with layers limiting the adhesion.

Detailed guidelines concerning the substrate preparation, depending on its type, are available in the product sheet on www.atlas.com.pl/en.

Adhesive preparation

Pour the adhesive from the bag into a container with the suitable amount of water (see Technical Data for ratio) and mix, using a low speed mixer with a drill for mortars, until homogenous. The dispersed adhesive should be left to rest for 5 minutes and then remixed. So prepared adhesive should be used up within approx. 4 hours.

Adhesive application

The adhesive should be applied onto the surface with a steel trowel and then distributed evenly and shaped (possibly in one direction) using a notched trowel. It is advisable to spread a thin adhesive coat first and then apply the coat of desired thickness and shape it with a notched trowel. It is recommended to lead a notched trowel in one direction. On walls, it's recommended to shape the adhesive in vertical direction.

Installing the tiles

After the application, the adhesive retains its properties for approx. 30 minutes (in temperature approx. 23 °C and 55 % humidity). Within this time, the tile must be placed and pressed well (the contact surface between the adhesive and the tile should be uniform and as large as possible – min. 2/3 of tile surface). Remove the excess of the adhesive pressed into the joints immediately.
In case of floor tiles or tiling outdoors it is advisable to keep the full bonding surface (use the mixed method consisting in application of the adhesive on the substrate and the back of a tile, if needed). Keep the joint width appropriate for the tile size and operation conditions (check data in the sheets of ATLAS grouts).

Tile adjustment

The position of a tile can be adjusted with delicate moves along the bonding plane. It can be done within approximately 20 minutes since the tile is pressed (in temperature approx. 23 °C and 55 % humidity).

Grouting and cladding use

Foot traffic and grouting with ATLAS GROUT, ATLAS ARTIS GROUT, ATLAS DECORATIVE GROUT or ATLAS EPOXY GROUT can start after approx. 24 hours since the tiles fixing. The mortar reaches the operational strength after 3 days (check the Technical Data). Expansion joints, joints along the wall corners, at sanitary equipment, etc. should be filled with sanitary silicone ATLAS SILTON S or ATLAS ARTIS.

Coverage

Average coverage: approx. 1 m^2 / 1 mm/ 1.5 kg of dry mix – for complete filling the space beneath the tile. It depends on the smoothness of the surface and the back side of the tile.

Tile size	Trowel notch size [mm]	Thickness of adhesive coat [mm]	2/3 surface contact [kg/m^2]	Full surface contact [kg/m^2]
mosaic up to 2 x 2 cm	4.0	2	from 2.0	from 3.0
small size up to 10 x 10 cm	≥ 6.0	2÷2.5	from 2.0	from 3.0
medium size up to 30 x 30 cm	≥ 8.0	3÷3.5	from 3.0	from 4.5
large size up to 50 cm x 50 cm	≥ 10.0	4÷4.5	from 4.0	from 6.0

Important additional information

- The tiles must not be soaked before fixing. When determining the adhesive thickness under the cladding, one should consider the geometric deviation of tiles shape, e.g. plane warpage. Tiles subject to discolouration in contact with grey cement should be applied with the use of adhesives based on white cement binder.
- Open time – from the moment of application of the adhesive to the moment of placing the tiles upon it – is limited. In order to check if it is still possible to fix tiles, performing a test is recommended. It consists in pressing your fingers against the adhesive. If the adhesive remains on the fingers, you may fix the tiles. If the fingers are clean, the old layer of the adhesive has to be removed and a new one applied.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set adhesive can be removed with the ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The adhesive must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%..

Packaging

Foil bags: 25 kg
Pallet: 1,200 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-03-31

NEW

ATLAS GEOFLEX

highly flexible gel adhesive (2-15 mm)

- no slip or full spreading beneath a tile
- foot traffic and grouting just after 12 hours
- for floating, thin- and thick-coat application
- for difficult substrates, inc. concrete, terrazzo, old tiles and OSB

C2TE
PRODUCT CONFORMS TO THE EUROPEAN STANDARD

EASY IN USE | FOR WALLS AND FLOORS | FROST- AND WATERPROOF | INDOORS AND OUTDOORS | APPLY WITH NOTCHED TROWEL

Unique Gel Technology

ATLAS GEOFLEX recipe contains an unique siliceous gel technology. The siliceous gel offers exceptional ability of water retention. It fills the pores formed at the stage of adhesive setting by the net of inorganic bindings. The accumulation of mixing water ensures full cement hydration, regardless the cladding type in use. Owing to the appropriate water management, which is necessary for the binding process completion, gel adhesive assures full adhesion to substrates of various absorptiveness level.

The use of siliceous gel technology gives the advantages:

- possibility of fixing cladding of any type, both absorbable and non-absorbable,
- possibility of optimum adaptation of the adhesive consistency to individual contractor's preferences and actual needs resulting from particular use, by dosing water within a range much wider than in case of traditional adhesives,
- full adhesive spreading beneath the tiles, which improves adhesion and bond durability, particularly in case of outdoor use,
- safe cladding fixing on substrates exposed to direct sunshine, both during tiling and the adhesive setting (e.g. on balconies, terraces, etc.).

Properties

Wide range of adhesive thickness (2-15 mm) enables:
- thin-coat cladding fixing on even substrates,
- thin-coat cladding fixing on uneven substrates, preceded by substrate floating,
- thick-coat cladding fixing on uneven substrates, with no need of substrate floating.

No cladding slip – enables fixing the cladding "from the top" with no need of support at the fixing stage.

Foot traffic and grouting just after 12 hours – owing to accelerated adhesive setting and drying process.

Use

Fixing ceramic and stone cladding - glazed tiles, terracotta, porcelain-gres tiles, marble/natural stone, cladding insusceptible to discolouration, clinker, stone, ceramic mosaic, glass mosaic, glass tiles, concrete/ cement tiles. If in doubt conduct an application test.

Fixing small, medium and large size claddings - small and medium size tiles (< 0.1 m^2), large size tiles (> 0.25 m^2).

Fixing the cladding on horizontal and vertical surfaces, indoors and outdoors:
- in residential, public access, healthcare, commercial and service, sacral buildings,
- in kitchens, bathrooms, laundries, garages, showers, washes, rooms washed with plenty of water, on terraces, balconies, loggia, communication routes, in rooms of small and medium operational loads in any building type.

Fixing the cladding on standard substrates - cement screeds and mortars, anhydrite screeds, cement, cement-lime and gypsum plasters, walls made of cellular concrete, silicate brick or hollow blocks, ceramic brick or hollow blocks, floors made of wood, OSB, dry gypsum screed, steel, plastic substrates.

Fixing the cladding on deformable substrates or, so called, difficult substrates – concrete, terrazzo, elastic and rigid damp proofing (e.g. WODER S, WODER E, WODER W or WODER DUO), magnesium substrates, dry substrates made of gypsum boards, screeds (cement and anhydrite) with water and electric heating system or with heating mats embedded, gypsum blocks, plasters with wall heating system, plasterboards, gypsum-fibre boards, cement-fibre boards, existing ceramic and stone cladding (tile on tile), concrete resin lacquers bonded to the substrate, dispersion, oil paints bonded to the substrate, mineral, dispersion and reactive sealing coats, wooden floors (thick. >25 mm), OSB/3, OSB/4 and chipboards (thick. >25 mm on floors and >18 mm on walls).

Floating standard and difficult substrates listed above.

Note. Check the product sheet on www.atlas.com.pl/en for more detailed info on the range of use.

Technical data

ATLAS GEOFLEX is manufactured as a dry mix of the highest quality cement binder, aggregates and specially selected modifying agents: natural and synthetic.

Mass bulk density (after mixing)	ca. 1.6 kg/dm^3
Mixing ratio (water/dry mix)	0.26 – 0.33 l / 1 kg 6.5 - 8.25 l / 25 kg
Min./max. adhesive thickness	2 mm / 15 mm
Adhesive preparation temperature, substrate and ambient temperature during work	from +5°C to +35°C
Maturing time	5 minutes
Pot life*	approx. 4 hours
Open time*	min. 30 minutes
Adjustability time*	20 minutes
Floor access/ grouting*	after 12 hours
Full operation load – foot traffic*	after 3 days
Full operation load – vehicle traffic*	after 14 days
Floor heating (warm surface)*	after 14 days

The time shown in the table is recommended for the application in the temperature 23°C and humidity 55% (approx.).

Technical requirements

The product conforms to PN-EN 12004 + A1:2012 standard for C2TE class adhesive. EC Declaration of Performance No. 186/CPR.

CE 0767, 1614	PN-EN 12004 + A1:2012 (EN 12004:2007 + A1:2012)
Cement-based adhesive of enhanced parameters, extended open time and reduced slip C2TE type	**for indoor and outdoor use, for walls and floors**
Reaction to fire – class	A1 $A1_{fl}$
Bonding strength - initial adhesion	**≥ 1.0 N/mm²**
Durability - bonding after: - heat exposure - immersion in water - freeze-thaw cycles	 **≥ 1.0 N/mm²** **≥ 1.0 N/mm²** **≥ 1.0 N/mm²**
Open time - tensile adhesion after time not shorter than 30 minutes	**≥ 0.5 N/mm²**
Slip	≤ 0.5 mm
Release/ content of hazardous substances	See: Safety Data Sheet

The product has been given the Radiation Hygiene Certificate.

Application

Substrate preparation

The substrate should be:

- **stable** – sufficiently sound, resistant to deformation, free from materials which would impair adhesion, stabilized.
- **even** – maximum adhesive thickness is 15 mm, in case of larger irregularities use, e.g. ATLAS ZW 330 mortar, screeds ATLAS SMS, SAM, POSTAR.
- **clean** – free from layers which can impair adhesion, especially dust, dirt, lime, oils, greases, wax, residues of oil and emulsion paints. The substrate coated with algae, fungi, etc. must be cleaned and protected with ATLAS MYKOS agent.
- **primed with:**
  - ATLAS UNI-GRUNT or ATLAS UNI-GRUNT PLUS – substrates of excessive or heterogenous absorptiveness,
  - ATLAS GRUNTO-PLAST – if the substrate absorptivity is low, or it is coated with layers limiting the adhesion.

Detailed guidelines concerning the substrate preparation, depending on its type, are available in the product sheet on www.atlas.com.pl/en.

Adhesive preparation

Pour the adhesive from the bag into a container with the suitable amount of water (see Technical Data for ratio) and mix, using a low speed mixer with a drill for mortars, until homogenous. The dispersed adhesive should be left to rest for 5 minutes and then remixed. So prepared adhesive should be used up within approx. 4 hours.

Adhesive application

The adhesive should be applied onto the surface with a steel trowel and then distributed evenly and shaped (possibly in one direction) using a notched trowel. It is advisable to rub a thin adhesive coat first and then apply the thicker coat and shape it with a notched trowel. It is recommended to lead a notched trowel in one direction. On walls, it's recommended to shape the adhesive in vertical direction.

Placing the tiles

After the application, the adhesive retains its properties for ca. 30 minutes (in temperature approx. 23 °C and 55 % humidity). Within this time, the tile must be placed and pressed well (the contact surface between the adhesive and the tile should be uniform and as large as possible – min. 2/3 of tile surface). Remove the excess of the adhesive pressed into the joints immediately.

In case of floor tiles or tiling outdoors it is advisable to keep the full bonding surface (use the mixed method consisting in application of the adhesive on the substrate and tile bottom side, if needed). Keep the joint width appropriate for the tile size and operation conditions (check data in the sheets of ATLAS grouts).

Tile adjustment

The position of a tile can be adjusted with delicate moves along the bonding plane. It can be done within approximately 20 minutes since the tile is pressed (in temperature approx. 23 °C and 55 % humidity).

Grouting and cladding use

Foot traffic and grouting with ATLAS GROUT, ATLAS ARTIS GROUT, ATLAS DECORATIVE GROUT or ATLAS EPOXY GROUT can start after approx. 12 hours since the tiles fixing. The mortar reaches the operational strength after 3 days (check the Technical Data). Expansion joints, joints along the wall corners, at sanitary equipment, etc. should be filled with sanitary silicone ATLAS SILTON S or ATLAS ARTIS.

Consumption

Average consumption: approx. 1.5 kg of dry mix / 1 m² / 1 mm adhesive layer – for complete filling the space beneath the tile. It depends on the smoothness of the surface and the bottom side of the tile.

Tile size	Trowel notch size [mm]	Thickness of adhesive coat [mm]	2/3 surface contact [kg/m²]	Full surface contact [kg/m²]
mosaic up to 2 × 2 cm	4.0	2.0	from 2.0	from 3.0
small size up to 10 × 10 cm	≥ 6.0	2.0÷2.5	from 2.0	from 3.0
medium size up to 30 × 30 cm	≥ 8.0	3.0÷3.5	from 3.0	from 4.5
large size up to 50 x 50 cm	≥ 10.0	4.0÷4.5	from 4.0	from 6.0

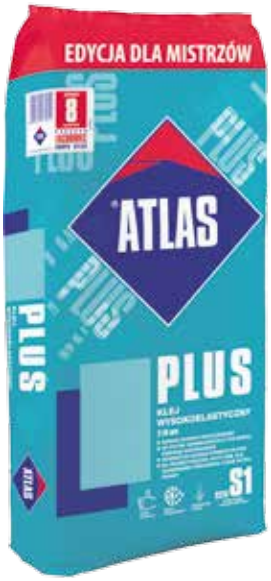
Important additional information

- The adhesive spreadability beneath a tile is reached when using the upper mixing ratio, i.e. approx. 0.33 l with 1 kg of dry mix. No slip is reached when using the lowest mixing ratio, i.e. 0.26 l with 1 kg of dry mix.
- When fixing the tiles on terraces divide the screed with expansion joints into max. 3 m x 3 m technological areas. It is acceptable to increase the area surface up to 25 m² on condition that contraction joints within the cladding are applied (recommended min. 4 cladding areas, each of 9 m²). Keep the 1:1 - 1:2 ratio between the area sides when planning the technological areas. The screed expansion joints should be transferred onto the cladding and filled with ATLAS ARTIS silicone. The contraction joints should be filled with ATLAS ARTIS silicone. The minimum adhesive coat after pressing – 4 mm. The adhesive must fill the whole space beneath the tile.
- The time of technological breaks, product technical parameters, etc. refer to standard setting conditions, i.e. in temperature +23°C (+/- 2°C) and 55% humidity (+/- 5%), substrates defined in PN-EN 1323 standard and tiles in PN-EN 176 standard. In other thermal and humidity conditions the time indicated may vary.
- The tiles must not be soaked before fixing. When determining the adhesive thickness under the cladding, one should consider the geometric deviation of tiles shape, e.g. plane warpage. Tiles subject to discolouration in contact with grey cement should be applied with the use of adhesives based on white cement binder.
- Open time – from the moment of application of the adhesive to the moment of placing the tiles upon it – is limited. In order to check if it is still possible to fix tiles, performing a test is recommended. It consists in pressing your fingers against the adhesive. If the adhesive remains on the fingers, you may fix the tiles. If the fingers are clean, the old layer of the adhesive has to be removed and a new one applied.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set adhesive can be removed with the ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/ eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The adhesive must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Foil bags: 25 kg
Pallet: 1,200 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-06-16



C2TES1
PRODUCT CONFORMS TO THE EUROPEAN STANDARD

ATLAS PLUS
deformable adhesive S1 2-10 mm

- for any type of ceramic, stone, glass cladding, composite panels
- for large size tiles (>1 m^2)
- for difficult substrates: OSB boards, old tiles, wooden floors, metal and plastic surfaces
- on terraces, balconies and façades, in pools and technological tanks (also with drinking water)
- for residential, commercial and service, public access and industrial buildings

Polymer technology

The polymer technology is used in the ATLAS PLUS recipe. Owing to the high content of redispersible polymer resins, the cement adhesive gets unique properties and offers the highest technical and operation parameters assuring long term durability. The presence of polymers ensures high bonding of any cladding to any substrate type, including, so called, difficult and critical ones. Owing to the interchange of the polymer network with the network of inorganic hydration cement bindings, the adhesive offers outstanding parameters:

The use of the polymer technology gives:

- possibility of fixing the cladding of any type, both absorbable and non-absorbable – owing to high bonding resulting from high content of the polymer resin,
- possibility of fixing the tiles on, so called, difficult substrates, including OSB boards, plasterboards, old tiles (tile on tile) as well as substrates subject to large and very large mechanical and thermal load – owing to the deformability,
- outstanding plasticity and mass homogeneity – the adhesive is easily workable and spread upon the surface – the adhesion strength prevents the adhesive from "rolling back" onto the trowel.

Reinforcement with fibers

- The structural reinforcement with cellulose fibers helps to compensate the stress occurring on deformable substrates.
- The fibers improve water retention of the adhesive: limit the effects of sudden water retention within the joint with both absorbable substrate and absorbable tile as well as within the evaporation zone. During the adhesive setting and drying (particularly when applied with maximum thickness) the fibers accumulate and transfer water keeping its uniform level within the whole coat.

Properties

ATLAS PLUS – is manufactured as a dry mix of high quality cement binder, aggregates and special composition of modifiers.

Highly flexible – deformability S1 – the permissible deflection of the set adhesive is within 2.5 – 5 mm range (test according to PN-EN 12002).

With improved bonding – the actual bonding to concrete substrate in standard conditions is two times higher than the one required by the PN-EN 12004 standard.

Range of adhesive thickness (2-10 mm) enables:

- thin-coat cladding fixing on even substrates,
- thin-coat cladding fixing on uneven substrates, preceded by substrate floating.

Extended open time - allows placing the tiles even 30 minutes since the mortar application – it can be once applied onto larger surface and therefore minimize the time of work.

Reduced slip - enables fixing the cladding "from the top" – proper consistency and layer thickness eliminate the adhesive slip. Therefore one can tile from the wall top and avoid cut-to-size tiles on exposed wall zones.

Versatility of use – the adhesive is designed for almost any cladding type, regardless the tile size, on various substrates, in any building type, even with high operation load.

Recommended for fixing tiles in drinking water reservoirs, food industry, healthcare buildings, nurseries, kindergartens, etc.

Use

Fixing ceramic and stone cladding of any type - glazed tiles, terracotta, porcelain-gres tiles, clinker, stone, ceramic mosaic, concrete and cement tiles, marble/natural stone cladding insusceptible to discolouration, glass mosaic and tiles, laminated porcelain-gres tiles, composite panels, insulation and acoustic panels. If in doubt conduct an application test.

Fixing small, medium and large size claddings - small and medium size tiles (< 0.1 m^2), large (< 0.25 m^2) and very large size tiles (> 0.25 m^2), slim-type tiles.

Fixing cladding on horizontal and vertical surfaces, indoors and outdoors:

- in residential, public access, healthcare, commercial and service, sacral, industrial buildings,
- in kitchens, bathrooms, laundries, showers, washes, rooms washed with plenty of water, offices, warehouses, garages, communication routes, on balconies, terraces, loggias, façades (incl. ETICS systems), external stairs, infrastructure,
- technological tanks, pools, fountains, jacuzzi, balneotechnology (with no aggressive chemicals in use), drinking water reservoirs, sauna, SPA,
- in rooms of small, medium and large operation load,

Fixing cladding on standard substrates - cement screeds and mortars, anhydrite screeds, cement, cement-lime and gypsum plasters, walls made of cellular concrete, silicate brick or hollow blocks, ceramic brick or hollow blocks, gypsum blocks.

Fixing cladding on deformable substrates or, so called, difficult substrates – concrete, terrazzo, elastic and rigid damp proofing (e.g. WODER S, WODER E, WODER W or WODER DUO), magnesium substrates, dry substrates made of gypsum boards, screeds (cement and anhydrite) with water and electric heating system or with heating mats embedded, plasters with wall heating system, plasterboards, gypsum-fibre boards, cement-fibre boards, existing ceramic and stone cladding ("tile on tile"), concrete resin lacquers bonded to the substrate, dispersion, oil paints bonded to the substrate, mineral, dispersion and reactive sealing coats, wooden floors (thick. >25 mm), OSB/3, OSB/4 and chipboards (thick. >25 mm on floors and >18 mm on walls), insulation and acoustic panels, metal, steel and plastic surfaces, mastic asphalt screeds. If in doubt conduct an application test.

Note. Check the product sheet on www.atlas.com.pl/en for more detailed info on the range of use.

Technical data

Mass bulk density (after mixing)	approx. 1.8 kg/dm^3
Mixing ratio (water/dry mix)	0.31 – 0.33 l / 1 kg 1.55 – 1.65 l / 5 kg 3.10 – 3.30 l / 10 kg 6.20 – 6.60 l / 20 kg 7.75 - 8.25 l / 25 kg
Min./max. adhesive thickness	2 mm / 10 mm
Adhesive preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Maturing time	approx. 5 minutes
Pot life*	approx. 5 hours
Open time*	min. 30 minutes
Adjustability time*	approx. 10 minutes
Floor access/ grouting*	after 24 hours
Full operation load – foot traffic*	after 3 days
Full operation load – vehicle traffic*	after 14 days
Floor heating (warm surface)*	after 14 days

The time shown in the table is recommended for the application in the temperature 23°C and humidity 55% (approx.).

Technical requirements

The product conforms to PN-EN 12004 + A1:2012 standard for C2TE S1 class adhesive. EC Declaration of Performance No. 1002/CPR.

CE 2007, 0767	PN-EN 12004+A1:2012 (EN 12004:2007+A1:2012)
Cement adhesive for tiles of enhanced parameters, extended open time and reduced slip, deformable, C2TE S1 type	**for indoor and outdoor use, for walls and floors**
Reaction to fire – class	A2-s1, d0 $A1_{fl}$-s1
Bonding strength - initial bonding	**≥ 1.0 N/mm^2**
Durability - bonding after: - heat exposure - immersion in water - freeze-thaw cycles	 **≥ 1.0 N/mm^2** **≥ 1.0 N/mm^2** **≥ 1.0 N/mm^2**
Open time - tensile adhesion after time not shorter than 30 minutes	**≥ 0.5 N/mm^2**
Slip	≤ 0.5 mm
Transverse deformation	≥ 2.5 mm and < 5 mm
Release/content of hazardous substances	See: Safety Data Sheet

The product has been given the Radiation Hygiene Certificate.

Application

Substrate preparation
The substrate should be:

- **stable** – sufficiently sound, resistant to deformation, free from materials which would impair adhesion, stabilized.
- **even** – maximum adhesive thickness is 10 mm, in case of larger irregularities use, e.g. ATLAS ZW 330 mortar, screeds ATLAS SMS, SAM, POSTAR.
- **clean** – free from layers which can impair adhesion, especially dust, dirt, lime, oils, greases, wax, residues of oil and emulsion paints. The substrate coated with algae, fungi, etc. must be cleaned and protected with ATLAS MYKOS agent.
- **primed with:**

- ATLAS UNI-GRUNT or ATLAS UNI-GRUNT PLUS – substrates of excessive or heterogenous absorptiveness,
- ATLAS GRUNTO-PLAST – if the substrate absorptivity is low, or it is coated with layers limiting the adhesion.

Detailed guidelines concerning the substrate preparation, depending on its type, are available in the product sheet on www.atlas.com.pl/en.

Adhesive preparation

Pour the adhesive from the bag into a container with the suitable amount of water (see Technical Data for ratio) and mix, using a low speed mixer with a drill for mortars, until homogenous. The dispersed adhesive should be left to rest for 5 minutes and then remixed. So prepared adhesive should be used up within approx. 5 hours.

Adhesive application

The adhesive should be applied onto the surface with a steel trowel and then distributed evenly and shaped (possibly in one direction) using a notched trowel. It is advisable to spread a thin adhesive coat first and then apply the coat of desired thickness and shape it with a notched trowel. It is recommended to lead a notched trowel in one direction. On walls, it's recommended to shape the adhesive in vertical direction.

Installing the tiles

After the application, the adhesive retains its properties for approx. 30 minutes (in temperature approx. 23 °C and 55 % humidity). Within this time, the tile must be placed and pressed well (the contact surface between the adhesive and the tile should be uniform and as large as possible – min. 2/3 of tile surface). Remove the excess of the adhesive pressed into the joints immediately.
In case of floor tiles or tiling outdoors it is advisable to keep the full bonding surface (use the mixed method consisting in application of the adhesive on the substrate and the back of a tile, if needed). Keep the joint width appropriate for the tile size and operation conditions (check data in the sheets of ATLAS grouts).

Tile adjustment

The position of a tile can be adjusted with delicate moves along the bonding plane. It can be done within approximately 10 minutes since the tile is pressed (in temperature approx. 23 °C and 55 % humidity).

Grouting and cladding use

Foot traffic and grouting with ATLAS GROUT, ATLAS ARTIS GROUT, ATLAS DECORATIVE GROUT or ATLAS EPOXY GROUT can start after approx. 24 hours since the tiles fixing. The mortar reaches the operational strength after 3 days (check the Technical Data). Expansion joints, joints along the wall corners, at sanitary equipment, etc. should be filled with sanitary silicone ATLAS SILTON S or ATLAS ARTIS.

Coverage

Average coverage: approx. 1.5 kg of dry mix / 1 m^2 / 1 mm adhesive layer – for complete filling the space beneath the tile. It depends on the smoothness of the surface and the back side of the tile.

Tile size	Trowel notch size [mm]	Thickness of adhesive coat [mm]	2/3 surface contact [kg/m^2]	Full surface contact [kg/m^2]
mosaic up to 2 x 2 cm	4.0	2.0	from 2.0	from 3.0
small size up to 10 x 10 cm	≥ 6.0	2.0÷2.5	from 2.0	from 3.0
medium size up to 30 x 30 cm	≥ 8.0	3.0÷3.5	from 3.0	from 4.5
large size up to 50 x 50 cm	≥ 10.0	4.0÷4.5	from 3.0	from 6.0
large size over 50 x 50 cm	12	6.0÷7.0	fnot recommended	from 9.0

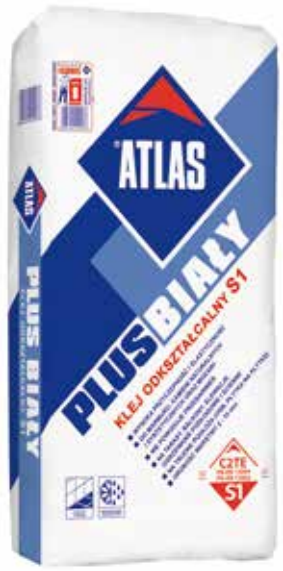
Important additional information

- The tiles must not be soaked before fixing. When determining the adhesive thickness under the cladding, one should consider the geometric deviation of tiles shape, e.g. plane warpage. Tiles subject to discolouration in contact with grey cement should be applied with the use of adhesives based on white cement binder.
- Open time – from the moment of application of the adhesive to the moment of placing the tiles upon it – is limited. In order to check if it is still possible to fix tiles, performing a test is recommended. It consists in pressing your fingers against the adhesive. If the adhesive remains on the fingers, you may fix the tiles. If the fingers are clean, the old layer of the adhesive has to be removed and a new one applied.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set adhesive can be removed with the ATLAS SZOP agent.
- Water reservoirs designated for drinking water should be washed with water after the product ageing.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The adhesive must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%..

Packaging

Foil bags: 5, 10, 25 kg
Pallet: : 1,050 kg in 5 kg bags, 1,100 kg in 10 kg bags, 1,200 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-03-31



C2TES1
PRODUCT CONFORMS TO THE EUROPEAN STANDARD

APPLY WITH NOTCHED TROWEL
FOR WALLS AND FLOORS
2-10 mm
LAYER THICKNESS
INDOORS AND OUTDOORS
FOOT TRAFFIC AFTER 24 H
EASY IN USE
WATER- AND FROST-RESISTANT

ATLAS PLUS WHITE
white deformable adhesive S1 2-10 mm

- for any type of ceramic, stone, glass cladding, composite panels
- for large size tiles (>1 m^2)
- for difficult substrates: OSB boards, old tiles, wooden floors, metal and plastic surfaces
- on terraces, balconies and façades, in pools and technological tanks (also with drinking water)
- for residential, commercial and service, public access and industrial buildings
- with white cement, which does not cause cladding discolouration which can occur in contact with grey cement

Polymer technology

The polymer technology is used in the ATLAS PLUS recipe. Owing to the high content of redispersible polymer resins, the cement adhesive gets unique properties and offers the highest technical and operation parameters assuring long term durability. The presence of polymers ensures high bonding of any cladding to any substrate type, including, so called, difficult and critical ones. Owing to the interchange of the polymer network with the network of inorganic hydration cement bindings, the adhesive offers outstanding parameters. The content of white cement limits the risk of the discolouration of the cladding.

The use of the polymer technology gives:

- possibility of fixing the cladding of any type, both absorbable and non-absorbable – owing to high bonding resulting from high content of the polymer resin,
- possibility of fixing the tiles on, so called, difficult substrates, including OSB boards, plasterboards, old tiles (tile on tile) as well as substrates subject to large and very large mechanical and thermal load – owing to the deformability,
- outstanding plasticity and mass homogeneity – the adhesive is easily workable and spread upon the surface – the adhesion strength prevents the adhesive from "rolling back" onto the trowel.

Properties

ATLAS PLUS WHITE is manufactured as a dry mix of high quality cement binder, aggregates and special composition of modifiers.
Does not cause cladding discolouration – perfect for fixing glass mosaic and glass blocks installation – owing to high bonding and white cement.
Highly flexible – deformability S1 – the permissible deflection of the set adhesive is within 2.5 – 5 mm range (test according to PN-EN 12002).
With improved bonding – the actual bonding to concrete substrate in standard conditions is two times higher than the one required by the PN-EN 12004 standard.
Range of adhesive thickness (2-10 mm) enables:
- thin-coat cladding fixing on even substrates,
- thin-coat cladding fixing on uneven substrates, preceded by substrate floating.

Extended open time - allows placing the tiles even 30 minutes since the mortar application – it can be once applied onto larger surface and therefore minimize the time of work.
Reduced slip - enables fixing the cladding "from the top" – proper consistency and layer thickness eliminate the adhesive slip. Therefore one can tile from the wall top and avoid cut-to-size tiles on exposed wall zones.
Versatility of use – the adhesive is designed for almost any cladding type, regardless the tile size, on various substrates, in any building type, even with high operation load.
Recommended for fixing tiles in drinking water reservoirs, food industry, healthcare buildings, nurseries, kindergartens, etc.

Use

Fixing ceramic and stone cladding of any type - glazed tiles, terracotta, porcelain-gres tiles, clinker, stone, ceramic mosaic, concrete and cement tiles, marble / natural stone cladding insusceptible to discolouration, glass mosaic and tiles, laminated porcelain-gres tiles, composite panels, insulation and acoustic panels. If in doubt conduct an application test.
Fixing small, medium and large size claddings - small and medium size tiles (< 0.1 m^2), large (< 0.25 m^2) and very large size tiles (> 0.25 m^2), slim-type tiles.
Fixing cladding on horizontal and vertical surfaces, indoors and outdoors:
- in residential, public access, healthcare, commercial and service, sacral, industrial buildings,
- in kitchens, bathrooms, laundries, showers, washes, rooms washed with plenty of water, offices, warehouses, garages, communication routes, on balconies, terraces, loggias, façades (incl. ETICS systems), external stairs, infrastructure,
- technological tanks, pools, fountains, jacuzzi, balneotechnology (with no aggressive chemicals in use), drinking water reservoirs, sauna, SPA,
- in rooms of small, medium and large operation load,

Fixing cladding on standard substrates - cement screeds and mortars, anhydrite screeds, cement, cement-lime and gypsum plasters, walls made of cellular concrete, silicate brick or hollow blocks, ceramic brick or hollow blocks, gypsum blocks.
Fixing cladding on deformable substrates or, so called, difficult substrates – concrete, terrazzo, elastic and rigid damp proofing (e.g. WODER S, WODER E, WODER W or WODER DUO), magnesium substrates, dry substrates made of gypsum boards, screeds (cement and anhydrite) with water and electric heating system or with heating mats embedded, plasters with wall heating system, plasterboards, gypsum-fibre boards, cement-fibre boards, existing ceramic and stone cladding ("tile on tile"), concrete resin lacquers bonded to the substrate, dispersion, oil paints bonded to the substrate, mineral, dispersion and reactive sealing coats, wooden floors (thick. >25 mm), OSB/3, OSB/4 and chipboards (thick. >25 mm on floors and >18 mm on walls), insulation and acoustic panels, metal, steel and plastic surfaces, mastic asphalt screeds. If in doubt conduct an application test.
Note. Check the product sheet on www.atlas.com.pl/en for more detailed info on the range of use.

Technical data

Mass bulk density (after mixing)	approx. 1.6 kg/dm^3
Mixing ratio (water/dry mix)	0.26 – 0.28 l / 1 kg 1.30 – 1.40 l / 5 kg 6.50 - 7.00 l / 25 kg
Min. /max. adhesive thickness	2 mm / 10 mm
Adhesive preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Maturing time	approx. 5 minutes
Pot life*	approx. 4 hours
Open time*	min. 30 minutes
Adjustability time*	approx. 10 minutes
Floor access/ grouting*	after 24 hours
Full operation load – foot traffic*	after 3 days
Full operation load – vehicle traffic*	after 14 days
Floor heating (warm surface)*	approx. 1.6 kg/dm^3

The time shown in the table is recommended for the application in the temperature 23°C and humidity 55% (approx.).

Technical requirements

The product conforms to PN-EN 12004 + A1:2012 standard for C2TE S1 class adhesive. EC Declaration of Performance No. 1030/CPR.

CE 2007, 0767	PN-EN 12004+A1:2012 (EN 12004:2007+A1:2012)
Cement adhesive for tiles of enhanced parameters, extended open time and reduced slip, deformable, C2TE S1 type	**for indoor and outdoor use, for walls and floors**
Reaction to fire – class	A1 $A1_{fl}$
Bonding strength - initial bonding	**≥ 0.5 N/mm²**
Durability - bonding after: - heat exposure - immersion in water - freeze-thaw cycles	**≥ 0.5 N/mm²** **≥ 0.5 N/mm²** **≥ 0.5 N/mm²**
Open time - tensile adhesion after time not shorter than 20 minutes	**≥ 0.5 N/mm²**
Slip	≤ 0.5 mm
Transverse deformation	≥ 2.5 mm and < 5 mm
Release/content of hazardous substances	See: Safety Data Sheet

The product has been given the Radiation Hygiene Certificate.

Application

Substrate preparation

The substrate should be:

- **stable** – sufficiently sound, resistant to deformation, free from materials which would impair adhesion, stabilized.
- **even** – maximum adhesive thickness is 10 mm, in case of larger irregularities use, e.g. ATLAS ZW 330 mortar, screeds ATLAS SMS, SAM, POSTAR.
- **clean** – free from layers which can impair adhesion, especially dust, dirt, lime, oils, greases, wax, residues of oil and emulsion paints. The substrate coated with algae, fungi, etc. must be cleaned and protected with ATLAS MYKOS agent.
- **primed with:**

- ATLAS UNI-GRUNT or ATLAS UNI-GRUNT PLUS – substrates of excessive or heterogenous absorptiveness,
– ATLAS GRUNTO-PLAST – if the substrate absorptivity is low, or it is coated with layers limiting the adhesion.

Detailed guidelines concerning the substrate preparation, depending on its type, are available in the product sheet on www.atlas.com.pl/en.

Adhesive preparation

Pour the adhesive from the bag into a container with the suitable amount of water (see Technical Data for ratio) and mix, using a low speed mixer with a drill for mortars, until homogenous. The dispersed adhesive should be left to rest for 5 minutes and then remixed. So prepared adhesive should be used up within approx. 4 hours.

Adhesive application

The adhesive should be applied onto the surface with a steel trowel and then distributed evenly and shaped (possibly in one direction) using a notched trowel. It is advisable to spread a thin adhesive coat first and then apply the coat of desired thickness and shape it with a notched trowel. It is recommended to lead a notched trowel in one direction. On walls, it's recommended to shape the adhesive in vertical direction.

Installing the tiles

After the application, the adhesive retains its properties for approx. 30 minutes (in temperature approx. 23 °C and 55 % humidity). Within this time, the tile must be placed and pressed well (the contact surface between the adhesive and the tile should be uniform and as large as possible – min. 2/3 of tile surface). Remove the excess of the adhesive pressed into the joints immediately.

In case of floor tiles or tiling outdoors it is advisable to keep the full bonding surface (use the mixed method consisting in application of the adhesive on the substrate and the back of a tile, if needed). Keep the joint width appropriate for the tile size and operation conditions (check data in the sheets of ATLAS grouts).

Tile adjustment

The position of a tile can be adjusted with delicate moves along the bonding plane. It can be done within approximately 10 minutes since the tile is pressed (in temperature approx. 23 °C and 55 % humidity).

Grouting and cladding use

Foot traffic and grouting with ATLAS GROUT, ATLAS ARTIS GROUT, ATLAS DECORATIVE GROUT or ATLAS EPOXY GROUT can start after approx. 24 hours since the tiles fixing. The mortar reaches the operational strength after 3 days (check the Technical Data). Expansion joints, joints along the wall corners, at sanitary equipment, etc. should be filled with sanitary silicone ATLAS SILTON S or ATLAS ARTIS.

Coverage

Average coverage: approx. 1.5 kg of dry mix / 1 m^2 / 1 mm adhesive layer – for complete filling the space beneath the tile. It depends on the smoothness of the surface and the back side of the tile.

Tile size	Trowel notch size [mm]	Thickness of adhesive coat [mm]	2/3 surface contact [kg/m^2]	Full surface contact [kg/m^2]
mosaic up to 2 x 2 cm	4.0	2	from 2.0	from 3.0
small size up to 10 x 10 cm	≥ 6.0	2÷2.5	from 2.0	from 3.0
medium size up to 30 x 30 cm	≥ 8.0	3÷3.5	from 3.0	from 4.5
large size up to 50 x 50 cm	≥ 10.0	4.0÷4.5	from 4.0	from 6.0
large size over 50 x 50 cm	10	6.0÷7.0	not recommended	from 9.0

Important additional information

- The tiles must not be soaked before fixing. When determining the adhesive thickness under the cladding, one should consider the geometric deviation of tiles shape, e.g. plane warpage.
- In case of fixing thin marble tiles temporary discolouration may occur due to high water absorption of marble. Fixed marble goes back to the previous colour after approx. 7 days, i.e. when it is completely dry.
- Open time – from the moment of application of the adhesive to the moment of placing the tiles upon it – is limited. In order to check if it is still possible to fix tiles, performing a test is recommended. It consists in pressing your fingers against the adhesive. If the adhesive remains on the fingers, you may fix the tiles. If the fingers are clean, the old layer of the adhesive has to be removed and a new one applied.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set adhesive can be removed with the ATLAS SZOP agent.
- Water reservoirs designated for drinking water should be washed with water after the product ageing.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The adhesive must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%..

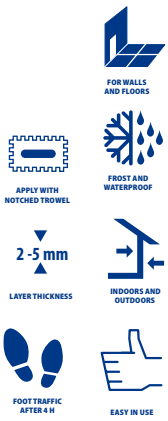
Packaging

Foil bags: 5, 25 kg
Pallet: : 1,050 kg in 5 kg bags, 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-03-31

C2FTES1

PRODUCT CONFORMS TO THE EUROPEAN STANDARD



ATLAS PLUS EXPRESS

fast-setting deformable adhesive S1 2-5 mm

- for projects requiring quick work progress and possibility of almost immediate use
- for any type of ceramic, stone, glass cladding, composite panels
- for small, medium and large size tiles
- for difficult substrates: floor heating systems, OSB and plasterboards, old tiles, wooden floors, metal and plastic surfaces
- on terraces, balconies and façades, in pools and technological tanks
- for residential, commercial and service, public access and industrial buildings

Polymer technology

The polymer technology is used in the ATLAS PLUS recipe. Owing to the high content of redispersible polymer resins, the cement adhesive gets unique properties and offers the highest technical and operation parameters assuring long term durability. The presence of polymers ensures high bonding of any cladding to any substrate type, including, so called, difficult and critical ones. Owing to the interchange of the polymer network with the network of inorganic hydration cement bindings, the adhesive offers outstanding parameters. The use of fast-setting cement enables rapid growth of bonding and strength not later than 6 hours since the tiles fixing.

The use of the polymer technology gives:

- possibility of fixing the cladding of any type, both absorbable and non-absorbable – owing to high bonding resulting from high content of the polymer resin,
- possibility of fixing the tiles on, so called, difficult substrates, including OSB boards, plasterboards, old tiles (tile on tile) as well as substrates subject to large and very large mechanical and thermal load – owing to the deformability,
- outstanding plasticity and mass homogeneity – the adhesive is easily workable and spread upon the surface – the adhesion strength prevents the adhesive from "rolling back" onto the trowel.

Reinforcement with fibers

- the structural reinforcement with cellulose fibers helps to compensate the stress occurring on deformable substrates.
- the fibers improve water retention of the adhesive: limit the effects of sudden water retention within the joint with both absorbable substrate and absorbable tile as well as within the evaporation zone. During the adhesive setting and drying (particularly when applied with maximum thickness) the fibers accumulate and transfer water keeping its uniform level within the whole coat.

Properties

ATLAS PLUS EXPRESS is manufactured as a dry mix of high quality cement binder, aggregates and specially selected modifiers.
Highly flexible – deformability S1 – the permissible deflection of the set adhesive is within 2.5 – 5 mm range (test according to PN-EN 12002).
Fast-setting – ensures rapid growth of strength parameters – very high early bonding enables walking on tiles and grouting just after 4 hours, and foot and vehicle traffic just after 1 day since the tiles fixing.
With improved bonding and durability – the actual bonding to concrete substrate after 28 days, also after thermal ageing, immersion in water, freeze and thaw cycles in standard conditions, is two times higher than the one required by the PN-EN 12004 standard.
Extended open time - allows placing the tiles even 30 minutes since the mortar application – it can be once applied onto larger surface and therefore minimize the time of work.
Reduced slip - enables fixing the cladding "from the top" – proper consistency and layer thickness eliminate the adhesive slip. Therefore one can tile from the wall top and avoid cut-to-size tiles on exposed wall zones.
Limits the influence of atmospheric conditions on the cladding installation correctness – enables quick and safe tiling in unpredictable atmospheric conditions. The optimum pace of work and reaching the operation parameters rapidly limit the risk of damage to the cladding installed indoors.
Recommended for fixing wall and floor tiles in individual construction, industrial, commercial, health care buildings, in nurseries and kindergartens, etc., anywhere where the quick progress of work and almost immediate possibility of the surface use is expected.

Use

Fixing ceramic and stone cladding of any type - glazed tiles, terracotta, porcelain-gres tiles, clinker, ceramic mosaic, concrete and cement tiles, marble/ natural stone cladding insusceptible to discolouration, glass mosaic and tiles, laminated porcelain-gres tiles, composite panels, insulation and acoustic panels. If in doubt conduct an application test.
Fixing small, medium and large size claddings - small and medium size tiles (< 0.1 m^2), large (< 0.25 m^2).
Fixing cladding on horizontal and vertical surfaces, indoors and outdoors:
- in residential, public access, healthcare, commercial and service, sacral, industrial buildings,
- in kitchens, bathrooms, laundries, showers, washes, rooms washed with plenty of water, offices, warehouses, garages, communication routes, on balconies, terraces, loggias, façades (incl. ETICS systems), external stairs, infrastructure,
- technological tanks, pools, fountains, jacuzzi, balneotechnology (with no aggressive chemicals in use), sauna, SPA,
- in rooms of small, medium and large operation load,

Fixing cladding on standard substrates - cement screeds and mortars, anhydrite screeds, cement, cement-lime and gypsum plasters, walls made of cellular concrete, silicate brick or hollow blocks, ceramic brick or hollow blocks, gypsum blocks.
Fixing cladding on deformable substrates or, so called, difficult substrates – concrete, terrazzo, elastic and rigid damp proofing (e.g. WODER S, WODER E, WODER W or WODER DUO), magnesium substrates, dry substrates made of gypsum boards, screeds (cement and anhydrite) with water and electric heating system or with heating mats embedded, plasters with wall heating system, plasterboards, gypsum-fibre boards, cement-fibre boards, existing ceramic and stone cladding ("tile on tile"), concrete resin lacquers bonded to the substrate, dispersion, oil paints bonded to the substrate, mineral, dispersion and reactive sealing coats, wooden floors (thick. >25 mm), OSB/3, OSB/4 and chipboards (thick. >25 mm on floors and >18 mm on walls), insulation and acoustic panels, metal, steel and plastic surfaces, mastic asphalt screeds. If in doubt conduct an application test.
Note. Check the product sheet on www.atlas.com.pl/en for more detailed info on the range of use.

Technical data

Mass bulk density (after mixing)	approx. 1.55 kg/dm^3
Mixing ratio (water/dry mix)	0.21 – 0.23 l / 1 kg 5.25 - 5.75 l / 25 kg
Min./max. adhesive thickness	2 mm / 5 mm
Adhesive preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Maturing time	approx. 5 minutes
Pot life*	approx. 1 hours
Open time*	min. 30 minutes
Adjustability time*	approx. 10 minutes
Floor access/ grouting*	after approx. 4 hours
Full operation load – foot traffic*	after 3 days
Full operation load – vehicle traffic*	after 14 days
Full water load – pool/tank*	after 14 days
Floor heating (warm surface)*	after 14 days

The time shown in the table is recommended for the application in the temperature 23°C and humidity 55% (approx.).

Technical requirements

The product conforms to PN-EN 12004 + A1:2012 standard for C2FTE S1 class adhesive. EC Declaration of Performance No. 1087/CPR.

CE 2007, 0767	PN-EN 12004+A1:2012 (EN 12004:2007+A1:2012)
Cement adhesive for tiles of enhanced parameters, fast-setting, extended open time and reduced slip, deformable, C2FTE S1 type	**for indoor and outdoor use, for walls and floors**
Reaction to fire – class	A2-s1, d0 A1$_{fl}$-s1
Bonding strength - initial bonding - early bonding (after ≤ 6 hours)	 **≥ 1.0 N/mmm^2** **≥ 0.5 N/mmm^2**
Durability - bonding after: - thermal ageing - immersion in water - freeze-thaw cycles	 **≥ 1.0 N/mmm^2** **≥ 1.0 N/mmm^2** **≥ 1.0 N/mmm^2**
Open time - tensile adhesion after time not shorter than 30 minutes	**≥ 0.5 N/mm^2**
Slip	≤ 0.5 mm
Transverse deformation	≥ 2.5 mm and < 5 mm
Release/content of hazardous substances	See: Safety Data Sheet

The product has been given the Radiation Hygiene Certificate.

Application

Substrate preparation
The substrate should be:

- **stable** – sufficiently sound, resistant to deformation, free from materials which would impair adhesion, stabilized.
- **even** – maximum adhesive thickness is 5 mm, in case of larger irregularities use, e.g. ATLAS ZW 330 mortar, screeds ATLAS SMS, SAM, POSTAR.
- **clean** – free from layers which can impair adhesion, especially dust, dirt, lime, oils, greases, wax, residues of oil and emulsion paints. The substrate coated with algae, fungi, etc. must be cleaned and protected with ATLAS MYKOS agent.
- **primed with:**

-ATLAS UNI-GRUNT or ATLAS UNI-GRUNT PLUS – substrates of excessive or heterogenous absorptiveness,
–ATLAS GRUNTO-PLAST – if the substrate absorptivity is low, or it is coated with layers limiting the adhesion.

Detailed guidelines concerning the substrate preparation, depending on its type, are available in the product sheet on www.atlas.com.pl/en.

Adhesive preparation

Pour the adhesive from the bag into a container with the suitable amount of water (see Technical Data for ratio) and mix, using a low speed mixer with a drill for mortars, until homogenous. The dispersed adhesive should be left to rest for 5 minutes and then remixed. So prepared adhesive should be used up within approx. 1 hour.

Adhesive application

The adhesive should be applied onto the surface with a steel trowel and then distributed evenly and shaped (possibly in one direction) using a notched trowel. It is advisable to spread a thin adhesive coat first and then apply the coat of desired thickness and shape it with a notched trowel. It is recommended to lead a notched trowel in one direction. On walls, it's recommended to shape the adhesive in vertical direction.

Installing the tiles

After the application, the adhesive retains its properties for approx. 30 minutes (in temperature approx. 23 °C and 55 % humidity). Within this time, the tile must be placed and pressed well (the contact surface between the adhesive and the tile should be uniform and as large as possible – min. 2/3 of tile surface). Remove the excess of the adhesive pressed into the joints immediately.
In case of floor tiles or tiling outdoors it is advisable to keep the full bonding surface (use the mixed method consisting in application of the adhesive on the substrate and the back of a tile, if needed). Keep the joint width appropriate for the tile size and operation conditions (check data in the sheets of ATLAS grouts).

Tile adjustment

The position of a tile can be adjusted with delicate moves along the bonding plane. It can be done within approximately 10 minutes since the tile is pressed (in temperature approx. 23 °C and 55 % humidity).

Grouting and cladding use

Foot traffic and grouting with ATLAS GROUT, ATLAS ARTIS GROUT, ATLAS DECORATIVE GROUT or ATLAS EPOXY GROUT can start after approx. 4 hours since the tiles fixing. The mortar reaches the operational strength after 3 days (check the Technical Data). Expansion joints, joints along the wall corners, at sanitary equipment, etc. should be filled with sanitary silicone ATLAS SILTON S or ATLAS ARTIS.

Coverage

Average coverage: approx. 1.5 kg of dry mix / 1 m^2 / 1 mm adhesive layer – for complete filling the space beneath the tile. It depends on the smoothness of the surface and the back side of the tile.

Tile size	Trowel notch size [mm]	Thickness of adhesive coat [mm]	2/3 surface contact [kg/m^2]	Full surface contact [kg/m^2]
mosaic up to 2 x 2 cm	4.0	2.0	from 2.0	from 3.0
small size up to 10 x 10 cm	≥ 6.0	2.0÷2.5	from 2.0	from 3.0
large size up to 30 x 30 cm	≥ 8.0	3.0÷3.5	from 3.0	from 4.5
large size up to 50 x 50 cm	≥ 10.0	4.0÷4.5	from 4.0	from 6.0

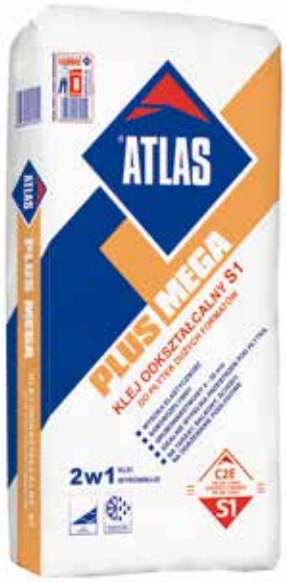
Important additional information

- The tiles must not be soaked before fixing. When determining the adhesive thickness under the cladding, one should consider the geometric deviation of tiles shape, e.g. plane warpage. Tiles subject to discolouration in contact with grey cement should be applied with the use of adhesives based on white cement binder.
- Higher air humidity or low temperature extend the setting time of the adhesive.
- Open time – from the moment of application of the adhesive to the moment of placing the tiles upon it – is limited. In order to check if it is still possible to fix tiles, performing a test is recommended. It consists in pressing your fingers against the adhesive. If the adhesive remains on the fingers, you may fix the tiles. If the fingers are clean, the old layer of the adhesive has to be removed and a new one applied.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set adhesive can be removed with the ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The adhesive must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Foil bags: 25 kg
Pallet: : 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-03-31



C2ES1
PRODUCT CONFORMS TO THE EUROPEAN STANDARD

FOR FLOORS
INDOORS AND OUTDOORS
APPLY WITH NOTCHED TROWEL
FROST AND WATERPROOF
4-20 mm
LAYER THICKNESS
SELFSPREADING
FOOT TRAFFIC AFTER 24 H
EASY IN USE
2 IN ONE
XXL
FOR LARGE SIZE TILES

ATLAS PLUS MEGA

thick-coat deformable adhesive S1 4-20 mm

- for any type of ceramic, stone, glass cladding, composite panels
- for large size tiles (>1 m^2)
- for difficult substrates: floor heating, terrazzo, OSB boards, old tiles, wooden floors, metal and plastic surfaces
- for thin- and thick-coat tiling
- for substrates requiring unevenness correction with full adhesive spreading beneath a tile
- on terraces, balconies, in pools and technological tanks
- for residential, commercial and service, public access and industrial buildings

Polymer technology

The polymer technology is used in the ATLAS PLUS MEGA recipe. Owing to the high content of redispersible polymer resins, the cement adhesive gets unique properties and offers the highest technical and operation parameters assuring long term durability. The presence of polymers ensures high bonding of any cladding to any substrate type, including, so called, difficult and critical ones. Owing to the interchange of the polymer network with the network of inorganic hydration cement bindings, the adhesive offers outstanding parameters. In combination with specially selected aggregate the adhesive offers full spreading and filling the space beneath a tile – thixotropic effect. The content of white cement limits the risk of the discolouration of the cladding.

The use of the polymer technology gives:

- possibility of fixing the cladding of any type, both absorbable and non-absorbable – owing to high bonding resulting from high content of the polymer resin,
- possibility of fixing the tiles on, so called, difficult substrates, including heated screeds, wooden floors, OSB boards, terrazzo, old tiles (tile on tile) as well as substrates subject to large and very large mechanical and thermal load – owing to the deformability,
- outstanding plasticity and mass homogeneity – the adhesive is easily workable and spread upon the surface – the adhesion strength prevents the adhesive from "rolling back" onto the trowel and thixotropic properties make the tiles stably fixed and eliminate the phenomenon of the tile pulling during fixing as well as the adhesive setting and drying..

Reinforcement with fibers

- the structural reinforcement with cellulose fibers helps to compensate the stress occurring on deformable substrates.
- the fibers improve water retention of the adhesive: limit the effects of sudden water retention both within the joint with absorbable substrate and absorbable tile as well as within the evaporation zone. During the adhesive setting and drying (particularly when applied with maximum thickness) the fibers accumulate and transfer water keeping its uniform level within the whole coat.

Properties

ATLAS PLUS MEGA is manufactured as a dry mix of high quality cement binder, aggregates and special composition of modifiers.

Highly flexible – deformability S1 – the permissible deflection of the set adhesive is within 2.5 – 5 mm range (test according to PN-EN 12002).

With improved bonding – the actual bonding to concrete substrate in standard conditions is two times higher than the one required by the PN-EN 12004 standard.

2 in 1 – levels the substrate and fixes the tiles simultaneously – it's a thick-coat adhesive (coat thickness up to 2 cm), eliminates the need of leveling screed installation.

Extended open time - allows placing the tiles even 30 minutes since the mortar application – it can be once applied onto larger surface and therefore minimize the time of work.

Fills full space beneath a tile – eliminates air gaps, limits water accumulation outdoors (freezing water loosens the tiles), ensures appropriate thermal performance of heated floors (air gaps isolate the heat flow).

Ensures full support of large size tiles – eliminates the risk of cracking resulting from impact or stress.

Slight slopes within the adhesive coat can be formed – plastic consistency of the adhesive and wide range of thickness supported with the thixotropic properties enables slight slopes forming.

Recommended for fixing floor tiles in any building type, wherever full filling the space beneath a tile is required. Does not cause the tile pulling phenomenon during the adhesive setting and drying.

Use

Fixing ceramic and stone cladding of any type - glazed tiles, terracotta, porcelain-gres tiles, clinker, stone, ceramic mosaic, concrete and cement tiles, marble/natural stone cladding insusceptible to discolouration, glass mosaic and tiles, laminated porcelain-gres tiles, composite panels, insulation and acoustic panels. If in doubt conduct an application test.

Fixing small, medium and large size claddings - small and medium size tiles (< 0.1 m^2), large (< 0.25 m^2) and very large size tiles (> 0.25 m^2), slim-type tiles.

Fixing cladding on horizontal surfaces, indoors and outdoors:

-- in residential, public access, healthcare, commercial and service, sacral, industrial buildings, warehouses, multi-storey garages, infrastructure,
- in kitchens, bathrooms, laundries, showers, washes, rooms washed with plenty of water, offices, garages, communication routes, on balconies, terraces, loggias,
- technological tanks, pools, fountains, jacuzzi, balneotechnology (with no aggressive chemicals in use), drinking water reservoirs, sauna, SPA,
- in rooms of small and medium operation load.

Fixing cladding on standard substrates - cement screeds and mortars, anhydrite screeds.

Fixing cladding on deformable substrates or, so called, difficult substrates – concrete, terrazzo, elastic and rigid damp proofing (e.g. WODER S, WODER E, WODER W or WODER DUO), magnesium substrates, dry substrates made of gypsum boards, screeds (cement and anhydrite) with water and electric heating system or with heating mats embedded, existing ceramic and stone cladding ("tile on tile"), concrete resin lacquers bonded to the substrate, dispersion, oil paints bonded to the substrate, mineral, dispersion and reactive sealing coats, wooden floors (thick. >25 mm), OSB and chipboards (thick. >25 mm), insulation and acoustic panels, metal, steel and plastic surfaces, mastic asphalt screeds. If in doubt conduct an application test..

Note. Check the product sheet on www.atlas.com.pl/en for more detailed info on the range of use.

Technical data

Mass bulk density (after mixing)	approx. 1.65 kg/dm^3
Mixing ratio (water/dry mix)	0.21 – 0.24 l / 1 kg 5.25 - 6.00 l / 25 kg
Min./max. adhesive thickness	4 mm / 20 mm
Adhesive preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Maturing time	approx. 5 minutes
Pot life*	approx. 4 hours
Open time*	min. 30 minutes
Adjustability time*	approx. 10 minutes
Floor access/ grouting*	after approx. 24 hours
Full operation load – foot traffic*	after 3 days
Full operation load – vehicle traffic*	after 14 days
Floor heating (warm surface)*	after 14 days

The time shown in the table is recommended for the application in the temperature 23°C and humidity 55% (approx.).

Technical requirements

The product conforms to PN-EN 12004 + A1:2012 standard for C2E S1 class adhesive. EC Declaration of Performance No. 1024/CPR.

CE 2007, 0767	PN-EN 12004+A1:2012 (EN 12004:2007+A1:2012)
Cement adhesive for tiles of enhanced parameters, extended open time, deformable C2E S1 type	**for indoor and outdoor use, for walls and floors**
Reaction to fire – class	A2-s1, d0 A1fl-s1
Bonding strength - initial bonding	**≥ 1.0 N/mm²**
Durability - bonding after: - heat exposure - immersion in water - freeze-thaw cycles	**≥ 1.0 N/mm²** **≥ 1.0 N/mm²** **≥ 1.0 N/mm²**
Open time - tensile adhesion after time not shorter than 30 minutes	**≥ 0.5 N/mm²**
Slip	≤ 0.5 mm
Transverse deformation	≥ 2.5 mm and < 5 mm
Release/content of hazardous substances	See: Safety Data Sheet

The product has been given the Hygienic Attest and the Radiation Hygiene Certificate.

Application

Substrate preparation

The substrate should be:

- **stable** – sufficiently sound, resistant to deformation, free from materials which would impair adhesion, stabilized.
- **even** – maximum adhesive thickness is 20 mm, in case of larger irregularities use, e.g. ATLAS ZW 330 mortar, screeds ATLAS SMS, SAM, POSTAR.
- **clean** – free from layers which can impair adhesion, especially dust, dirt, lime, oils, greases, wax, residues of oil and emulsion paints. The substrate coated with algae, fungi, etc. must be cleaned and protected with ATLAS MYKOS agent.
- **primed with:**

- ATLAS UNI-GRUNT or ATLAS UNI-GRUNT PLUS – substrates of excessive or heterogenous absorptiveness,
- ATLAS GRUNTO-PLAST – if the substrate absorptivity is low, or it is coated with layers limiting the adhesion.
layers limiting the adhesion.

Detailed guidelines concerning the substrate preparation, depending on its type, are available in the product sheet on www.atlas.com.pl/en.

Adhesive preparation

Pour the adhesive from the bag into a container with the suitable amount of water (see Technical Data for ratio) and mix, using a low speed mixer with a drill for mortars, until homogenous. The dispersed adhesive should be left to rest for 5 minutes and then remixed. So prepared adhesive should be used up within approx. 4 hours.

Adhesive application

The adhesive should be applied onto the surface with a flat steel trowel and then distributed evenly and shaped (possibly in one direction) using a notched trowel. It is advisable to spread a thin adhesive coat first and then apply the coat of desired thickness and shape it with a notched trowel. It is recommended to lead a notched trowel in one direction.

Installing the tiles

After the application, the adhesive retains its properties for approx. 30 minutes (in temperature approx. 23 °C and 55 % humidity). Within this time, the tile must be placed and pressed well. Remove the excess of the adhesive pressed into the joints immediately. Keep the joint width appropriate for the tile size and operation conditions (check data in the sheets of ATLAS grouts).

Tile adjustment

The position of a tile can be adjusted with delicate moves along the bonding plane. It can be done within approximately 10 minutes since the tile is pressed (in temperature approx. 23 °C and 55 % humidity).

Grouting and cladding use

Foot traffic and grouting with ATLAS GROUT, ATLAS ARTIS GROUT, ATLAS DECORATIVE GROUT or ATLAS EPOXY GROUT can start after approx. 24 hours since the tiles fixing. The mortar reaches the operational strength after 3 days (check the Technical Data). Expansion joints, joints along the wall corners, at sanitary equipment, etc. should be filled with sanitary silicone ATLAS SILTON S or ATLAS ARTIS.

Coverage

Average coverage: approx. 1.5 kg of dry mix / 1 m^2 / 1 mm adhesive layer – for complete filling the space beneath the tile. It depends on the smoothness of the surface and the back side of the tile.

Tile size	Trowel notch size [mm]	Thickness of adhesive coat [mm]	Full surface contact [kg/m^2]
small, medium and large size up to 50 x 50 cm	≥ 10.0	4.0÷4.5	from 6.0
large size from 50 x 50 cm	12	6.0÷7.0	from 9.0

Important additional information

- The tiles must not be soaked before fixing. When determining the adhesive thickness under the cladding, one should consider the geometric deviation of tiles shape, e.g. plane warpage. Tiles subject to discolouration in contact with grey cement should be applied with the use of adhesives based on white cement binder.
- Open time – from the moment of application of the adhesive to the moment of placing the tiles upon it – is limited. In order to check if it is still possible to fix tiles, performing a test is recommended. It consists in pressing your fingers against the adhesive. If the adhesive remains on the fingers, you may fix the tiles. If the fingers are clean, the old layer of the adhesive has to be removed and a new one applied.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set adhesive can be removed with the ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The adhesive must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Foil bags: 25 kg
Pallet: : 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-03-31

ATLAS PLUS MEGA WHITE

white, thick-coat deformable adhesive S1 4-20 mm

- for any type of ceramic, stone, glass cladding, composite panels
- for large size tiles (>1 m^2)
- for difficult substrates: floor heating, terrazzo, OSB boards, old tiles, wooden floors, metal and plastic surfaces
- for thin- and thick-coat tiling
- for substrates requiring unevenness correction with full adhesive spreading beneath a tile
- on terraces, balconies, in pools and technological tanks
- for residential, commercial and service, public access and industrial buildings
- with white cement, which does not cause cladding discolouration, which which can occur in contact with grey cement

Polymer technology

The polymer technology is used in the ATLAS PLUS MEGA WHITE recipe. Owing to the high content of redispersible polymer resins, the cement adhesive gets unique properties and offers the highest technical and operation parameters assuring long term durability. The presence of polymers ensures high bonding of any cladding to any substrate type, including, so called, difficult and critical ones. Owing to the interchange of the polymer network with the network of inorganic hydration cement bindings, the adhesive offers outstanding parameters. In combination with specially selected aggregate the adhesive offers full spreading and filling the space beneath a tile – thixotropic effect. The content of white cement limits the risk of the discolouration of the cladding.

The use of the polymer technology gives:

- possibility of fixing the cladding of any type, both absorbable and non-absorbable – owing to high bonding resulting from high content of the polymer resin,
- possibility of fixing the tiles on, so called, difficult substrates, including heated screeds, wooden floors, OSB boards, terrazzo, old tiles (tile on tile) as well as substrates subject to large and very large mechanical and thermal load – owing to the deformability,
- outstanding plasticity and mass homogeneity – the adhesive is easily workable and spread upon the surface – the adhesion strength prevents the adhesive from "rolling back" onto the trowel and thixotropic properties make the tiles stably fixed and eliminate the phenomenon of the tile pulling during fixing as well as the adhesive setting and drying.

Reinforcement with fibers

- the structural reinforcement with cellulose fibers helps to compensate the stress occurring on deformable substrates.
- the fibers improve water retention of the adhesive: limit the effects of sudden water retention both within the joint with absorbable substrate and absorbable tile as well as within the evaporation zone. During the adhesive setting and drying (particularly when applied with maximum thickness) the fibers accumulate and transfer water keeping its uniform level within the whole coat.

Properties

ATLAS PLUS MEGA WHITE is manufactured as a dry mix of high quality cement binder, aggregates and special composition of modifiers.

Does not cause cladding discolouration – perfect for fixing natural stone and tiles prone to discolouration – owing to high bonding and white cement.

Highly flexible – deformability S1 – the permissible deflection of the set adhesive is within 2.5 – 5 mm range (test according to PN-EN 12002).

With improved bonding – the actual bonding to concrete substrate in standard conditions is two times higher than the one required by the PN-EN 12004 standard.

2 in 1 – levels the substrate and fixes the tiles simultaneously – it's a thick-coat adhesive (coat thickness up to 2 cm), eliminates the need of leveling screed installation.

Extended open time - allows placing the tiles even 30 minutes since the mortar application – it can be once applied onto larger surface and therefore minimize the time of work.

Fills full space beneath a tile – eliminates air gaps, limits water accumulation outdoors (freezing water loosens the tiles), ensures appropriate thermal performance of heated floors (air gaps isolate the heat flow).

Ensures full support of large size tiles – eliminates the risk of cracking resulting from impact or stress.

Slight slopes within the adhesive coat can be formed – plastic consistency of the adhesive and wide range of thickness supported with the thixotropic properties enables slight slopes forming.

Recommended for fixing floor tiles in any building type, wherever full filling the space beneath a tile is required. Does not cause the tile pulling phenomenon during the adhesive setting and drying.

Use

Fixing ceramic and stone cladding of any type - glazed tiles, terracotta, porcelain-gres tiles, clinker, stone, ceramic mosaic, concrete and cement tiles, marble/natural stone cladding, glass mosaic and tiles, laminated porcelain-gres tiles, composite panels, insulation and acoustic panels. If in doubt conduct an application test.

Fixing small, medium and large size claddings - small and medium size tiles (< 0.1 m^2), large (< 0.25 m^2) and very large size tiles (> 0.25 m^2), slim-type tiles.

Fixing cladding on horizontal surfaces, indoors and outdoors:

- in residential, public access, healthcare, commercial and service, sacral, industrial buildings, warehouses, multi-storey garages, infrastructure,
- in kitchens, bathrooms, laundries, showers, washes, rooms washed with plenty of water, offices, garages, communication routes, on balconies, terraces, loggias,
- technological tanks, pools, fountains, jacuzzi, balneotechnology (with no aggressive chemicals in use), drinking water reservoirs, sauna, SPA,
- in rooms of small and medium operation load.

Fixing cladding on standard substrates - cement screeds and mortars, anhydrite screeds.

Fixing cladding on deformable substrates or, so called, difficult substrates – concrete, terrazzo, elastic and rigid damp proofing (e.g. WODER S, WODER E, WODER W or WODER DUO), magnesium substrates, dry substrates made of gypsum boards, screeds (cement and anhydrite) with water and electric heating system or with heating mats embedded, existing ceramic and stone cladding ("tile on tile"), concrete resin lacquers bonded to the substrate, dispersion, oil paints bonded to the substrate, mineral, dispersion and reactive sealing coats, wooden floors (thick. >25 mm), OSB and chipboards (thick. >25 mm), insulation and acoustic panels, metal, steel and plastic surfaces, mastic asphalt screeds. If in doubt conduct an application test.

Note. Check the product sheet on www.atlas.com.pl/en for more detailed info on the range of use.

Technical data

Mass bulk density (after mixing)	approx. 1.95 kg/dm^3
Mixing ratio (water/dry mix)	0.21 – 0.24 l / 1 kg 5.25 - 6.00 l / 25 kg
Min./max. adhesive thickness	4 mm / 20 mm
Adhesive preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Maturing time	approx. 5 minutes
Pot life*	approx. 4 hours
Open time*	min. 30 minutes
Adjustability time*	approx. 10 minutes
Floor access/ grouting*	after approx. 24 hours
Full operation load – foot traffic*	after 3 days
Full operation load – vehicle traffic*	after 14 days
Floor heating (warm surface)*	after 14 days

The time shown in the table is recommended for the application in the temperature 23°C and humidity 55% (approx.).

Technical requirements

The product conforms to PN-EN 12004 + A1:2012 standard for C2E S1 class adhesive. EC Declaration of Performance No. 089/CPR.

CE 2007, 0767	PN-EN 12004+A1:2012 (EN 12004:2007+A1:2012)
Cement adhesive for tiles of enhanced parameters, extended open time, deformable C2E S1 type	**for indoor and outdoor use, for walls and floors**
Reaction to fire – class	A2-s1, d0 A1fl-s1
Bonding strength - initial bonding	**≥ 1.0 N/mm^2**
Durability - bonding after: - heat exposure - immersion in water - freeze-thaw cycles	**≥ 1.0 N/mm^2** **≥ 1.0 N/mm^2** **≥ 1.0 N/mm^2**
Open time - tensile adhesion after time not shorter than 30 minutes	**≥ 0.5 N/mm^2**
Slip	≤ 0.5 mm
Transverse deformation	≥ 2.5 mm and < 5 mm
Release/content of hazardous substances	See: Safety Data Sheet

The product has been given the Hygienic Attest and the Radiation Hygiene Certificate.

Application

Substrate preparation

The substrate should be:

- **stable** – sufficiently sound, resistant to deformation, free from materials which would impair adhesion, stabilized.
- **even** – maximum adhesive thickness is 20 mm, in case of larger irregularities use, e.g. ATLAS ZW 330 mortar, screeds ATLAS SMS, SAM, POSTAR.
- **clean** – free from layers which can impair adhesion, especially dust, dirt, lime, oils, greases, wax, residues of oil and emulsion paints. The substrate coated with algae, fungi, etc. must be cleaned and protected with ATLAS MYKOS agent.
- **primed with:**

- ATLAS UNI-GRUNT or ATLAS UNI-GRUNT PLUS – substrates of excessive or heterogenous absorptiveness,
- ATLAS GRUNTO-PLAST – if the substrate absorptivity is low, or it is coated with layers limiting the adhesion.

Detailed guidelines concerning the substrate preparation, depending on its type, are available in the product sheet on www.atlas.com.pl/en.

Adhesive preparation

Pour the adhesive from the bag into a container with the suitable amount of water (see Technical Data for ratio) and mix, using a low speed mixer with a drill for mortars, until homogenous. The dispersed adhesive should be left to rest for 5 minutes and then remixed. So prepared adhesive should be used up within approx. 4 hours.

Adhesive application

The adhesive should be applied onto the surface with a flat steel trowel and then distributed evenly and shaped (possibly in one direction) using a notched trowel. It is advisable to spread a thin adhesive coat first and then apply the coat of desired thickness and shape it with a notched trowel. It is recommended to lead a notched trowel in one direction.

Installing the tiles

After the application, the adhesive retains its properties for approx. 30 minutes (in temperature approx. 23 °C and 55 % humidity). Within this time, the tile must be placed and pressed well. Remove the excess of the adhesive pressed into the joints immediately. Keep the joint width appropriate for the tile size and operation conditions (check data in the sheets of ATLAS grouts).

Tile adjustment

The position of a tile can be adjusted with delicate moves along the bonding plane. It can be done within approximately 10 minutes since the tile is pressed (in temperature approx. 23 °C and 55 % humidity).

Grouting and cladding use

Foot traffic and grouting with ATLAS GROUT, ATLAS ARTIS GROUT, ATLAS DECORATIVE GROUT or ATLAS EPOXY GROUT can start after approx. 24 hours since the tiles fixing. The mortar reaches the operational strength after 3 days (check the Technical Data). Expansion joints, joints along the wall corners, at sanitary equipment, etc. should be filled with sanitary silicone ATLAS SILTON S or ATLAS ARTIS.

Coverage

Average coverage: approx. 1.5 kg of dry mix / 1 m^2 / 1 mm adhesive layer – for complete filling the space beneath the tile. It depends on the smoothness of the surface and the back side of the tile.

Tile size	Trowel notch size [mm]	Thickness of adhesive coat [mm]	Full surface contact [kg/m^2]
small, medium and large size up to 50 x 50 cm	≥ 10.0	4.0÷4.5	from 6.0
large size from 50 x 50 cm	12	6.0÷7.0	from 9.0

Important additional information

- The tiles must not be soaked before fixing. When determining the adhesive thickness under the cladding, one should consider the geometric deviation of tiles shape, e.g. plane warpage.
- Open time – from the moment of application of the adhesive to the moment of placing the tiles upon it – is limited. In order to check if it is still possible to fix tiles, performing a test is recommended. It consists in pressing your fingers against the adhesive. If the adhesive remains on the fingers, you may fix the tiles. If the fingers are clean, the old layer of the adhesive has to be removed and a new one applied.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set adhesive can be removed with the ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The adhesive must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%..

Packaging

Foil bags: 25 kg
Pallet: : 1,050 kg in 25 kg bags

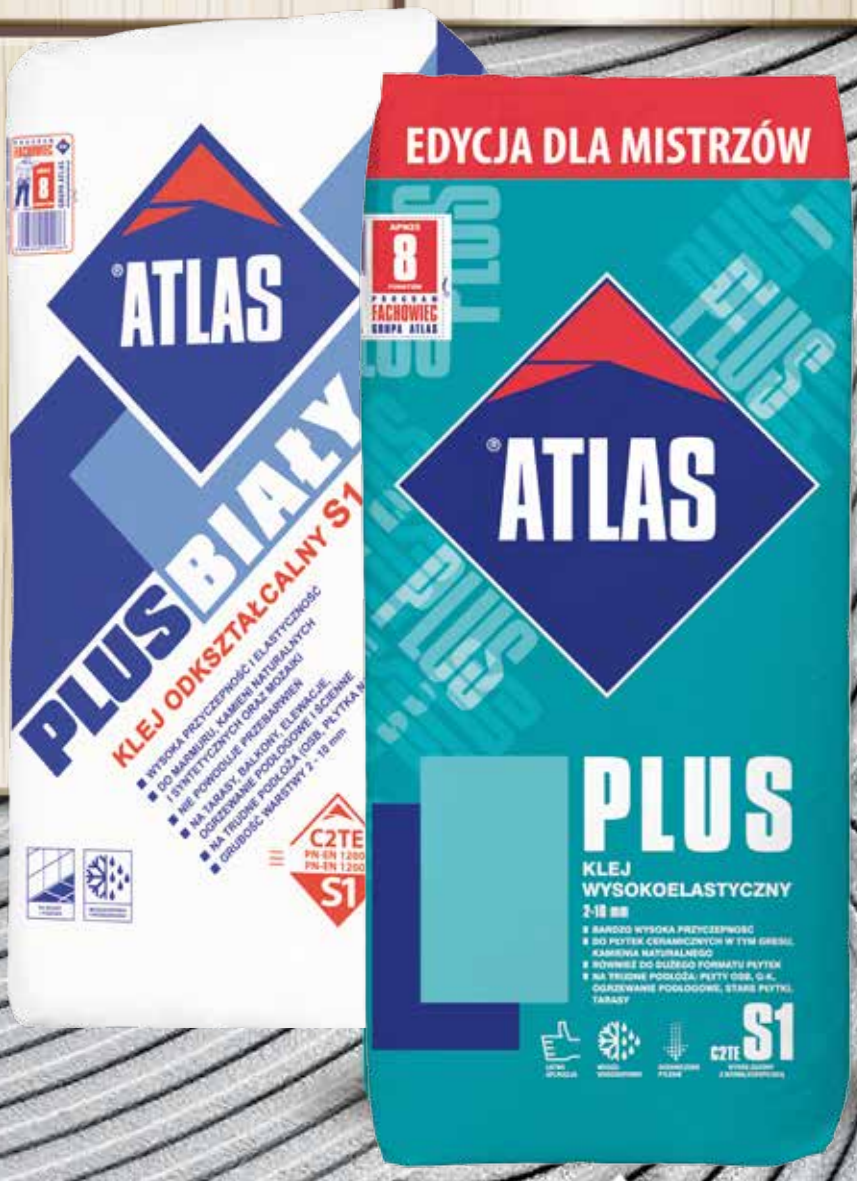
The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-03-31

ATLAS

www.atlas.com.pl

ATLAS PLUS is a flexible adhesive most popular for professionals. It is confirmed by millions of square meters of tiles laid on different substrates with the use of this adhesive. It is appreciated because of high bonding strength, flexibility as well as of firmness and reliability.
It meets the highest Polish and European standards.
Highly flexible adhesives ATLAS PLUS and ATLAS PLUS WHITE has S1 class of deformability that means resistance to deformation up to 5 mm. It allows to apply the adhesives on difficult substrates such as plasterboards, OSB, wooden ceilings. It ensures firm and lasting cladding in bathrooms, kitchens, on terraces, balconies, façades and even in home swimming-pools.

ATLAS PLUS – FIRM, RELIABLE, FLEXIBLE!



When the substrate works like this page …

C2TE
PN-EN 12004
CONFORMS WITH
PN-EN 12002 NORM
S1

DEFORMABLE ADHESIVE

GROUTS, SILICONES, FINISHING TRIMS

GROUTS, SILICONES, FINISHING TRIMS

Classification of grouts

Grouts are classified in accordance to PN-EN 13888 Grouts for tiles. Requirements, evaluation of conformity, classification and designation.

Main requirements	**CG1** - cement grout of standard setting	**CG 2** - cement grout of enhanced parameters with additional requirements (reduced water absorption and increased resistance to abrasion)	**RG** - grout based on reactive resins
ATLAS GROUTS	-	ATLAS ARTIS GROUT ATLAS TIGHT GROUT ATLAS WIDE GROUT ATLAS DECORATIVE GROUT	ATLAS EPOXY GROUT
Resistance to abrasion	≤ 2,000 mm^3	≤ 1,000 mm^3	≤ 250 mm^3
Flexural strength	≥ 3.5 N/mm^2	≥ 3.5 N/mm^2	≥ 30 N/mm^2
Compressive strength	≥ 15 N/mm^2	≥ 15 N/mm^2	≥ 45 N/mm^2
Shrinkage	≤ 2 mm/m	≤ 2 mm/m	≤ 1.5 mm/m
Water absorption after 30 minutes	≤ 5 g	≤ 2 g	-
Water absorption after 240 minutes	≤ 10 g	≤ 5 g	≤ 0.1 g

Consumption

The grout consumption for a given surface can be calculated according to the formula:
$z = (a_1 + a_2)/(a_1 \times a_2) \times S \times b \times c \times g$
z – amount of grout needed [kg]
a_1 **and** a_2 – tile length and width [m]
S – surface to be grouted [m^2]
b – average joint depth [m]
c – joint width [m]
g – grout density [kg/m^2]
(Note: the formula does not consider loss of material)

Density (g) of particular grouts is listed in their technical data sheets.

Modern technologies used in ATLAS grouts

GUARANTEED COLOUR – owing to the use of special, strictly selected inorganic pigments, additionally protected against degradation by hydrophobic polymer, grouts keep durable and intensive colours for years.

PEARL EFFECT – the use of structural and coat hydrophobic additives protects the surface against penetration of dirt and discolouration resulting from use.

BIO BARRIER AG+ – owing to the use ions of silver grouts hold antibacterial properties.

MYCO PROTECT – – the addition of bio active substances protects grouts against development of fungi, mould and algae.

100% TIGHTNESS – owing to very low absorptiveness the product is resistant to water.

GLITTER EFFECT – special brocade provides the cladding with unique and decorative appearance. Appropriately selected colourful particles make the grout glitter. The effect intensiveness depends on the light angle and its intensity.

TABLE 2.1

PRODUCT					
	ATLAS ARTIS GROUT	ATLAS DECORATIVE GROUT	ATLAS GROUT/ AVAL EXTRA GROUT	ATLAS WIDE GROUT	ATLAS EPOXY GROUT
	Fine aggregate grout	Decorative grout with glitter effect	Fine aggregate cement grout	Coarse aggregate cement grout	Two-component grout
Reference document:	PN-EN 13888:2010				
Grout class	CG2 WA	CG2 WA	CG2 WA	CG2 WA	RG
TECHNICAL DATA					
Mixing ratio water/dry mix [l/kg]	0.21-0.22	0.22-0.24	0.28-0.29	approx. 0.25	n/a
Min/max joint thickness [mm]	1-25	1-15	1-7	4-16	1-10
Temperature during application [°C]	5-35	5-35	5-25	5-25	10-25
Pot life [min]	40	120	120	120	45
Initial cleaning [min]	30	30	10	10	5
Final cleaning [min]	180	180	30	20	20
Foot traffic [h]	3	24	24	24	24
Full load [days]	1	1	1	1	7
Full chemical resistance [days]	-	-	-	-	7
Improved colour durability	✓	✓	✓		✓
Pearl Effect	✓	✓	✓		
Myco Protect	✓	✓	✓	✓	✓
Bio Barrier	✓		✓		
Colours	40	5	44	7	12

PRODUCT			
	SILICONE ATLAS ARTIS	SILICONE ATLAS SILTON S	SILICONE AVAL EXTRA
Reference document	PN-EN 15651-1:2013 PN-EN 15651-2:2013 PN-EN 15651-3:2013		
Hardening system	acetate	acetate	acetate
Substrate and ambient temperature during work [°C]	5-40	5-40	5-40
Temperature resistance after hardening [°C]	from -50 to +180	from -50 to +180	from -50 to +180
Max. joint depth [mm]	14	14	14
Joint width [mm]	4-25	4-25	4-25
Pot life [min]	15	15	15
Foot traffic [h]	3	3	3
Full load [h]	24	24	24
Improved colour durability	✓		
Myco Protect	✓	✓	✓
Colours	38 + transparent	38 + transparent	38 + transparent

CG2 WA
CONFORMS WITH THE EUROPEAN STANDARD EN13888

ATLAS TIGHT GROUT (1-7 mm)

fine-aggregate cement grout

- for any size of ceramic, stone and glass tiles
- resistant to discolouration and efflorescence, bacteria and mould
- smooth, highly flexible, resistant to dirt and damage
- particularly recommended on difficult substrates, e.g. terraces, balconies and floor heating systems
- for use in residential, service, commercial and public access buildings

Innovative technologies

ATLAS TIGHT GROUT has been designed for the most demanding users, appreciating aesthetics, functionality, safety and durability.
Owing to innovative recipe containing properly selected components ATLAS TIGHT GROUT ensures:

- **safety of use –** owing to the elimination of microscratches and cracks, discolouration and efflorescence during application and in long term,
- **hygiene and safety of use** based on hybrid action of bio active substances and ions of silver – the grout protects against development of mould, algae and bacteria,
- **high resistance to UV radiation** owing to the use of special, strictly selected inorganic pigments, additionally protected against degradation by hydrophobic polymer which makes the grouts durable and intensive in time,
- **high resistance to washing, scrubbing and abrasion as well as cleaning agents,** which makes the grout maintenance easy during whole period of use.

Properties

GUARANTEED COLOUR – durable and intensive colours for years – pigments of high resistance to UV radiation additionally protected by special additives.
PEARL EFFECT – the use of structural and coat hydrophobic additives protects the surface against penetration of dirt and discolouration resulting from use.
MYCO PROTECT – the addition of bio active substances protects the grout against development of fungi, mould and algae.
BIO BARRIER AG+ - owing to the use ions of silver the grout holds antibacterial properties.
Very high mechanical resistance – even to medium and high operation loads, including intensive cladding use, frequent scrubbing and abrasion. The abrasion resistance is 8 times higher than the PN-EN 13888 standard requirements for grouts of higher category – A.
Very low water absorption – absorbability 3 times lower after 30 minutes and 4 times lower after 240 minutes than the standard PN-EN 13888 requirements for grouts of higher category – W.
Range of use – for any cladding on any substrate type, indoors and outdoors. Recommended for dry, damp and wet rooms, on floor heating systems, deformable substrates, façades, etc.
Improved adhesion to tile edges – strong adhesion to edges of various tile types, even in case of high operation loads or cladding thermal deformations.
Smooth surface.
Recommended for grouting cladding in drinking water reservoirs, food industry, healthcare buildings, nurseries, kindergartens, etc.
Highly resistant to temperatures from -30° to +80°C.
Manufactured in 44 colours – matching the colours of ATLAS grouts, silicones and trims. The range of colours depends on the packaging type. Please check the pattern of colours in the product data sheet on www.atlas.com.pl/en.

Use

Grouting ceramic and stone cladding: stone, terracotta, monocottura, clinker, cotto, porcelain-gres tiles, tiles not susceptible to discolouration, ceramic and glass mosaic, glass tiles resistant to scratching, glass bricks, decorated tiles with delicate pattern, mirrors, mirror tiles and other surfaces susceptible to scratching, metal tiles and aluminium sheets, natural stone, e.g. marble.
Note. When grouting mirrors, mirror tiles and other surfaces susceptible to scratching, decorated tiles with delicate pattern or natural stone (e.g. marble), one should check the grout influence on a tile individually.
Grouting small, medium and large size cladding - small and medium size tiles (< 0.1 m^2), large size tiles (< 0.25 m^2), very large size tiles (> 0.25 m^2), slim-type tiles.
Grouting cladding fixed on standard and deformable as well as difficult substrates:
- concrete, cement, anhydrite screed, etc., including those with water and electric heating;
- concrete walls made of ceramic brick, silicate brick, with ceramic elements; walls made of cellular concrete, gypsum blocks;
- cement, cement-lime, gypsum plasters, etc.; walls and drywalls made of plasterboards, incl. fireplace casing;
- floors made of wood, OSB, dry gypsum screed.

Grouting tiles on vertical and horizontal surfaces, indoors and outdoors in:
- **residential single- and multi-family buildings, office buildings** – in living rooms, kitchens, kitchenettes, halls, antechambers, corridors, staircases, bathrooms, showers, laundries, garages, on terraces, balconies, stairs, plinths;
- **public access and commercial buildings** – in nurseries, kindergartens, schools, lecture halls, storage rooms, sacral buildings, hospitals (incl. rooms where sterilization with UV lamps is required), pharmacies, car showrooms;
- **drinking water reservoirs, fountains;**
- **transport infrastructure buildings** – railway and bus stations, airports - salesrooms, waiting rooms, auxiliary rooms;
- **production and industrial buildings** – storage rooms and warehouses, wash rooms, production premises intensively washed with water.

Technical data

ATLAS TIGHT GROUT is manufactured in the form of dry mix of cement binder, specially selected aggregates, fillers, pigments and modifying agents of the highest quality..

Bulk density (of dry mix)	approx. 1.15 kg/dm^3
Wet density (after mixing)	approx. 1.80 kg/dm^3
Dry density (after setting)	approx. 1.65 kg/dm^3
Mixing ratio (water/dry mix)	0.28 – 0.29 l/1 kg 0.56 – 0.58 l/2 kg 1.40 – 1.45 l/5 kg
Min./max. joint thickness	1 mm / 7 mm
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Maturing time	approx. 5 minutes
Pot life	approx. 2 hours
Grouted cladding cleaning	after 10 – 30 minutes
Foot traffic	after approx. 24 hours

The time shown in the table is recommended for the application in temperature 23 ° C and humidity 55% (approx.).

Technical requirements

The product conforms to PN-EN 13888:2010 standard. Declaration of Conformity No. 009.

PN-EN 13888:2010	Cement mortar for filling joints, with increased parameters: high abrasion resistance and reduced water absorption.
Class	CG2 WA
Flexural strength in dry conditions	≥ 3.5 N/mm^2
Flexural strength after freeze-thaw cycles	≥ 3.5 N/mm^2
Compressive strength in dry conditions	≥ 15 N/mm^2
Compressive strength after freeze-thaw cycles	≥ 15 N/mm^2
Shrinkage	≤ 2 mm/m
Resistance to abrasion	≤ 1000 mm^3
Water absorption - after 30 min. - after 240 min.	 ≤ 2 g ≤ 5 g

The product has been given the Hygienic Certificate by the National Institute of Hygiene, the Radiation Hygiene Certificate. The product has been given the marketing authorization for a biocide no. 5873/14

Grouting

Substrate preparation

Carefully clean the joints between tiles. The joints should be of even depth - while fixing tiles, remove excessive adhesive immediately. One can begin grouting only when the adhesive sets, not earlier than 24 hours since fixing the tiles. In case of use of ATLAS MIG 2 or ATLAS PLUS EXPRESS adhesive, one can begin grouting already after 4 hours. Directly before grouting, clean the surface of tiles with damp sponge and wet the joints slightly in order to limit and unify the substrate absorptiveness.

Mortar preparation

Pour the mortar from the bag into a container with the suitable amount of water (see Technical Data for ratio) and mix until homogenous. You can do it manually or mechanically. The mortar can be used after 5 minutes and remixing. It should be used up within 2 hours.

Grouting

Apply the mortar deep and tightly into the joints with the use of a rubber spatula. Move the spatula diagonally to the edges of tiles and held at ca. 45° to the tiles surface.

Cleaning

Cleaning can be carried out after 10 - 30 minutes. Use damp, hard sponges with larger pores. For at least 3 days, the mortar must not be exposed to precipitation, low temperatures (below +5 °C) and extensive air humidity. The grout should be protected against rapid drying. In order to preserve the optimum setting conditions for the grout, the fresh joints should be kept slightly moist, e.g. by sprinkling the surface with clean water. The actual colour of grout is set after drying, after approx. 2 - 3 days.

Cladding use

Foot traffic is possible after 24 hours since grouting. As an additional protection against soiling, it is recommended (when the grout dries completely, i.e. after approx. 2 weeks) to apply ATLAS DELFIN protective agent.

Consumption

The grout consumption depends on the width and the depth of the joints and the type and size of the tiles used. It can be calculated for a given surface according to the formula:

z = (a1 + a2)/a1•a2 x S x b x c x g

z – amount of grout needed [kg]
a1 and a2 – tile length and width [m]
S – surface to be grouted
b – joint depth [m]
c – joint width [m]
g – grout density [kg/m^2] – for ATLAS TIGHT GROUT g = 1650

Examples of consumption:

Tile size	Width of joint [mm]	Depth of joint [mm]	Consumption [kg/m^2]
0,02 m x 0,02 m	2.0	2.0	approx. 0.65
0,10 m x 0,10 m	3.0	7.5	approx. 0.75
0.30 m x 0.30 m	4.0	7.5	approx. 0.35
0.30 m x 0.60 m	5.0	7.5	approx. 0.30
0.50 m x 0.50 m	5.0	7.5	approx. 0.25
0.60 m x 0.60 m	5.0	7.5	approx. 0.20

Important additional information

- Before grouting the whole cladding, carry out test application on a small fragment (best on a waste piece of tile) and test cleaning in order to eliminate the tile discolouration.
- In order to avoid various colour shades, it is recommended to use grout of the same manufacturing date and the same batch number for each individual surface.
- Silicones and grouts are manufactured on the basis of different types of binders, therefore differ in the degree of smoothness and gloss. TThese factors naturally influence the colour shade of each product type.
- Addition of inappropriate amount of water to the mortar can cause deterioration of its quality and lead to discolouration.
- The differences in the depth of the joints, or washing the tiles too early may cause uneven colour shade on the grout surface.
- In joints located in particular parts of cladding (internal and external corners, expansion joints), finishing beads should be used, e.g. ATLAS EDGE TRIMS or filling with permanently elastic materials e.g. ATLAS ARTIS silicone.
- Water reservoirs designated for drinking water should be washed with water after the product ageing.
- The colour shown on the package front has a view character. Due to difference in technologies used in poligraphy and construction any differences between shades of a particular product colour and its simulation shown on the package does not constitute the basis for any claims against the editor as well as ATLAS. The particular colour shade depends on its texture homogeneity, conditions of use, substrate and ambient conditions as well as lighting conditions. The actual colour shade may to some extent differ from the one shown on the label. Use the grout of the same manufacturing date and the same batch number for each individual surface.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set adhesive can be removed with the ATLAS SZOP agent.
- Contains cement, 2-Octyl-2H-isothiazolin-3-one. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Follow the instructions of the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 15 months (for paper bags) and 24 months (for foil bags) from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Paper bags: 2 kg, 5 kg
Pallet: 1000 kg in 2 kg bags, 1000 kg in 5 kg bags
Plastic bags: 2 kg, 5 kg
Cardboard cartons: 10 x 2 kg, 4 x 5 kg
Pallet: 36 cartons - 720 kg

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous one become void.
Date of update: 2016-02-18

ATLAS WIDE GROUT (4-16 mm)

coarse-aggregate cement grout

- for ceramic, gres-porcelain and stone tiles
- for grouting masonry work made of bricks, blocks, glass bricks
- on plinths, fences, communication routes
- highly resistant to scratches and cracks

Use

For all types of tiles in wet, damp and dry places– particularly outdoors , but also in bathrooms, kitchens, corridors, on stairs.
Recommended for large size tiles – on plinths, fences, small architecture, communication routes, etc.
For grouting masonry work – made of bricks, blocks, glass bricks.
Plastification and extending the range of use possible – after mixing with ATLAS ELASTIC EMULSION, the mortar can be used for grouting tiles on balconies, terraces, façades and wall or floor heating systems.
Element of the tiling system – in combination with corresponding in colour ATLAS silicones, finishing trims and other grouts.

Types of joined elements – medium and large size; ceramic (glazed tiles, terracotta, gres-porcelain, bricks, hollow blocks), cement, concrete, stone and glass blocks.
Types of substrates under the tiles – cement, cement-lime and gypsum plasters, rough walls, cement and anhydrite screeds.

Properties

MYCO PROTECT – creates unfavorable conditions for fungi and algae growth owing to low absorption and acid-alkaline reaction.
Improved bonding to tile edges – strong bonding to edges of various tile types, even in case of significant cladding deformation; no shrinkage cracks during setting.
With coarse aggregate – the joint surface has natural appearance, matching cement, stone tiles, etc.
High mechanical resistance – against cracks, scratches and abrasion.
Low water absorption.
7 colours – white, beige, brick red, dark brown, grey, dark grey and graphite, matching the colours of ATLAS grouts, silicones and trims.

Technical data

ATLAS WIDE GROUT is manufactured as a dry mix of high quality cement binder, specially selected aggregates, fillers, pigments and modifiers.

Bulk density (of dry mix)	approx. 1.40 kg/dm^3
Mass bulk density (after mixing)	approx. 1.85 kg/dm^3
Dry density (after setting)	approx. 1.70 kg/dm^3
Mixing ratio (water/dry mix)	approx. 0.25 l/1 kg approx. 1.25 l/5 kg approx. 6.25 l/25 kg
Min./max. joint thickness	4 mm / 16 mm
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Maturing time	approx. 5 minutes
Pot life	approx. 2 hours
Grouted cladding cleaning	after 10 – 20 minutes
Foot traffic	after approx. 24 hours
Full load	after approx. 24 hours

The time shown in the table is recommended for the application in temperature 23 ° C and humidity 55% (approx.).

Technical requirements

The product conforms to PN-EN 13888:2010 standard. Declaration of Conformity No. 031.

PN-EN 13888:2010	Cement mortar for filling joints, with increased parameters: high abrasion resistance and reduced water absorption.
Class	CG2 WA
Flexural strength in dry conditions	≥ 3.5 N/mm^2
Flexural strength after freeze-thaw cycles	≥ 3.5 N/mm^2
Compressive strength in dry conditions	≥ 15 N/mm^2
Compressive strength after freeze--thaw cycles	≥ 15 N/mm^2
Shrinkage	≤ 2 mm/m
Resistance to abrasion	≤ 1000 mm^3
Water absorption - after 30 min. - after 240 min.	≤ 2 g ≤ 5 g

The product has been given the Radiation Hygiene Certificate.

Grouting

Substrate preparation
Carefully clean the joints between tiles. The joints should be of even depth - while fixing tiles, remove excessive adhesive immediately. One can begin grouting only when the adhesive sets, not earlier than 24 hours since fixing the tiles. In case of use of ATLAS MIG 2 or ATLAS PLUS EXPRESS adhesive, one can begin grouting already after 4 hours. Directly before grouting, clean the surface of tiles with damp sponge and wet the joints slightly in order to limit and unify the substrate absorptiveness.

Mortar preparation
Pour the mortar from the bag into a container with the suitable amount of water (see Technical Data for ratio) and mix until homogenous. You can do it manually or mechanically. The mortar can be used after 5 minutes and remixing.
When adding ATLAS ELASTIC EMULSION, pour the mortar into the container with the dispersed emulsion, keep the ratio: 10 kg of dry mix with 1 kg of emulsion and 1.7 l of water. Continue the application as above. In both cases the mixed grout should be used up within 2 hours.

Application
Apply the mortar deep and tightly into the joints with the use of a rubber spatula. Move the spatula diagonally to the edges of tiles and held at ca. 45° to the tiles surface.

Cleaning
Cleaning can be carried out after 10 - 20 minutes. Use damp, hard sponges with larger pores. For at least 3 days, the mortar must not be exposed to precipitation, low temperatures (below +5 °C) and extensive air humidity. The grout should be protected against rapid drying. In order to preserve optimum setting conditions for the grout, fresh joints should be kept slightly moist, e.g. by sprinkling the surface with clean water. The actual colour of grout is set after drying, after approx. 2 - 3 days.

Cladding use
Foot traffic is possible after 24 hours since grouting. As an additional protection against soiling, it is recommended (when the grout dries completely, i.e. after approx. 2 weeks) to apply ATLAS DELFIN protective agent.

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Consumption

The grout consumption depends on the width and the depth of the joints and the type and size of the tiles used. It can be calculated for a given surface according to the formula:
z = (a1 + a2)/a1•a2 x S x b x c x g
z – amount of grout needed [kg]
a1 and a2 – tile length and width [m]
S – surface to be grouted
b – joint depth [m]
c – joint width [m]
g – grout density [kg/m^2] – for ATLAS WIDE GROUT g = 1700
Examples of consumption:

Tile size	Width of joint [mm]	Depth of joint [mm]	Consumption [kg/m^2]
0.45 m x 0.45 m	4.0	7.5	approx. 0.25
0.60 m x 0.60 m	5.0	7.5	approx. 0.20

Important additional information

- Before grouting the whole cladding, carry out test application on a small fragment (best on a waste piece of tile) and test cleaning in order to eliminate the tile discolouration.
- In order to avoid various colour shades, it is recommended to use grout of the same manufacturing date and the same batch number for each individual surface.
- Silicones and grouts are manufactured on the basis of different types of binders, therefore differ in the degree of smoothness and gloss. These factors naturally influence the colour shade of each product type.
- Addition of inappropriate amount of water to the mortar can cause deterioration of its quality and lead to discolouration.
- The differences in the depth of the joints, or washing the tiles too early may cause uneven colour shade of the grout surface.
- In joints located in particular parts of cladding (internal and external corners, expansion joints), finishing beads should be used, e.g. ATLAS EDGE TRIMS or filling with permanently elastic materials e.g. ATLAS SILTON S silicone.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set adhesive can be removed with the ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Paper bags: 5 kg, 25 kg
Pallet: 1,000 kg in 5 kg bags, 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous one become void.
Date of update: 2015-04-29

ATLAS ARTIS GROUT (1-25 mm)

highly flexible fine aggregate grout

- fast-setting – foot traffic possible after 3 hours
- resistant to discolouration and efflorescence
- easy to keep clean, resistant to bacteria and mould
- palette of 40 durable colours
- for any type of ceramic cladding, natural stone, glass mosaic

Innovative technologies

ATLAS ARTIS grout is intended for the most demanding users appreciating aesthetics, functionality, safety and durability. The widest available range of colours which meets current trends and enables to choose grout matching individual likes and room characteristics.

Owing to innovative recipe containing properly selected components ATLAS ARTIS grout ensures:

- **safety of use –** owing to the elimination of microscratches and cracks, discolouration and efflorescence during application and in long term operation – as the result of content of selected aggregates and special cement mix,
- **hygiene and safety of use** based on hybrid action of bio active substances and ions of silver – the grout protects against development of mould, algae and bacteria, even in case of frequent surface damp, possibility of application with any type of tiles, owing to high adhesion and vast joint width range (1-25 mm),
- **high resistance to UV rays** owing to the use of special, strictly selected inorganic pigments, additionally protected against degradation by hydrophobic polymer, which makes the grouts durable and intensive in time,
- **high resistance to washing, scrubbing and abrasion as well as cleaning agents**, which makes the grout maintenance easy during whole period of use.

Properties

GUARANTEED COLOUR – owing to the use of special, strictly selected inorganic pigments, additionally protected against degradation by hydrophobic polymer, the grouts keep durable and intensive colours for years.

PEARL EFFECT – very low absorptiveness (4 times lower after 30 minutes and 6 times lower after 240 minutes than the PN-EN 13888 standard requirement) – the use of structural and coat hydrophobic additives protects the surface against penetration of dirt and discolouration.

MYCO PROTECT – the addition of bio active substances protects the grout against development of fungi, mould and algae.

BIO BARRIER AG+ - owing to the use ions of silver the grout holds antibacterial properties.

COLOR PROTECT – extends colour durability – protects against discolouration and efflorescence (the grout is manufactured on aluminium cement base), increases resistance to dirt, UV rays, oils and detergents; the uniformity of the colour is guaranteed by the exceptional homogeneity of the mortar and uniform distribution and granulation of pigments.

Allows obtaining perfectly smooth surface – contains very fine aggregate.

Short setting time – light foot traffic is possible already 3 hours since grouting, which significantly speeds up the final cleaning of the cladding and its commissioning; in combination with Atlas UNI-GRUNT and Atlas MIG 2 or Atlas PLUS EXPRESS adhesives forms a set of products for fast tiling.

Easy in preparation, comfortable and quick in application – divided package enables individual arrangement of work to meet one's preferences and habits.

Wide range of use – can be used with any cladding on any substrate type, indoors and outdoors. Recommended for dry, damp and wet rooms, onto floor heating and deformable substrates.

Holds exceptional abrasion resistance – the abrasion resistance is 8 times higher than the PN-EN 13888 standard requirements for supplementary parameters.

Recommended for grouting in drinking water reservoirs, food industry, healthcare buildings, nurseries, kindergartens, etc.

Highly resistant to temperatures from -30° to +80°C.

Manufactured in 40 colours – matching the colours of ATLAS grouts, silicones and trims. Please check the pattern of colours in the product data sheet on www.atlas.com.pl/en.

Use

Grouting ceramic and stone cladding: stone, terracotta, monocottura, clinker, cotto, porcelain-gres tiles, ceramic and glass mosaic, glass bricks, metal tiles and aluminium sheets, tiles susceptible to discolouration.

Note. When grouting mirrors, mirror tiles and other surfaces susceptible to scratching, decorated tiles with delicate pattern or natural stone (e.g marble), one should check the grout influence on a tile individually.

Grouting small, medium and large size cladding - small and medium size tiles (< 0.1 m^2), large size tiles (< 0.25 m^2), very large size tiles (> 0.25 m^2), slim-type tiles.

Grouting cladding fixed on standard and deformable as well as difficult substrates:

- concrete, cement, anhydrite screed, etc., including those with water and electric heating;
- concrete walls made of ceramic brick, silicate brick, with ceramic elements; walls made of cellular concrete, gypsum blocks;
- cement, cement-lime, gypsum plasters, etc.; walls and drywalls made of plasterboards, incl. fireplace casing;
- floors made of wood, OSB, dry gypsum screed;
- steel, plastic substrates.

Grouting tiles on vertical and horizontal surfaces, indoors and outdoors in:

- **residential single- and multi-family buildings, office buildings** – in living rooms, kitchens, kitchenettes, halls, antechambers, corridors, staircases, bathrooms, showers, laundries, garages, on terraces, balconies, stairs, plinths, façades;
- **public access and commercial buildings** – in nurseries, kindergartens, schools, lecture halls, storage rooms, sacral buildings, hospitals (incl. rooms where sterilization with UV lamps is required), pharmacies, laboratories*, industrial kitchens*,garages and car parks, diagnostic stations, car showrooms, car washes, industrial laundries*;
- **pool basins, saunas, jacuzzi, drinking water reservoirs, fountains;**
- **transport infrastructure buildings** – railway and bus stations, airports - platforms, communication routes, salesrooms, waiting rooms, auxiliary rooms;
- **production and industrial buildings** – food, fruit and vegetable industry (areas with no aggressive chemical load), storage rooms and warehouses, wash rooms, production premises intensively washed with water.

Note. In case of rooms marked with "*" determination of chemical loads and confirmation of resistance needed.

Note. In the sterile rooms in healthcare objects, operating theatres, on beaches around pools, in balneotechnique objects as well as in production areas with aggressive chemical load, accumulator rooms, etc., **we recommend the use of ATLAS EPOXY Grout.**

Technical data

ATLAS ARTIS GROUT is manufactured in the form of dry mix of cement binder, specially selected aggregates, fillers, pigments and modifying additives of the highest quality.

Bulk density (of dry mix)	approx. 1.2 kg/dm^3
Wet density (after mixing)	approx. 1.80 kg/dm^3
Dry density (after setting)	approx. 1.65 kg/dm^3
Mixing ratio (water/dry mix)	0.21 – 0.22 l/1 kg 0.42 – 0.44 l/2 kg 1.05 – 1.10 l/5 kg
Min./max. joint thickness	1 mm / 25 mm
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +35°C
Maturing time	after approx. 5 minutes
Pot life	after approx. 40 minutes
Initial cleaning	after approx. 30 minutes
Final cleaning	after approx. 3 hours
Light foot traffic	after approx. 3 hours
Full load	after approx. 24 hours

The time shown in the table is recommended for the application in temperature 23°C and humidity 55% (approx.).

Technical requirements

The product conforms to PN-EN 13888:2010 standard. Declaration of Conformity No. 093.

PN-EN 13888:2010	Cement mortar for filling joints, with increased parameters: high abrasion resistance and reduced water absorption.
Class	CG2 WA
Flexural strength in dry conditions	≥ 3.5 N/mm^2
Flexural strength after freeze-thaw cycles	≥ 3.5 N/mm^2
Compressive strength in dry conditions	≥ 15 N/mm^2
Compressive strength after freeze--thaw cycles	≥ 15 N/mm^2
Shrinkage	≤ 2 mm/m
Resistance to abrasion	≤ 1000 mm^3
Water absorption - after 30 min. - after 240 min.	 ≤ 2 g ≤ 5 g

The product has been given the Hygienic Certificate by the National Institute of Hygiene and the Radiation Hygiene Certificate. The product has been given the marketing authorization for a biocide no. 5921/14.

Grouting

Substrate preparation

Carefully clean the joints between tiles. The joints should be of even depth - while fixing tiles, remove excessive adhesive immediately. One can begin grouting only when the adhesive sets, not earlier than 24 hours since fixing the tiles. In case of use of ATLAS MIG 2 or ATLAS PLUS EXPRESS adhesive, one can begin grouting already after 4 hours. Directly before grouting, clean the surface of tiles with damp sponge and wet the joints slightly in order to limit and unify the substrate absorptiveness.

Mortar preparation

Pour the mortar from the bag into a container with the suitable amount of water (see Technical Data for ratio) and mix until homogenous. You can do it manually or mechanically. The mortar can be used after 5 minutes and remixing. It should be used up within 40 minutes. Water must not be added to already prepared mortar.

Grouting

Apply the mortar deep and tightly into the joints with the use of a rubber spatula. Move the spatula diagonally to the edges of tiles and held at ca. 45° to the tiles surface.

Cleaning

Cleaning is carried out in two stages: preliminary cleaning and final cleaning. **Preliminary cleaning**. When the grout gets matt – after approx. 30 minutes - wash the whole surface with a damp sponge. Joints of intensive colours shall be additionally wetted with plenty of water and left to dry. They may "release" the colour slightly during the initial period of use, which is not a product defect and does not influence the final effect. **Final cleaning**. It can be carried out already after 3 hours. It consists in washing the whole cladding surface with a damp sponge again.

Cladding use

Light pedestrian traffic is possible already after approx. 3 hours. Full load of the grouted surface is possible after approx. 24 hours.

Consumption

The grout consumption depends on the width and the depth of the joints and the type and size of the tiles used. It can be calculated for a given surface according to the formula:

z = (a1 + a2)/a1•a2 x S x b x c x g

z – amount of grout needed [kg]
a1 and a2 – tile length and width [m]
S – surface to be grouted
b – joint depth [m]
c – joint width [m]
g – grout density [kg/m^2] – for ATLAS ARTIS GROUT g = 1650
Examples of consumption:

Tile size	Width of joint [mm]	Depth of joint [mm]	Consumption [kg/m^2]
0,02 m x 0,02 m	2.0	2.0	approx. 0.65
0,10 m x 0,10 m	3.0	7.5	approx. 0.75
0.30 m x 0.30 m	4.0	7.5	approx. 0.35
0.30 m x 0.60 m	5.0	7.5	approx. 0.30
0.50 m x 0.50 m	5.0	7.5	approx. 0.25
0.60 m x 0.60 m	5.0	7.5	approx. 0.20

Important additional information

- Before grouting the whole cladding, carry out test application on a small fragment (best on a waste piece of tile) and test cleaning in order to eliminate the tile discolouration.
- In order to avoid various colour shades, it is recommended to use grout of the same manufacturing date and the same batch number for each individual surface.
- Silicones and grouts are manufactured on the basis of different types of binders, therefore differ in the degree of smoothness and gloss. These factors naturally influence the colour shade of each product type.
- Protect the grout against drying too fast.
- The real grout colour is set when the grout sets and dries, after approx. 2 – 3 days.
- For at least first 3 days the grout must not be exposed to precipitation, low temperatures (below +5°C) and high air humidity.
- In joints located in particular parts of cladding (internal and external corners, expansion joints), finishing beads should be used, e.g. ATLAS EDGE TRIMS or filling with permanently elastic materials e.g. ATLAS ARTIS silicone.
- Water reservoirs designated for drinking water should be washed with water after the product ageing.
- The colour shown on the package front has a view character. Due to difference in technologies used in poligraphy and construction any differences between shades of a particular product colour and its simulation shown on the package does not constitute the basis for any claims against the editor as well as ATLAS. The particular colour shade depends on its texture homogeneity, conditions of use, substrate and ambient conditions as well as lighting conditions. The actual colour shade may to some extent differ from the one shown on the label. Use the grout of the same manufacturing date and the same batch number for each individual surface.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set adhesive can be removed with the ATLAS SZOP agent. Contains 2-Octyl-2H-isothiazolin-3-one. Due to its form – dust, the mixture can mechanically irritate eyes and respiratory system. After mixing, the mortar has slightly alkaline reaction. Wearing appropriate protective gloves and goggles is recommended. Follow the instructions of the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed original bags, in dry conditions (most preferably on pallets). Protect against moisture. Shelf life in conditions as specified is 24 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Plastic buckets: 2 kg, 5 kg
Pallet: 240 kg in 2 kg buckets, 260 kg in 5 kg buckets

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous one become void.
Date of update: 2016-02-12

ATLAS EPOXY GROUT (1-10 mm)

two-component grout

- for any type of tiles
- quick application and profiling, extra smooth surface
- very high resistance to scrubbing and abrasion
- high chemical resistance and very low absorptiveness
- for residential, commercial, public access, industrial buildings, particularly for intensively used areas

Innovative technologies

ATLAS EPOXY GROUT is a new generation grout of extraordinary durability and chemical resistance designed for places subject to intensive use. The use of epoxy technology enables to form perfect aesthetics and offers parameters many times higher than given by traditional cement grouts.
Special properties of ATLAS EPOXY GROUT are most of all:
• **safety and wide range of use** – owing to the possibility of use with any substrate and cladding type (from 1 mm joint thickness), with no risk of discolouration and cracking,
• **extraordinary mechanical durability** – the grout is resistant to abrasion, scratching, cracking, infl uence of high and low temperature,
• **high resistance to chemical factors** (including acids, fats, aggressive and colouring factors such as alcohol (wine, spirit), juice, sauces, fats, jam, strong cleaning agents,
• **high resistance to washing, scrubbing and abrasion** – the grout keeps its initial appearance even years of intensive use,
• **hygiene and safety of use** - owing to extremely low grout absorptiveness and formation of unfavourable conditions for development of fungi and mould.

Properties

GUARANTEED COLOUR – owing to the use of special, strictly selected inorganic pigments and high resistance to external factors.
100% TIGHTNESS – owing to very low absorptiveness the product is resistant to water.
MYCO PROTECT – protects against development of fungi, mould and algae.
High chemical resistance – perfect for kitchens, bathrooms, showers, garages, water treatment plants, barns, dairies, slaughterhouses, car washes, accumulator rooms, breweries, wineries, bottling plants, laboratories, etc.
Wide range of use – can be used with any cladding on any substrate type, ndoors and outdoors. Recommended for dry, damp and wet rooms, onto floor heating and deformable substrates.
Very high mechanical strength – forms very hard grout, recommended for intensively operated areas, has flexural strength 8 times higher, compressive strength 3 times higher and abrasion resistance 4 times higher than the standard requirements.
Manufactured in 12 colours – matching the colours of ATLAS grouts, silicones and trims. Please check the pattern of colours in the product data sheet on www.atlas.com.pl/en.

Use

Grouting ceramic and stone cladding: stone, terracotta, monocottura, clinker, cotto, porcelain-gres tiles, tiles not susceptible to discolouration, ceramic and glass mosaic, glass tiles resistant to scratching, glass bricks, decorated tiles with delicate pattern, mirrors, mirror tiles and other surfaces susceptible to scratching, metal tiles and aluminium sheets, natural stone, e.g. marble.
Note. When grouting mirrors, mirror tiles and other surfaces susceptible to scratching, decorated tiles with delicate pattern or natural stone (e.g marble), one should check the grout influence on a tile individually.
Grouting small, medium and large size cladding - small and medium size tiles (< 0.1 m^2), large size tiles (< 0.25 m^2), very large size tiles (> 0.25 m^2), slim-type tiles.
Grouting cladding fixed on standard and deformable as well as difficult substrates:
- concrete, cement, anhydrite screed, etc., including those with water and electric heating;
- concrete walls made of ceramic brick, silicate brick, with ceramic elements; walls made of cellular concrete, gypsum blocks;
- cement, cement-lime, gypsum plasters, etc.; walls and drywalls made of plasterboards, incl. fi replace casing;
- floors made of wood, OSB, dry gypsum screed;
- steel, plastic substrates.

Grouting tiles on vertical and horizontal surfaces, indoors and outdoors in:
- **residential single- and multi-family buildings, office buildings** – in living rooms, kitchens, kitchenettes, halls, antechambers, corridors, staircases, bathrooms, showers, laundries, garages, on terraces, balconies, stairs, plinths, façades; - **public access and commercial buildings** – in nurseries, kindergartens, schools, lecture halls, storage rooms, sacral buildings, hospitals (incl. rooms where sterilization with UV lamps is required), sterile rooms in healthcare objects*, operating theatres*, pharmacies, laboratories*, industrial kitchens*,garages and car parks, diagnostic stations, car showrooms, car washes, industrial laundries*;
- pool basins, saunas, jacuzzi, beaches around pools*, balneotechnique objects*, drinking water reservoirs, fountains;
- **transport infrastructure buildings** – railway and bus stations, airports - platforms, communication routes, salesrooms, waiting rooms, auxiliary rooms;
- **production and industrial buildings** – food, fruit and vegetable industry (areas with no aggressive chemical load), storage rooms and warehouses, wash rooms, production premises intensively washed with water, production of fertilizers*, areas with aggressive chemical load*, accumulator rooms*.

Note. In case of rooms marked with "*" determination of chemical loads and confirmation of resistance needed.

Technical data

ATLAS EPOXY GROUT is a product consisting of two components – A and B which have to be mixed before application. Component A is a mixture of epoxy resin with specially selected aggregate, fillers, pigments and modifying and decorative additives. Component B is a high quality polyamide hardener for epoxy resins.

Density after mixing the components	1.55 g/cm^3
Min./max. joint thickness	1 mm / 10 mm
Mortar preparation temperature, substrate and ambient temperature during work	from +10°C to +25°C
Temperature resistance	from -30°C to +90°C
Component A mixing time	approx. 3 minutes
Mass mixing time	approx. 3 minutes
Pot life	approx. 45 minutes
Cleaning	max. 10 - 20 minutes
Foot traffic	approx. 24 hours
Full mechanical resistance	after 7 days
Full chemical resistance	after 7 days

The time shown in the table is recommended for the application in temperature 23°C and humidity 55% (approx.).

Technical requirements

The product conforms to PN-EN 13888:2010 standard. Declaration of Conformity No. 191. The product has been given the Hygienic Certificate by the National Institute of Hygiene.

Reactive resin based mortar for ceramic tiles grouting	PN-EN 13888:2010
Class	RG
Flexural strength	≥ 30 N/mm^2
Compressive strength	≥ 45 N/mm^2
Shrinkage	≥ 1.5 N/mm^2
Water absorption after 240 min.	≤ 0.1 g
Abrasion resistance	≤ 250 mm

Grouting

Substrate preparation

Before grouting, carefully clean the joints between tiles of dust and any contamination. The joints should be of even depth - while fixing tiles, remove excessive adhesive immediately. One can begin grouting only when the adhesive sets, not earlier than 24 hours since fixing the tiles. In case of use of ATLAS MIG 2 or ATLAS PLUS EXPRESS adhesive, one can begin grouting already after 4 hours. Directly before grouting clean the tiles and joints with a damp sponge. **Grouting can commence when they dry completely.**

Grout preparation

Check the table of chemical resistance available on www.atlas.com.pl/en before the grout use.

The epoxy mortar is delivered as a set consisting of two components: the mass (A) and the hardener (B), in appropriate mixing ratio. All works connected with preparation must be carried out in temperature between +10°C and +25°C. It is recommended to keep the grout in the room of use for min. 12 hours in the application conditions. Mix the component A thoroughly (approx. 3 min), then add component B (hardener), keep the mixing ratio prepared in the package. Mix the mass with a low-speed hand mixer until mass of homogenous consistency and colour is formed (min. 3 minutes). Do not heat the ready-to-use mass in warm water. The mass must be used up within approx. 45 minutes in temperature 20-23°C.

Grouting and cleaning

The mass must be applied into the joints with a rubber spatula. Clean the cladding surface immediately after grouting (not later than after 20 minutes) using hard sponges soaked with clean water, with circular moves, paying attention not to damage the already applied grout. Profile the grout (if necessary) after approx. 1 hour with the use of a cellulose sponge until perfectly smooth surface is formed. Then wash the cladding with a wet sponge, frequently rinse the sponge. If a tarnish occurs on the initially set grout surface – wash the surface with warm water with addition of detergent or alcohol.

Cladding use

Foot traffic on the grouted or fixed tiles is possible after 24 hours.

Consumption

The grout consumption depends on the width and the depth of the joints and the type and size of the tiles used. It can be calculated for a given surface according to the formula:

$z = (a1 + a2)/a1 \cdot a2 \times S \times b \times c \times g$

z – amount of grout needed [kg]
a1 and a2 – tile length and width [m]
S – surface to be grouted
b – joint depth [m]
c – joint width [m]
g – grout density [kg/m^2] – for ATLAS EPOXY GROUT g = 1500

Examples of consumption:

Tile size	Width of joint [mm]	Depth of joint [mm]	Consumption [kg/m^2]
0,02 m x 0,02 m	2.0	2.0	approx. 0.65
0,10 m x 0,10 m	3.0	7.5	approx. 0.70
0.30 m x 0.30 m	4.0	7.5	approx. 0.40
0.30 m x 0.60 m	5.0	7.5	approx. 0.30
0.50 m x 0.50 m	5.0	7.5	approx. 0.25
0.60 m x 0.60 m	5.0	7.5	approx. 0.20

Important additional information

- Before grouting the whole cladding, carry out test application on a small fragment (best on a waste piece of tile) and test cleaning in order to eliminate the tile discolouration.
- Use grout of the same manufacturing date and the same batch number for each individual surface.
- Silicones and grouts are manufactured on the basis of different types of binders, therefore differ in the degree of smoothness and gloss. These factors naturally influence the colour shade of each product type.
- Protect fresh grout against temperatures below +5 °C and precipitation until fully hardens.
- After 4 hours in temperature +20°C, only mechanical removal of grout residues s possible.
- In joints located in particular parts of cladding (internal and external corners, expansion joints), finishing beads should be used, e.g. ATLAS EDGE TRIMS or filling with permanently elastic materials e.g. ATLAS ARTIS silicone.
- The tools must be cleaned with water directly after use. Cleaning at a later time is very difficult and can be done mechanically only.
- Water reservoirs designated for drinking water should be washed with water after the product ageing.
- The colour shown on the package front has a view character. Due to difference in technologies used in poligraphy and construction any differences between shades of a particular product colour and its simulation shown on the package does not constitute the basis for any claims against the editor as well as ATLAS. The particular colour shade depends on its texture homogeneity, conditions of use, substrate and ambient conditions as well as lighting conditions. The actual colour shade may to some extent differ from the one shown on the label. Use the grout of the same manufacturing date and the same batch number for each individual surface.
- For component A. Contains epoxy resin (average molecular weight ≤ 700), and alkyl (C12-C14) glycidyl ether. Causes serious eye irritation. Causes skin irritation. Harmful to aquatic life with long-lasting effects. To avoid risks to human health and the environment, comply with the instructions for use. If medical advice is needed, have product container or label at hand. Keep out of reach of children. Do not eat, drink or smoke when using this product. Wear protective gloves. Do not get in eyes, on skin, or on clothing. Wash hands thoroughly after handling. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Dispose of contents/container according to local regulations.
- For component B. Contains 3-Aminomethyl-3,5,5-trimethylcyclohexylamine. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Harmful to aquatic life with long-lasting effects. If medical advice is needed, have product container or label at hand. Keep out of reach of children. Do ot eat, drink or smoke when using this product. Wear protective gloves. Do not get in yes, on skin, or on clothing. Wash hands thoroughly after handling. IF N SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Store locked up. Dispose of contents/container according to local regulations.
- The product must be transported and stored in tightly sealed original packages, in dry conditions (most preferably on pallets) in temperatures between +10°C and +25°C. Shelf life in conditions as specified is 12 months from the production date shown on the packaging.

Packaging

Plastic buckets 2 kg. The bucket contains 2 bags with component A (2 x 0.92 kg) and 2 packages with component B (2 x 0.08 kg).
Plastic buckets 5 kg. The bucket contains 2 bags with component A (2 x 2.30 kg) and 2 packages with component B (2 x 0.20 kg).

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous one become void.
Date of update: 2016-02-18

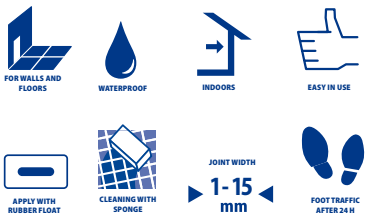
CG2 WA
CONFORMS WITH THE EUROPEAN STANDARD EN13888

ATLAS DECORATIVE GROUT

(1-15 mm)

fine-aggregate cement grout

- for any size and many types of tiles
- flexible
- durable glitter effect, perfect for mosaic and glass bricks
- easy to keep clean, resistant to bacteria and mould



Innovative technologies

DECORATIVE GROUT ATLAS is a product of extraordinary decorative features. Owing to the content of brocade in the mass it provides the cladding with special aesthetic effect. Moreover, due to appropriate recipe ATLAS DECORATIVE GROUT ensures:

- **possibility of application with most types of tiles** - owing to high adhesion and vast joint width range (1-15 mm),
- **high resistance to UV radiation** - owing to the use of special, strictly selected inorganic pigments, additionally protected against degradation by hydrophobic polymer, which makes the grouts durable and intensive in time,
- **hygiene and safety of use** - owing to low absorptiveness and protection against development of mould, algae and fungi.

Properties

PEARL EFFECT – reduced absorptiveness – the use of structural and coat hyrophobic additives protects the surface against penetration of dirt and discolouration.
GUARANTEED COLOUR – durable and intensive colours for years - owing to the use of special, strictly selected inorganic pigments, additionally protected against UV radiation.
MYCO PROTECT – protects against development of fungi, mould and algae.
GLITTER EFFECT – the grout contains in mass a special brocade providing the cladding with unique and decorative appearance. Appropriately selected colourful particles make the grout glitter. The effect intensiveness depends on the light angle and intensity.
BIO BARRIER AG+ - owing to the use of ions of silver the grout holds antibacterial properties,
Flexible – enables to grout cladding fixed on substrates subject to deformation – screeds and plasters with heating systems, plasterboards, etc.
Perfectly matches metalized tiles, glass and ceramic, mosaic, glass bricks.
Manufactured in 5 colour compositions – matching the colours of ATLAS grouts, silicones and trims. Please check the pattern of colours in the product data sheet on www.atlas.com.pl/en.

Use

Grouting ceramic and stone cladding: stone, terracotta, monocottura, clinker, cotto, porcelain-gres tiles, tiles not susceptible to discolouration, ceramic and glass mosaic, glass tiles resistant to scratching, glass bricks, decorated tiles with delicate pattern, mirrors, mirror tiles and other surfaces susceptible to scratching, metal tiles and aluminium sheets, natural stone, e.g. marble.
Note. When grouting mirrors, mirror tiles and other surfaces susceptible to scratching, decorated tiles with delicate pattern or natural stone (e.g marble), one should check the grout influence on a tile individually.
Grouting small, medium and large size cladding - small and medium size tiles (< 0.1 m^2), large size tiles (< 0.25 m^2), very large size tiles (> 0.25 m^2), slim-type tiles.
Grouting cladding fixed on standard and deformable as well as difficult substrates:
- concrete, cement, anhydrite screed, etc., including those with water and electric heating;
- concrete walls made of ceramic brick, silicate brick, with ceramic elements; walls made of cellular concrete, gypsum blocks;
- cement, cement-lime, gypsum plasters, etc.; walls and drywalls made of plasterboards, incl. fireplace casing;
- floors made of wood, OSB, dry gypsum screed;

Grouting tiles on vertical and horizontal surfaces, indoors in:
- **residential single- and multi-family buildings, office buildings** – in living rooms, kitchens, kitchenettes, halls, antechambers, corridors, staircases, bathrooms, showers, laundries;
- **public access and commercial buildings** – in nurseries, kindergartens, schools, lecture halls, sacral buildings, hospitals (incl. rooms where sterilization with UV lamps is required)*, pharmacies, car showrooms;
- **transport infrastructure buildings** – railway and bus stations, airports - salesrooms, waiting rooms.

Note. In sterile rooms in healthcare objects, operating theatres, etc., we recommended the use of ATLAS EPOXY Grout.

Technical data

ATLAS DECORATIVE GROUT is manufactured in the form of dry mix of cement binder, specially selected aggregates, fillers, pigments and modifying additives of the highest quality.

Bulk density (of dry mix)	approx. 1.2 kg/dm^3
Wet bulk density (after mixing)	approx. 1.8 kg/dm^3
Dry density (after setting)	approx. 1.65 kg/dm^3
Mixing ratio (water/dry mix)	0.22 – 0.24 l/1 kg 0.44 – 0.48 l/2 kg
Min./max. joint thickness	1 mm / 15 mm
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +35°C
Maturing time	approx. 5 minutes
Pot life	approx. 2 hours
Initial cleaning	after approx. 30 minutes
Final cleaning	after approx. 3 hours
Light foot traffic	after approx. 3 hours
Full load	after approx. 24 hours

The time shown in the table is recommended for the application in temperature 23 ° C and humidity 55% (approx.).

Technical requirements

The product conforms to PN-EN 13888:2010 standard. Declaration of Conformity No. 190.

PN-EN 13888:2010	Cement mortar for filling joints, with increased parameters: high abrasion resistance and reduced water absorption.
Class	CG2 WA
Flexural strength in dry conditions	≥ 3.5 N/mm^2
Flexural strength after freeze-thaw cycles	≥ 3.5 N/mm^2
Compressive strength in dry conditions	≥ 15 N/mm^2
Compressive strength after freeze--thaw cycles	≥ 15 N/mm^2
Shrinkage	≤ 2 mm/m
Resistance to abrasion	≤ 1000 mm^3
Water absorption - after 30 min. - after 240 min.	 ≤ 2 g ≤ 5 g

Grouting

Substrate preparation
Before grouting, carefully clean the joints between tiles of dust and any contamination. The joints should be of even depth - while fixing tiles, remove excessive adhesive immediately. One can begin grouting only when the adhesive sets, not earlier than 24 hours since fixing the tiles. In case of use of ATLAS MIG 2 or ATLAS PLUS EXPRESS adhesive, one can begin grouting already after 4 hours. Directly before grouting, clean the surface of tiles with damp sponge and wet the joints slightly in order to limit and unify the substrate absorptiveness.

Mortar preparation
Pour the mortar from the package into a container with the suitable amount of water (see Technical Data for ratio) and mix until homogenous. You can do it manually or mechanically. The mortar can be used after 5 minutes and remixing. It should be used up within 2 hours. Water must not be added to already prepared mortar.

Grouting
Apply the mortar deep and tight into the joints with the use of a float or a rubber spatula. Move the spatula diagonally to the edges of tiles and collect the grout excess. The grout cleaning consists of 3 stages: initial cleaning, final cleaning and dry cleaning.
1. Initial cleaning - when the grout gets matt – after approx. 30 minutes - wash the whole surface with a damp sponge. Joints of intensive colours shall be additionally wetted with plenty of water and left to dry. They may "release" the colour slightly during the initial period of use, which is not a product defect and does not influence the final effect.
2. Final cleaning. It can be carried out already after 3 hours. It consists in washing the whole cladding surface with a damp sponge again.
3. Dry cleaning – in order to form an uniform Glitter Effect, when the grout fully sets, wipe the grout with dry cloth.

Cladding use
Light pedestrian traffic is possible already after approx. 3 hours. Full load of the grouted surface is possible after approx. 24 hours.

Consumption

The grout consumption depends on the width and the depth of the joints and the type and size of the tiles used. It can be calculated for a given surface according to the formula:
z = (a1 + a2)/a1 · a2 x S x b x c x g
z – amount of grout needed [kg]
a1 and a2 – tile length and width [m]
S – surface to be grouted
b – joint depth [m]
c – joint width [m]
g – grout density [kg/m^2] – for ATLAS DECORATIVE GROUT g = 1650

Examples of consumption:

Tile size	Width of joint [mm]	Depth of joint [mm]	Consumption [kg/m^2]
0.02 m x 0.02 m	2.0	2.0	approx. 0.80
0.10 m x 0.10 m	3.0	7.5	approx. 0.90
0.30 m x 0.30 m	4.0	7.5	approx. 0.40
0.30 m x 0.60 m	5.0	7.5	approx. 0.38
0.50 m x 0.50 m	5.0	7.5	approx. 0.30
0.60 m x 0.60 m	5.0	7.5	approx. 0.25

Important additional information

- Before grouting the whole cladding, carry out test application on a small fragment (best on a waste piece of tile) and test cleaning in order to eliminate the tile discolouration.
- In order to avoid various colour shades, it is recommended to use grout of the same manufacturing date and the same batch number for each individual surface.
- Silicones and grouts are manufactured on the basis of different types of binders therefore differ in the degree of smoothness and gloss. These factors naturally influence the colour shade of each product type.
- Protect the grout against drying too fast.
- The real grout colour is set when the grout sets and dries, after approx. 2 – 3 days.
- In joints located in particular parts of cladding (internal and external corners, expansion joints), finishing beads should be used, e.g. ATLAS EDGE TRIMS or filling with permanently elastic materials e.g. ATLAS ARTIS silicone.
- The colour shown on the package front has a view character. Due to difference in technologies used in poligraphy and construction any differences between shades of a particular product colour and its simulation shown on the package does not constitute the basis for any claims against the editor as well as ATLAS. The particular colour shade depends on its texture homogeneity, conditions of use, substrate and ambient conditions as well as lighting conditions. The actual colour shade may to some extent differ from the one shown on the label. Use the grout of the same manufacturing date and the same batch number for each individual surface.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set adhesive can be removed with the ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves, protective clothing, eye protection, face protection. If on skin (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed original bags, in dry conditions (most preferably on pallets). Protect against moisture. Shelf life in conditions as specified is 24 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Foil bags: 2 kg
Paper cartons: 10 x 2 kg
Pallet: 36 cartons (720 kg)

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous one become void.
Date of update: 2016-02-18

ATLAS SILTON S (4-25 mm)
sanitary silicone

- for sealing shower units, wash basins, kitchen furniture
- flexible, resistant to atmospheric conditions
- forms unfavorable conditions for growth of mould and bacteria

Innovative technologies

ATLAS SILTON S is an one-component sealant based on polymers with acetate hardening system. Due to its characteristic it can be widely used in residential and industrial construction. The specially designed recipe ensures:
• resistance to harmful atmospheric conditions,
• high flexibility,
• resistance to wide range of temperature.
Recommended for sealing the joints between the cladding and the room equipment – around shower cabins, shower basins, joints bathroom furniture and fittings, wash basins, toilets, bath tubs, kitchen worktops, sinks

Properties

Permanently exible – retains high flexibility during the whole operation period, hardens without contraction; enables sealing tiles on stable wood-based panels and plasterboards, as well as on floor and wall heating systems.
Ensures aesthetic appearance and durable colour of the joints – it is resistant to UV rays, ageing processes and the influence of cleaning agents.
Forms ideally smooth surface.
Highly resistant to temperatures from -50°C up to +180°C.
Element of the tiling nishing system – in combination with corresponding in colour ATLAS grouts and finishing strips.
36 colours – including the colourless one, matching the colours of ATLAS grouts, silicones and finishing trims.

Use

Caulking tiles on vertical and horizontal surfaces, indoors and outdoors in:
- **residential single - and multi-family buildings, office buildings** – in living rooms, kitchens, kitchenettes, halls, antechambers, corridors, staircases, offices, bathrooms, showers, laundries, garages, on terraces, balconies, external stairs*, plinths*;
- **public access and commercial buildings** – in nurseries, kindergartens, schools, lecture halls, storage rooms, malls, stadiums, sacral buildings, hospitals (incl. rooms sterilization with UV lamps is required), pharmacies, diagnostic stations, car showrooms;
- **pools (adjacent rooms, e.g. dressing rooms, showers), saunas, jacuzzi, fountains;**
- **production and industrial buildings** – areas with no aggressive chemical load, storage rooms and warehouses, wash rooms;

Note. In sterile rooms in healthcare objects*, operating theatres*, laboratories*, garages, car washes, fire water reservoirs, industrial laundries and kitchens*, production areas with aggressive chemical load* as well as for ceramic cladding on façades, we recommend the use of ATLAS ARTIS silicone.

Caulking tiles on standard and deformable substrates:
- concrete, cement, anhydrite screed, etc., including those with water and electric heating;
- concrete walls made of ceramic brick, silicate brick, with ceramic elements; walls made of cellular concrete, gypsum blocks;
- cement, cement-lime, gypsum plasters, etc.; walls and drywalls made of lasterboards, incl. fireplace casing;
- floors made of wood, OSB, dry gypsum screed.

Note. In case of steel or plastic substrates, **we recommend the use of ATLAS ARTIS silicone.**
Surfaces exposed to low, medium and heavy traffic.
Surfaces subject to water and chemical loads: temporarily and frequently washed with water, detergents, machines and power wash.
Note. For surfaces temporarily or frequently washed with aggressive cheicals* or under chemical load*, **we recommend the use of ATLAS ARTIS silicone.**
Note. In case of mark "*" determination of chemical loads and confirmation of resistance needed.

Technical data

ATLAS SILTON S is a sealant based on silicone elastomer.

Hardening system	acetate
Substrate temperature and ambient temperature during work	from +5°C to +40°C
Temperature resistance after hardening	from -50° up to +180°C
Joint depth	max. 14 mm
Joint width	4 - 25 mm
Pot life	up to approx. 15 min
Foot traffic	after approx. 3 hours
Full load	after approx. 24 hours

Technical requirements

The product conforms to PN-EN 15651-1:2013, PN-EN 15651-2:2013, PN-EN 15651-3:2013 standards. EC Declaration of Performance No. 035/CPR.

CE 1213	PN-EN 15651-1:2013 (EN 15651-1:2012) PN-EN 15651-2:2013 (EN 15651-2:2012) PN-EN 15651-3:2013 (EN 15651-3:2012)
Sealants for Façade Elements F-EXT-INT-CC (EN 15651-1) Sealants for Glazing G-CC (EN 15651-2) Sealants for Sanitary Joints S (class S1) (EN 15651-3)	
Conditioning: method A (acc. to ISO 8340)Substrate: glass (without priming), anodized aluminium (without priming)	
Reaction to fire	class E
Durability	Meets requirements
Microbiological growth	1
Release/content of hazardous substances	See: Safety Data Sheet
Watertightness and gastightness	
Volume change	≤ 3 mm
Resistance to flow	≤ 40%
Mechanical properties at constant elongation after water action.	NF
Adhesion/cohesion properties after exposition to heat, water and artificial light	NF
Mechanical properties after water action (+ 23°C)	≥ 25%
Properties at elongation (transverse elongation module) for sealants used in cold climate (- 30 °C) s	≤ 0.9 MPa
Mechanical properties at constant elongation for sealants used in cold climate (- 30 °C) s	NF
Elastic return	≥ 60%

Caulking

Substrate preparation

The substrate should be dry, clean and free from dust, dirt and other contamiations adversely affecting the binding. Surfaces adjacent to places to be filled with the silicone should be protected with protective tape.

Caulking

Before application, remove the nozzle and cut the tip of the cartouche. Then install the nozzle and cut it at angle to the width corresponding with the width of the joint. Insert the cartouche into the caulk gun. Press the silicone out in a uniform way and with little excess into the joint, continuously, without gaps or empty spots. Shape the surface of the silicone within 10 - 15 minutes since application and finally smooth it with a putty knife or another appropriate tool soaked with water with a small addition of soap or dish washing liquid. It is recommended to shape the joints in a way enabling free water dribbling. After smoothing the joints, remove the tape protecting the surface of the caulked elements immediately.

Usage of the floor

Slight pedestrian traffic is possible already after 3 hours since caulking. The sealed surface is ready for full operation load after approx. 24 hours.

Coverage

The coverage depends on the width and depth of joints. Example coverage for the most common applications is presented in the table below illustrating the number of running meters of the joint obtained from a single cartouche.

Joint width [mm])	Joint depth [mm]	Coverage [rm/280 ml]
4.0	6.0	approx. 11.0
6.0	6.0	approx. 7.5
8.0	6.0	approx. 5.5

Important additional information

- The sanitary silicone must not be used for mending fish tanks, fixing mirrors, or caulking joints with Teflon, polyethylene (PE), polypropylene (PP), concrete, marble and lead, zinc, copper and iron.
- The colour shown on the package front has a view character. Due to difference in technologies used in poligraphy and construction any differences between shades of a particular product colour and its simulation shown on the package does not constitute the basis for any claims against the editor as well as ATLAS. The particular colour shade depends on its texture homogeneity, conditions of use, substrate and ambient conditions as well as lighting conditions. The actual colour shade may to some extent differ from the one shown on the label. Use the silicone of the same manufacturing date and the same batch number for each individual surface.
- Silicones and grouts are manufactured on the basis of different types of binders, therefore differ in the degree of smoothness and gloss. These factors naturally influence the colour shade of each product type.
- In order to prevent the silicone from sticking to the bottom of the joint and ensure optimum filling between its side walls only, it is recommended to use polyurethane foam backer rods.
- All silicone stains must be removed immediately with petroleum spirits. After hardening they can be removed mechanically only.
- Keep out of reach of children. In case of any symptoms of concern get medical assistance immediately, show safety data sheet, packaging or label. Follow the Safety Data Sheet.
- The silicone has to be transported and stored in tightly sealed original pack ging, in dry conditions and temperature between +5°C and +25°C. Shelf life in conditions as specified is 18 months from the production date shown on the packaging.

Packaging

Plastic cartouches: 280 ml
Cartons of 6 or 12 cartouches (depending on the colour).

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-03-09

ATLAS ARTIS (4-25 mm)
sanitary silicone

- permanently flexible, frost-resistant, resistant to UV radiation
- for joints and expansion joints between materials of various types
- forms unfavorable conditions for growth of mould and bacteria
- 39 durable colours
- for residential, commercial and service, public access, industrial buildings

Innovative technologies

ATLAS ARTIS silicone is an advanced one-component elastomer sealing putty based on polysiloxanes with acetate hardening system, used for filling and sealing joints between tiles and for execution of flexible expansion joints filling. Owing to optimum recipe containing appropriately selected components ATLAS ARTIS silicone ensures:

- possibility of application with tiles of any type – owing to high adhesion to edges and wide range of use (4-25 mm),
- high durability – ensures tightness when compensating deformations of expansion joints, cladding joints in the corners, etc. as well as deformations resulting from mechanical and operation loads,
- resistance to external factors – long-term UV and water action, extreme temperature.

Properties

Recommended for sealing the joints between the cladding and the room equipment – around shower cabins, shower basins, joints bathroom furniture nd fittings, wash basins, toilets, bath tubs, kitchen worktops, sinks.
Resistant to machine and pressure washing.
For caulking tiles located in the corners and for filling the expansion joints.
Permanently flexible – retains high flexibility during the whole operation period, hardens without contraction, enables caulking tiles on stable wood-based panels and plasterboards, on fl oor and wall heating systems.
Allows to form perfectly smooth surface.
Highly resistant to temperature - between -50°C and +180°C.
39 colours – including the colourless one, matching the colours of ATLAS grouts, silicones and finishing trims.

Use

Caulking tiles on vertical and horizontal surfaces, indoors and outdoors in:
- residential single- and multi-family buildings, office buildings – in living rooms, kitchens, kitchenettes, halls, antechambers, corridors, staircases, offices, bathrooms, showers, laundries, garages, on terraces, balconies, external stairs*, plinths*, façades;
- public access and commercial buildings – in nurseries, kindergartens, schools, lecture halls, storage rooms, malls, stadiums, sacral buildings, hospitals (incl. rooms where sterilization with UV lamps is required), sterile rooms in healthcare objects*, operating theatres*, pharmacies, laboratories*, industrial kitchens*, garages and car parks, diagnostic stations, car showrooms, car washes, industrial laundries*;
- pools (adjacent rooms, e.g. dressing rooms, showers), saunas, jacuzzi, fire water reservoirs, fountains;
- production and industrial buildings – areas with no aggressive chemical load, production areas with aggressive chemical load*, storage rooms and warehouses, wash rooms, production premises intensively washed with water;

Caulking tiles on standard and deformable substrates:
- concrete, cement, anhydrite screed, etc., including those with water and electric heating;
- concrete walls made of ceramic brick, silicate brick, with ceramic elements; walls made of cellular concrete, gypsum blocks;
- cement, cement-lime, gypsum plasters, etc.; walls and drywalls made of plasterboards, incl. fireplace casing;
- floors made of wood, OSB, dry gypsum screed;
- steel, plastic substrates.

Surfaces exposed to low, medium and heavy traffic.
Surfaces subject to water and chemical loads: temporarily and frequently washed with water, detergents, aggressive chemicals*, machines and power wash.
Note. In case of mark "*" determination of chemical loads and confirmation of resistance needed.

Technical data

ATLAS ARTIS silicone is a sealant based on silicone elastomer.

Hardening system	Coverage
Substrate temperature and ambient temperature during work	from +5°C to +40°C
Temperature resistance after hardening	from -50° up to +180°C
Joint depth	max. 14 mm
Joint width	4 - 25 mm
Pot life	up to approx. 15 min
Foot traffic	approx. 3 hours
Full load	approx. 24 hours

Technical requirements

The product conforms to PN-EN 15651-1:2013, PN-EN 15651-2:2013, PN-EN 15651-3:2013 standards. EC Declaration of Performance No. 128/CPR.

CE 1213	PN-EN 15651-1:2013 (EN 15651-1:2012) PN-EN 15651-2:2013 (EN 15651-2:2012) PN-EN 15651-3:2013 (EN 15651-3:2012)
Sealants for Façade Elements F-EXT-INT-CC (EN 15651-1) Sealants for Glazing G-CC (EN 15651-2) Sealants for Sanitary Joints S (class S1) (EN 15651-3)	
Conditioning: method A (acc. to ISO 8340)Substrate: glass (without priming), anodized aluminium (without priming)	
Reaction to fire	Class E
Durability	Meets requirements
Microbiological growth	1
Release/content of hazardous substances	See: Safety Data Sheet
Watertightness and gastightness	
Volume change	≤ 3 mm
Resistance to flow	≤ 40%
Mechanical properties at constant elongation after water action	NF
Adhesion/cohesion properties after exposition to heat, water and artificial light	NF
Mechanical properties after water action (+ 23°C)	≥ 25%
Properties at elongation (transverse elongation module) for sealants used in cold climate (- 30°C)	≤ 0.9 mPa
Mechanical properties at constant elongation for sealants used in cold climate (- 30°C)	NF
Elastic return	≥ 60%

Caulking

Substrate preparation
The substrate should be dry, clean and free from dust, dirt and other contaminations adversely affecting the binding. Surfaces adjacent to places to be filled with the silicone should be protected with protective tape.

Caulking
Before application, remove the nozzle and cut the tip of the cartouche. Then install the nozzle and cut it at angle to the width corresponding with the width of the joint. Insert the cartouche into the caulk gun. Press the silicone out in a uniform way and with little excess into the joint, continuously, without gaps or empty spots. Shape the surface of the silicone within 10 - 15 minutes since application and finally smooth it with a putty knife or another appropriate tool soaked with water with a small addition of soap or dish washing liquid. It is recommended to shape the joints in a way enabling free water dribbling. After smoothing the joints, remove the tape protecting the surface of the caulked elements immediately.

Usage of the floor
Slight pedestrian traffic is possible already after 3 hours since caulking. The sealed surface is ready for full operation load after approx. 24 hours.

Coverage

The coverage depends on the width and depth of joints. Example coverage for the most common applications is presented in the table below illustrating the number of running meters of the joint obtained from a single cartouche.

Joint width [mm]	Joint depth [mm]	Coverage [rm/280 ml]
4.0	6.0	approx. 11.0
6.0	6.0	approx. 7.5
8.0	6.0	approx. 5.5

Important additional information

- The sanitary silicone must not be used for mending fish tanks, fixing mirrors, or caulking joints with Teflon, polyethylene (PE), polypropylene (PP), concrete, marble and lead, zinc, copper and iron.
- The colour shown on the package front has a view character. Due to difference in technologies used in poligraphy and construction any differences between shades of a particular product colour and its simulation shown on the package does not constitute the basis for any claims against the editor as well as ATLAS. The particular colour shade depends on its texture homogeneity, conditions of use, substrate and ambient conditions as well as lighting condi ions. The actual colour shade may to some extent differ from the one shown on the label. Use the silicone of the same manufacturing date and the same batch number for each individual surface.
- Silicones and grouts are manufactured on the basis of different types of binders, therefore differ in the degree of smoothness and gloss. These factors naturally influence the colour shade of each product type.
- In order to prevent the silicone from sticking to the bottom of the joint and ensure optimum filling between its side walls only, it is recommended to use polyurethane foam backer rods.
- All silicone stains must be removed immediately with petroleum spirits. After hardening they can be removed mechanically only.
- Keep out of reach of children. In case of any symptoms of concern get medical assistance immediately, show safety data sheet, packaging or label. Follow the Safety Data Sheet.
- The silicone has to be transported and stored in tightly sealed original packaging, in dry conditions and temperature between +5°C and +25°C. Shelf life in conditions as specified is 18 months from the production date shown on the packaging.

Packaging

Plastic cartouches: 280 ml
Cartons of 6 or 12 cartouches (depending on the colour)

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous one become void.
Date of update: 2016-03-09

ATLAS FUGERO
grout renovator

- contains cellulose microfibers
- well bonding
- high abrasion resistance
- restores colour of cement grouts
- high coating degree

Use

Restores colour of cement grouts – renovates and unifies colours of discoloured, dirty and faded grouts or those with efflorescence.

Types of renovated grouts – cement and acrylic.
Types of tiles between which the grout can be renovated – ceramic (glazed tiles, terracotta, gres-porcelain, clinker, china mosaic), stone and cement tiles.

Properties

High coating degree – enables changing the colour of grout, applies new colour irrespective of colour intensity of the renovated grout.
Contains cellulose microfibres – guarantees very good coating of the painted areas and increases the coating resistance by forming an internal structure.
Can be used gradually – throughout whole shelf life, i.e. 24 months from the production date.
Available as a kit – the package contains the renovating mass, an application brush and a sponge for cleaning the tiles.
Very good bonding to old grouts – tightly bonds to the painted areas.
High abrasion resistance – can be used on floors in places with intensive pedestrian traffic.
3 colours – white, light grey and light beige – matching the colours of ATLAS grouts, silicones and trims.

Technical data

ATLAS FUGERO is manufactured on the basis of high quality polymer binder, fillers and modifiers. Coating paint for painting external and internal finishing elements ATLAS FUGERO: maximum content of VOC in the product 31.8 g/l, permissible content of VOC 130 g/l.

Density	approx. 1.4 kg/dm^3
Substrate and ambient temperature during work	from +5°C up to +25°C
Drying time	approx. 2 hours

Technical requirements

The renovator is not classified as construction product. The product has been given the Radiation Hygiene Certificate.

Grouts renovation

Substrate preparation
Before work commencement, the grouts must be carefully degreased and cleaned from dust, efflorescence and any other contaminations. The following substances can be used for cleaning: ATLAS SZOP (contaminations from cementitious mortars) or ATLAS SZOP 2000 (contaminations from products based on polymer dispersions). In case of organic tarnish (fungi or algae), prior application of ATLAS MYKOS fungicide is necessary. When using the cleaning agents, rinse the surface with clear water and leave to dry. If during the sample application (check Important additional information section) a tile gets discoloured, its edges must be appropriately secured prior to the application of the renovator, e.g. by using a protective tape along the edges.

Renovator preparation
The renovator is manufactured in the form of ready to use, homogenous mass. It must not be mixed with other materials, diluted or thickened. After opening the container, mix the mass in order to unify the consistency.

Painting
Apply the renovator once and evenly upon dry joints, using a brush or a sponge (included in the kit), going slightly over the edges of tiles. In case of colour change or when the joints are slightly cracked, application of two coats of the renovator may be necessary.

Cleaning
The product can be removed from tiles with a sponge during application or after initial drying, i.e. after approximately 30 minutes.

Usage of the cladding
The surface with renovated grouts can be used after approx.12 hours.

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Coverage

The actual coverage depends on the width of joints and the type and size of tiles.

Tile size [cm]	Joint width [mm]	Coverage [m^2 from a 250 ml container]
Mosaics	2.0	approx. 8.0
10 x 10	3.0	approx. 12.0
15 x 15	3.0	approx. 15.0
20 x 25	3.0	approx. 15.0
30 x 30	3.0	approx. 15.0

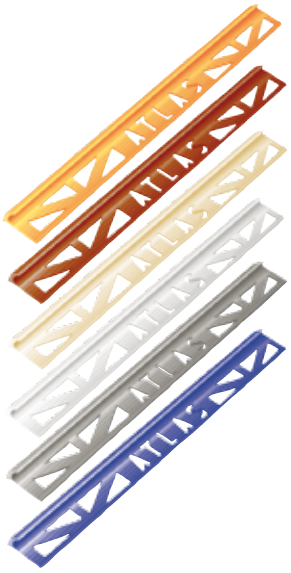
Important additional information

- Excessively absorptive tiles can get discoloured in contact with the renovator. Therefore, it is recommended to conduct a test of the renovator effect on a small, unexposed fragment of surface. If, as the result of the test, the tile gets discoloured, the edges of tiles must be protected appropriately, e.g. with a protective tape.
- In order to avoid various shades of colour, it is recommended to use only renovator of the same manufacturing date and the same batch number for each individual surface.
- During the application of renovator and in the initial period afterwards (approx. 24 hours), the painted surface must be protected against excessive drying and contact with water.
- The tools must be cleaned with clean water directly after use.
- Harmful to aquatic life with long lasting effects. Keep out of reach of children. Read label before use. Avoid release to the environment. Dispose of contents/container to appropriately labeled containers designed for selective waste treatment, emptied by an authorized company. Follow the instructions of the Safety Data Sheet.
- Keep in tightly sealed original and labeled containers. Keep in dry and cool places, protect against overheating (> 30 °C) and freezing - the product freezes and irreversibly loses its performance in temperature below 0 °C. Protect against direct sunshine. Incompatible materials: avoid contact with aluminum, copper and alloys of these metals. Shelf life in conditions as specified is 24 months from the production date shown on the packaging.

Packaging

The kit includes a 250 ml plastic container with renovator, a brush and a sponge. Collective packaging: 6 pieces.

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-03-10



ATLAS EDGE AND TILE TRIMS

PVC and aluminium finishing profiles for tiles

- for finishing internal and external corners
- protect the edges of tiles against chipping
- permanently join two planes of tiles
- cover the edges of cut-to-size tiles

Use

Protection of tile edges against chipping – increased mechanical resistance.
Permanently join two planes of tiles – prevent the occurrence of cracks (possible at the application of cementitious mortars) in the corners of rooms, along edges of reveals (e.g. doors, windows), shelves, columns, stairs, bathtub and shower base rims.
Finish the cladding – in places where it joins other construction element, e.g. door frame, parquet, floor panels, carpet floor.
Cover the edges of cut-to-size tiles – give aesthetic appearance.
Make maintenance and keeping clean easier.
Edge and tile trims, together with ATLAS grouts and silicones, make a colour matched set for joining the tiles.

Place of application – bathrooms, shower cabins, toilets, kitchens, laundries or other rooms with increased humidity, balconies, terraces, façades, wall and floor heating systems.

Properties

Edge and tile trims are made of material resistant to negative temperature and UV radiation.
Trims made of PVC are flexible – can be adjusted to edges not being a straight line.
Trims made of PVC are manufactured in 20 colours – partially matching the colours of ATLAS grouts and silicones. Wide range of PVC trims allows selecting the appropriate finishing trim according to the colour of the tiles.
Edge and tile trims made of aluminium are characterized by high mechanical resistance.

Technical Data

PVC edge trims – 4 types of profiles, length 2,500 mm. Two profile heights: 7 mm (also used for tiles 6 mm thick) and 9 mm (recommended also for tiles 8 mm thick), each in two types – for internal and external corners.
Anodized aluminium edge trims – for places exposed to mechanical damage, e.g. thresholds or wall corners in passageways; length 2,050 mm and 2,500 mm, profile height 8 mm and 10 mm (available as trims for external edges only).
Tile trims: anodized and non-anodized, 2,000 mm and 3,000 mm long, with the profile height 8 mm and 10 mm.
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Installation

Preparation
Select the appropriate type of the edge or tile trims before the tiling commencement. The profile height must be selected so that the upper plane of the tile (after fixing) does not extend over the applied trim.

Application
The edge and tile trims must be applied at the stage of the cladding installation. Put the adhesive on the substrate and press the assembly strip of the trim in the designated installation location. Add additional amount of adhesive on the strip and then carefully place a tile so that it tightly adheres to the profile (avoid gaps) and does not extend above the profile height. The 1÷2 mm wide gaps (that may appear between the tile and the trim) can be filled in with the grout.

Important additional information

Commonly available cleaning agents for ceramic tiles are recommended for maintenance and cleaning of the edge and tile trims. Do not use products containing concentrated chlorine or ammonia compounds and products based on organic solvents for the PVC trims cleaning.

Packaging

PVC edge trims are packed in sets of 100 pieces (internal trims) or 50 pieces (external trims), consisting of 10 packages – so-called plastic sleeves, each containing 10 pcs of trims.
Aluminium edge trims are packed in sets of 50 pcs, consisting of 5 packages – so-called plastic sleeves, each containing 10 pcs of trims.
Aluminium tile trims (anodized and non-anodized) are packed in sets of 50 pieces of trims, consisting of 5 packages – so-called plastic sleeves, each containing 10 pcs of trims.

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2009-11-13

ATLAS FUGA

COLOURS OF GROUTS AND SILICONES

40 colours, with 3 shades of white

WHITE & GREY

200	COLD WHITE
001	WHITE
201	WARM WHITE
202	ASH
034	LIGHT GREY
035	GREY
203	STEEL
136	SILVER
036	DARK GREY
037	GRAPHITE
204	BLACK

BEIGE & BROWN

118	JASMINE
018	PASTEL BEIGE
019	LIGHT BEIGE
205	CREAM
206	CAPPUCCINO
020	BEIGE
207	LATTE
210	COCOA
120	TOFFI
123	LIGHT BROWN
209	BROWN
024	DARK BROWN
124	DARK WENGE
212	GREY-BROWN
211	CEMENT
023	BROWN
022	WALNUT

COLOURS

215	SAPPHIRE
031	BLUE
117	VIOLET
214	LILAC
216	RED
219	ORANGE
213	MANDARINE
218	LEMON
220	AVOCADO
025	LIGHT GREEN
027	GREEN
217	TURQUOISE

EPOXY GROUT

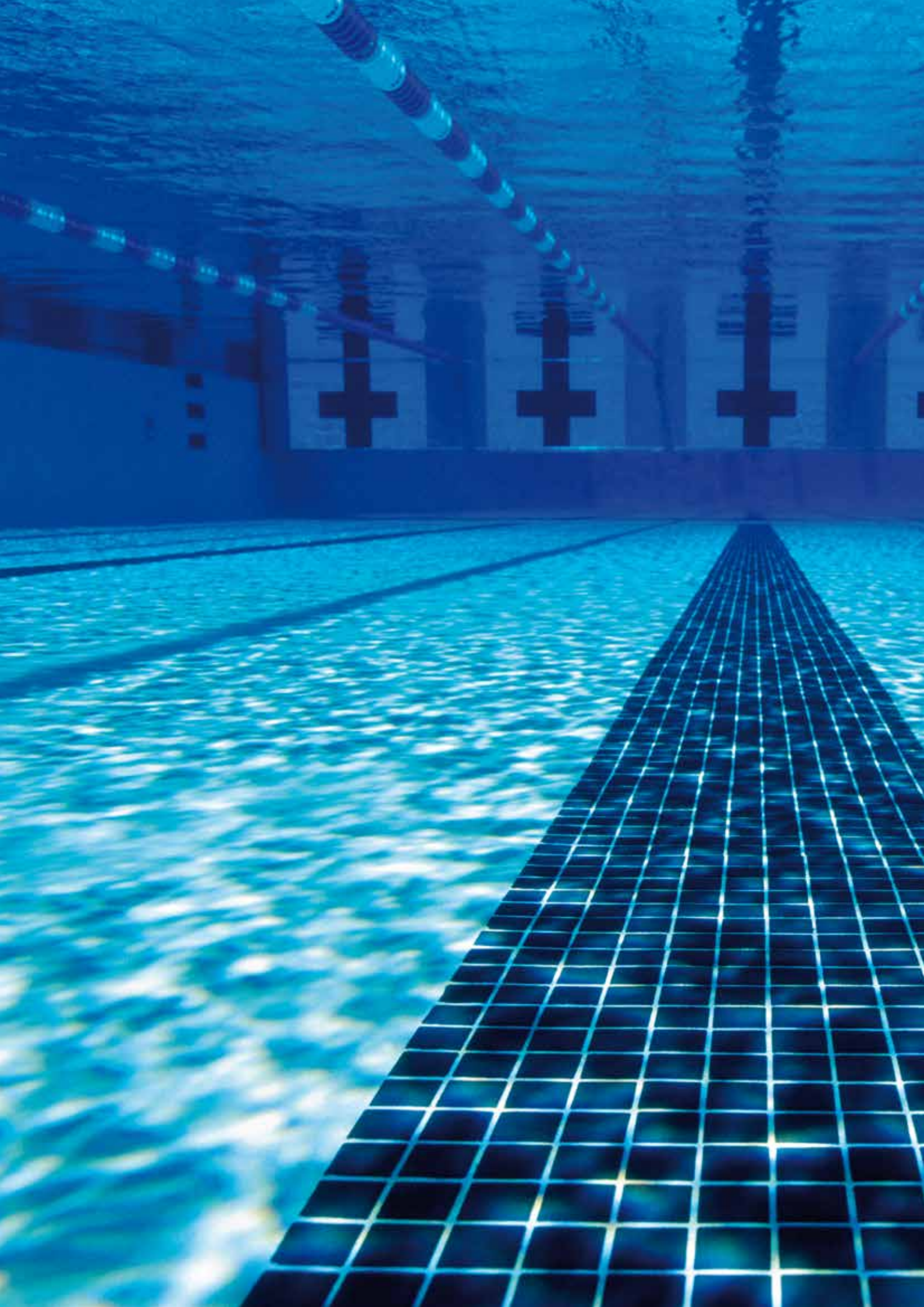
001	WHITE
202	ASH
035	GREY
136	SILVER
037	GRAPHITE
018	PASTEL BEIGE
019	LIGHT BEIGE
212	GREY-BROWN
020	BEIGE
120	TOFFI
023	BROWN
024	DARK BROWN

DECORATIVE GROUT

300	ALABASTER
301	PEARL
302	OPAL
303	ZIRCONIA
304	DARK DIAMOND

We made every effort to present the shades so as to reflect the ATLAS palette of colours precisely. Nevertheless, the shades may differ from the real ones.

Prior to purchase of a particular product check the shade with the original colour chart. Additionally, take into account the surface structure and size, light intensity and substrate type.



WATERPROOFING

WATERPROOFING

Waterproofing

Waterproofing protects building elements against destructive water and damp action. It should be installed upon following constructions: foundations, terraces, balconies, pools, water reservoirs, walls and floors in wet rooms (shower trays, zones around baths and sinks). ATLAS offers the following types of water and damp proofing:

- waterproofing system ATLAS WODER E
- watertight cement mortar ATLAS WODER S
- two-component waterproofing ATLAS WODER DUO
- elastic one-component damp proofing ATLAS WODER W

Water- and damp proofing applied upon corners of walls, joints between walls and floors, expansion joints, surfaces around pipes led through partitions, etc. are particularly subject to damage and leakage. Therefore, they should be strengthened with accessories:

- ATLAS SEALING TAPES, CORNERS and RINGS
- SEALING TAPES and ACCESSORIES ATLAS HYDROBAND or ATLAS HYDROBAND 3G

DETERMINING WET ZONES IN BATHROOMS

A - wet zone
B - damp zone

Note:
In small bathrooms, for example in multifamily buildings, it is recommended to treat the entire bathroom as a wet zone.

LAYERS OF TERRACE ABOVE HEATED ROOM (WITH EPS)

1. EPS 70 boards
2. EPS 200 boards
3. Concrete floor
4. Contact coat: water + ATLAS ELASTIC EMULSION + ATLAS POSTAR 20 or ATLAS POSTAR 80
5. ATLAS POSTAR 20 or ATLAS POSTAR 80 cement screed
6. Vapour barrier: ATLAS GENERAL-PURPOSE BITUMEN MASS + ATLAS SMB BITUMINOUS MEMBRANE
7. Thermal insulation: min. EPS 200 boards
8. Waterproofing, e.g. 2 x heat-welded membrane
9. ATLAS POSTAR 20 or ATLAS POSTAR 80 cement screed
10. ATLAS 100 eave profile
11. ATLAS WODER-DUO under-tile waterproofing
12. ATLAS HYDROBAND 3G sealing tape
13. ATLAS PLUS MEGA adhesive
14. Ceramic, gres-porcelain tiles
15. ATLAS ARTIS GROUT
16. Base coat and thin-coat rendering coat of ATLAS Thermal Insulation System

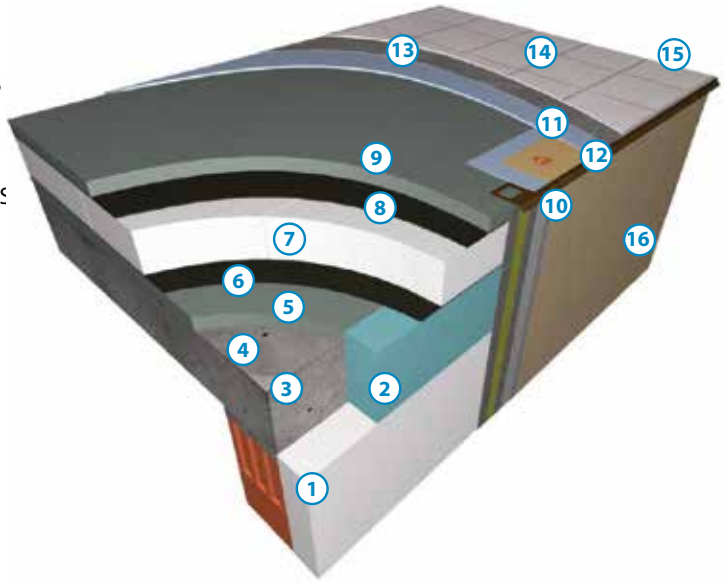


TABLE 3.1

PRODUCT				
	ATLAS WODER DUO	ATLAS WODER E/ AVAL KL 51	ATLAS WODER W	ATLAS WODER S
	Two-component waterproofing	Watertight flexible foil	Flexible, one-component damp proofing	Watertight cement mortar
Reference document	PN-EN 14891:2012 CM P	AT-15-5032/2013	AT-15-7990/2014	AT-15-5031/2013
TECHNICAL DATA				
Min/max coat thickness [mm]	1-3	1-5	1-5	1-3
Open time [min]	30	30	30	30
Pot life [min]	60	whole shelf life period	whole shelf life period	120
Application of the second coat after [h]	3	3	3	5
Top coat application [h]	12	24	24	24
Resistance to pressurized water [head of water in m]	50	not resistant	not resistant	50
Loading with pressurized water [days]	7	not resistant	not resistant	7
Cracks bridging up to [mm]	≥0.75	-	-	-
Vapour permeability resistance coefficient μ	500	1000	600	500
APPLICATION				
Indoors	✓	✓	✓	✓
Outdoors	✓	✓		✓
USAGE CONDITIONS				
Foundations, cellar walls	✓			✓
Floor/wall heating	✓	✓	✓	✓
Water reservoirs, pools	✓			✓
Terraces, balconies	✓	✓ *		✓
TYPE OF SUBSTRATE				
Cement and concrete screeds, cement-lime renders, concrete, cellular concrete, silicates	✓	✓	✓	✓
Anhydrite screeds, gypsum plasters		✓	✓	
Plasterboards, OSB boards	✓	✓	✓	
Galvanized metal sheets	✓	✓		
INSULATION TYPE				
Light	✓	✓	✓	✓
Medium	✓	✓		✓
Heavy	✓			✓

* ATLAS WODER DUO is recommended for terraces

ATLAS WODER DUO

two-component waterproofing

- protects substrates against moisture
- highly flexible
- on balconies and terraces
- in bathrooms, kitchens and cellars
- element of the set of waterproofing products

Use

Forms waterproofing and damp proofing – light, medium or heavy type (depending on the thickness of the applied layer).
Seals against water:
- under pressure of 50 m water column (5 bars) – in water reservoirs, pools (resistant to chlorinated water).
- pressureless – flowing freely as the result of rain, surface washing, in showers, in wash rooms or in the form of surface damp, etc.

Protects substrates under cladding when exposed to precipitation – balconies, terraces, etc.
Protects substrates against moisture formed indoors – plasters and screeds in wet rooms (bathrooms, baths, showers, kitchens, wash rooms), particularly in wet zones of these rooms - around shower cabins, wash basins, bathtubs, sinks, etc.
Forms waterproofing of underground elements – cellar and foundation walls made of bricks, retaining walls made of concrete blocks and other construction elements exposed to permanent contact with ground water (on condition that protected against mechanical damage).
Perfect waterproofing of water reservoirs, fire water tanks, sewage treatment plants.
Recommended for protection of elements particularly exposed to damage when in contact with moisture - gypsum (plasterboards and plasters) and anhydrite products, cellular concrete, etc.
Can be used for waterproofing the drinking water reservoirs.
Can be used to coat OSB boards and zinc galvanized steel (after degreasing) – metals: zinc, copper, aluminum should be coated with polyurethane or epoxy resin prior to the membrane application.
May be used on substrates with wall and floor heating systems as well as other mineral substrates exposed to deformation (stairs, reservoirs, dams, water gates, terraces, balconies).
Enables installation of flexible protection of corners and expansion joints – along with ATLAS SEALING TAPE and CORNERS or ATLAS HYDROBAND tapes and corners embedded, secures the edges of joints between walls and screeds as well as the expansion joints.
Proofs surfaces around walls and floors, around passages of water and sewage system pipes – together with FLOOR or WALL RINGS or ATLAS HYDROBAND wall rings embedded.

Types of waterproofed substrates - the ones listed above and cement, cement-lime plasters, cement screeds, concrete, ferroconcrete and masonry made of bricks, hollow bricks, blocks, plasterboard, etc.

Properties

Flexible and water vapour permeable.
Resistant to frost, UV radiation and ageing.
Obturates scratches and cracks up to 0.75 mm wide.
Resistant to light direct load, e.g. foot traffic.
Reinforced with fibres – their presence makes the coat more resistant to damage resulting from substrate action and operation loads of the cladding covering it.
High bonding – adheres with no priming, the actual bonding to concrete substrates in standard conditions exceeds 1.0 MPa (when the standard requires 0.5 MPa).
Coat waterproofing – 2-3 mm thick.
Can be used directly under tiles – replaces bitumen membranes and traditional foils requiring execution of screed before fixing the tiles.
Does not contain solvents or any other harmful substances.
Does not cause corrosion of metal elements.
Forms coating resistant to negative water pressure - Caution! The waterproofing material should be installed on the pressing water side. If it is not possible due to economic or construction reasons, an unique local technical design should be prepared. Please contact Atlas technical advisors if assist required.

Technical data

ATLAS WODER DUO is a two-component waterproofing manufactured on the basis of cement, mineral fillers and modifying agents (dry mix- A component) and water dispersion of plastic (emulsion – B component).

Bulk density of component A	approx. 1.85 g/cm^3
Density of component B	approx. 1.00 g/cm^3
Substrate and ambient temperature	from +8°C to +25°C
Max. single coat thickness	2 mm
Bonding to the concrete substrate	≥ 1.0 MPa
Relative elongation at maximum tensile force	min. 40 %
Water vapour permeability coefficient μ	approx. 500
Resistance to pressurised water (50 m water column)	min. 0.5 MPa
Pot life after components mixing	approx. 1 hour
Open time	min. 30 minutes
Second coat application	after approx. 3 h
Foot traffic and subsequent coat application	after approx. 12 h*
Burial of trenches	after approx. 72 h*
Fixing the cladding	after approx. 12 h*
Loading with pressurized water	after approx. 7 days*

* The time shown in the table is recommended for the application in the temperature 23°C and humidity 55% (approx.).

Technical requirements

The product conforms to PN-EN 14891:2012 standard. EC Declaration of Performance No 096/CPR.

CE 1487	PN-EN 12004+A1:2012 (EN 12004:2007+A1:2012)
Two-component, polymer-modified watertight cement product used in liquid form, resistant to chlorinate water (CM P),	for outdoor use and in pools under ceramic tiles fixed with C2 adhesives (according to EN 12004 standard)
Bonding strength - initial bonding	≥ 0.5 N/mm²
Durability - bonding: - after immersion in water - after heat exposure - after freeze-thaw cycles - after lime water action - after chlorinated water action	≥ 0.5 N/mm²
Water-tightness	no penetration
Crack-bridging ability in standard conditions	up to 0.75 mm
Release/content of hazardous substances	See: Safety Data Sheet

The product has been given the Hygienic Certificate no. HK/W/0162/01/2013 by the National Institute of Hygiene and the ITB Technical Approval No. AT-15-9373/2014 - Domestic Declaration of Conformity No. 096 of 30.09.2014.

Waterproofing

Substrate preparation

The substrate should be:

- **even and sound** – i.e. strong, stable and free from dust, dirt, salt efflorescence and weakly adhering substrate elements, remains of old paints, oils and other substances which may impair the membrane bonding. Any substrate scratches and defects wider than 1.0 mm must be widened mechanically and filled with cement mortar, e.g. ATLAS TEN-10 or ATLAS MONTER T-5. Dusty substrates must be grinded and dusted. Rough walls must be constructed with full joints.
- **stable** – freshly installed plasters or floors may be waterproofed after appropriate stabilising, not earlier however, than after 14 days since their execution. In case of use of fast drying cement screed ATLAS POSTAR 20 the further work can be continued after 5-6 days.
- **dry** – free from technological moisture or capillary action, dried after precipitation, flooding, etc. Just before the mass application the substrate surface should be wet until matt-wet state (with no puddles).
- **primed** – initially intensively wet and matt-wet during application. Highly absorbent or dusty substrates should be primed with ATLAS UNI-GRUNT emulsion and smooth or hardly absorbable substrates should be coated with ATLAS GRUNTO-PLAST mass.

Mass preparation

The product is manufactured as a set consisting of two components: the dry mix (component A) and the emulsion (component B). The components are packed in separate packages constituting a ready to use set with appropriate mixing ratio. The preparation of the mass consists in pouring the liquid component (B) into an appropriate container and steady pouring the dry mix (A) with concurrent mixing until homogenous mass of even color is formed (approx. 2 minutes). It is advisable to use a low speed mixer with a drill. The mass can be used after 5 minutes and remixing. So prepared should be used up within approx. 60 minutes. Note: if partial use of the product is assumed, prepare the mass by keeping the weight ratio of the components (3 parts of dry A component and 1 part of emulsion B).

Waterproofing

The membrane should be applied in minimum two coats. The first coat is always applied with a brush, rubbing the mass well into the substrate to close the existing pores. Start the application from points where ATLAS SEALING TAPES, CORNERS, RINGS or ATLAS HYDROBAND accessories are to be used. These accessories are embedded in the freshly applied mass. The tape should overlap with min. 5 cm. The excessive amount of mass should be pressed out with a trowel or a float. Depending on the needs, in order to obtain proper consistency, 3% of water can be added to the mixed mass for the application of the first coat. The second coat can be applied, with a brush, a roller or a float once the first coat is completely dry (after approx. 3-4 hours). Similar technological breaks must be kept in case of application of the subsequent coats. Keep the same thickness of each individual coat – this ensures optimum waterproofing coat usage conditions. Caution: It is not recommended to apply a single coat larger than 3.0 kg/m². In higher temperature the coating size should not exceed 1.5 kg/m².

Finishing works

The waterproofed surfaces must be protected against precipitation and free water action within approx. 12 hours and within 7 days against pressurized water action. The coating must be covered with ceramic cladding (after approx. 12 hours). It is recommended to use C2 adhesives, e.g. ATLAS ELASTYK or ATLAS PLUS line adhesives.

Consumption

The total coating thickness must be adjusted respectively to the conditions of water action on the waterproofed surface.

Type of waterproofing	Recommended coating thickness [mm]	Consumption [kg/m²]
light (damp proofing)	2.0	approx. 3.00
medium (ground water)	2.5	approx. 3.75
heavy (pressurised water)	3.0	approx. 4.50

Important additional information

- Not treated surfaces should be protected against soiling.
- Low temperature and increased humidity extend the mortar setting time. Avoid work in strong sunlight.
- Any passages under water pressure should be protected with twisted ring sealers.
- When waterproofing water tanks it is acceptable to execute coves made of ATLAS TEN-10 or ATLAS FILER in the wall corners.
- The product during setting is sensitive to frost. The waterproofed places should be protected during setting against precipitation within min. 12 hours.
- The waterproofing coat should be protected against mechanical damages, e.g. pedestrian traffic – it is necessary to cover it with screed, plaster or tilling; in case of foundations waterproofing the coating should be at least covered with construction foil.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set waterproofing can be removed with the ATLAS SZOP and ATLAS SZOP 2000 agent.
- Water reservoirs designated for drinking water should be washed with water after the product ageing.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The components should be transported and stored in tightly closed packaging, in dry conditions (preferably on pallets). The component B (emulsion) should be transported and stored in positive temperature. Protect against moisture and overheating (> 30 °C). The shelf life (for component A and B) is 12 months from the production date shown on packaging.

Packaging

Set 32 kg: component A - paper bag 24 kg, component B – plastic drum 8 kg.
Pallet: packaging 24 kg – 1,008 kg, packaging 8 kg – 480 kg.

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-10-14

ATLAS WODER E

elastic sealing mass

- protects substrates against moisture
- highly flexible
- on balconies and terraces
- in bathrooms, kitchens and cellars
- element of the set of waterproofing products

Use

Forms light type damp proofing – proofs places with no pressurised water action (free flow).
Main element of ATLAS WODER waterproofing system – with ATLAS UNI-GRUNT priming emulsion, sealing tapes and accessories.
Protects substrates against moisture formed indoors – plasters and screeds in wet rooms (bathrooms, baths, showers, kitchens, wash rooms), particularly in wet zones of these rooms - around shower cabins, wash basins, bathtubs, sinks, etc.
Protects substrates exposed to precipitation – balconies, terraces, etc.
Recommended for protection of elements particularly exposed to damage when in contact with moisture - gypsum (plasterboards and plasters) and anhydrite products, cellular concrete, etc.
Can be used to coat OSB boards and zinc galvanized steel – after application of contact layer made of ATLAS GRUNTO-PLAST mass.
Enables installation of flexible protection of corners and expansion joints – along with ATLAS SEALING TAPE and CORNERS or ATLAS HYDROBAND tapes and corners embedded, secures the edges of joints between walls and screeds as well as the expansion joints.
Proofs surfaces around walls and floors, around passages of water and sewage system pipes – together with FLOOR or WALL RINGS or ATLAS HYDROBAND wall rings embedded.

Types of waterproofed substrates – cement, lime-cement and gypsum plasters, cement or anhydrite screeds, concrete and ferroconcrete elements, masonry made of brick, hollow blocks, blocks, plasterboard, OSB boards, etc.

Properties

Highly flexible – can be used on substrates with wall and floor heating systems and other surfaces subject to deformation.
Resistant to substrate cracking – the maximum score width, where no coat cracking occurs is 2.5 mm.
High adhesion – minimum 1.3 MPa for typical concrete substrates.
Coat damp proofing – forms a several millimeter thick coat, which has to be protected against mechanical damage, e.g. resulting from foot traffic – must be covered with screeds, plasters or cladding.
Can be used directly under tiles – replaces bitumen membranes and traditional foils requiring execution of screed before fixing the tiles.
Easy in use – one component – requires mixing the package content before use only; after opening the bucket and partial use, the rest of the mass can be used up within the whole shelf life period, i.e. 12 months since the production date.

Technical data

ATLAS WODER E is manufactured as a ready-to-use mass based on polymer dispersion, fillers and modifying agents.

Product density	approx. 1.5 g/cm^3
Ambient and substrate temperature	from +5°C to +25°C
Min./max. coat thickness	1 mm / 5 mm
Bonding	min. 1.3 MPa
Water vapour permeability coefficient μ	approx. 1000
Drying time	approx. 3 hours
Second coat application	after approx. 3 hours
Foot traffic	after approx. 12 hours
Execution of protective layer	after approx. 24 hours

Technical requirements

The product has been given the ITB Technical Approval AT-15-5032/2013 for the ATLAS WODER E system. Domestic Declaration of Conformity No. 052 of 26.09.2013. The product has been given the Radiation Hygiene Certificate.

Damp proofing

Substrate preparation

The substrate should be:

- **even and sound** – i.e. strong, stable and free from dust, dirt, salt efflorescence and weakly adhering substrate elements, remains of old paints, oils and other substances which may impair the membrane bonding. Any substrate scratches and defects must be widened mechanically and filled with cement mortar, e.g. ATLAS TEN-10. Dusty substrates and those made of gypsum materials must be grinded and dusted,
- **dry**– the surface should be completely dry, which should be checked with the "sheet test". This consists in covering an area of approx. 1m^2 with plastic sheet. If condensation occurs on the inside of the sheet within approx. 12 hours, the substrate is yet not ready for the application of ATLAS WODER E. Freshly applied surfaces, e.g. plasters or screeds can be proofed when they completely dry, but not earlier than 14 days since their application,
- **primed**– highly absorbent substrates should be primed with ATLAS UNI-GRUNT emulsion. In order to improve the membrane bonding to smooth or hardly absorbable substrates, the substrate should be coated with ATLAS GRUNTO-PLAST mass.

Mass preparation

ATLAS WODER E is manufactured as a ready-to-use, uniform paste. It must not be mixed with other materials, thinned or thickened. After opening the bucket, the mass should be mixed in order to unify the consistency (low speed hand mixer recommended).

Damp proofing

The membrane should be applied in minimum two coats. The first coat is applied with a brush, starting from points where additional ATLAS SEALING TAPES, CORNERS and RINGS or ATLAS HYDROBAND accessories are to be used. These accessories are embedded in the freshly applied WODER E mass. The second coat can be applied once the first coat is completely dry (after approx. 3 hours). Subsequent coats can be applied using a brush or a steel float.

Finishing works

The set coating (after approx. 24 hours) should be permanently covered with floor, plaster or facing. The proofed surfaces must be protected against water action within approx. 3 days.

Consumption

The total coating thickness must be adjusted respectively to the conditions of water action on the proofed surface.

Layer thickness [mm]	Consumption [kg/m^2]
1.5	approx. 1.5
2.0	approx. 2.0
3.0	approx. 3.0

Important additional information

- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mass can be removed with ATLAS SZOP 2000 agent.
- Harmful to aquatic life with long lasting effects. Keep out of reach of children. Read label before use. Avoid release to the environment. Dispose of contents/container to appropriately labeled containers designed for selective waste treatment, emptied by an authorized company. Follow the instructions of the Safety Data Sheet.
- Keep in tightly sealed original and labeled containers. Keep in dry and cool places, protect against overheating (> 30 °C) and freezing - the product freezes and irreversibly loses its performance in temperature below 0 °C. Protect against direct sunshine. Incompatible materials: avoid contact with aluminum, copper and alloys of these metals. Shelf life in conditions as specified is 12 months from the production date shown on the packaging.

Packaging

Plastic buckets: 5 kg, 25 kg
Pallet: 400 kg in 5 kg buckets, 600 kg in 25 buckets

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-04-24

ATLAS WODER W

elastic one-component damp proofing

- for bathrooms, kitchens and cellars
- highly flexible
- protects substrates against moisture
- excellent bonding

Use

Protects substrates against moisture formed indoors – plasters and screeds in wet rooms (bathrooms, baths, showers, kitchens, wash rooms), particularly in wet zones of these rooms - around shower cabins, wash basins, bathtubs, sinks, etc.
Recommended for protection of elements particularly exposed to damage when in contact with moisture - gypsum (plasterboards and plasters) and anhydrite products, cellular concrete, etc.
Forms light type damp proofing – proofs places with no pressurised water action (free flow).
Enables installation of flexible protection of corners and expansion joints – along with ATLAS SEALING TAPE and CORNERS or ATLAS HYDROBAND tapes and corners embedded, secures the edges of joints between walls and screeds as well as the expansion joints.
Proofs surfaces around walls and floors, around passages of water and sewage system pipes – together with FLOOR or WALL RINGS or ATLAS HYDROBAND wall rings embedded.

Types of waterproofed substrates – cement, lime-cement and gypsum plasters, cement or anhydrite screeds, concrete and ferroconcrete elements, masonry made of brick, hollow blocks, blocks, plasterboard, OSB boards, etc.

Properties

Highly flexible – can be used on substrates with floor or wall heating systems and other surfaces subject to deformations.
Excellent bonding to typical construction substrates – minimum 2.2 MPa for concrete.
Coat damp proofing – forms a several millimeter thick coat, which has to be protected against mechanical damage, e.g. resulting from foot traffic – must be covered with screeds, plasters or cladding.
Resistant to substrate cracking - the maximum score width, where no coat cracking occurs is 2.5 mm.
Should only be mixed before use – a one-component membrane.
It can be used up gradually within 12 months – even if the bucket is opened and the material partially used, the remaining mass can be used up within the rest of the shelf life, i.e. 12 months since the date of manufacturing.
Comfortable use regardless the substrate type – it is easily applied onto plasterboards, OSB boards, cement or gypsum plasters, metal or PVC elements.
Easily controlled coat thickness – regardless the application tool - when using a brush, a roller or a steel trowel.
Excellent substrate coating, even with a single coat.
Allows easy visual assessment of thickness and uniformity of the applied coat – owing to intense colour and texture after drying.

Technical data

ATLAS WODER W is manufactured as a ready-to-use mass based on polymer dispersion, fillers and modifiers.

Product density	approx. 1.4 g/cm^3
Air and ambient temperature	from +5°C to +30°C
Min./max. coat thickness	1 mm / 5 mm
Bonding to concrete substrate	min. 2.2 MPa
Water vapour permeability coefficient μ	approx. 600
Open time	min. 30 minutes
Drying time	approx. 60 minutes
Second coat application	after approx. 3 hours
Foot traffic	after approx. 12 hours
Fixing the tiles	after approx. 24 hours

Technical requirements

The product has been given the ITB Technical Approval AT-15-7990/2014. Domestic Declaration of Conformity No. 103 of 21.03.2014. Factory Production Control Certificate No. ITB-0329/Z.

Damp proofing

Substrate preparation
The substrate should be:
- **even and sound** – i.e. strong, stable and free from dust, dirt, salt efflorescence and weakly adhering substrate elements, remains of old paints, oils and other substances which may impair the membrane bonding. Any substrate scratches and defects must be widened mechanically and filled with cement mortar, e.g. ATLAS TEN-10. Dusty substrates and those made of gypsum materials must be grinded and dusted,
- **dry** – the surface should be completely dry, which should be checked with the "sheet test". This consists in covering an area of approx. 1m^2 with plastic sheet. If condensation occurs on the inside of the sheet within approx. 12 hours, the substrate is yet not ready for the application of ATLAS WODER W. Freshly applied surfaces, e.g. plasters or screeds can be proofed when they completely dry, but not earlier than 14 days since their application,
- **primed** – highly absorbent substrates should be primed with ATLAS UNI-GRUNT emulsion. In order to improve the membrane bonding to smooth or hardly absorbable substrates, the substrate should be coated with ATLAS GRUNTO-PLAST mass.

Mass preparation
ATLAS WODER W is manufactured as a ready-to-use, uniform paste. It must not be mixed with other materials, thinned or thickened. After opening the bucket, the mass should be mixed in order to unify the consistency (low speed hand mixer recommended).

Damp proofing
The membrane should be applied in minimum two coats. The first coat is applied with a brush, starting from points where additional ATLAS SEALING TAPES, CORNERS and RINGS or ATLAS HYDROBAND accessories are to be used. These accessories are embedded in the freshly applied WODER W mass. The second coat can be applied once the first coat is completely dry (after approx. 3 hours). Subsequent coats can be applied using a brush or a steel float.

Finishing works
The set coat (after approx. 24 hours) should be permanently covered with floor, plaster or facing. The proofed surfaces must be protected against water action within approx. 3 days.

Consumption

Average coverage for 2 coats depends on the substrate evenness and absorbability.

Layer thickness [mm]	Consumption [kg/m^2]
1.0	approx. 0.9
2.0	approx. 1.8
3.0	approx. 2.7
4.0	approx. 3.6
5.0	approx. 4.5

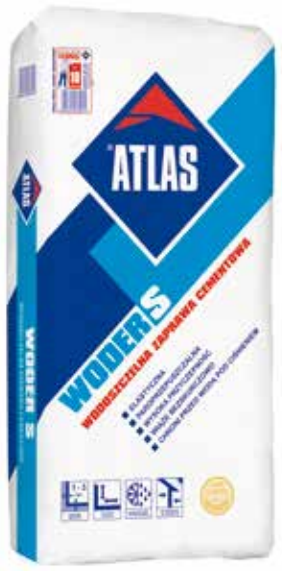
Important additional information

- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mass can be removed with ATLAS SZOP 2000 agent.
- Harmful to aquatic life with long lasting effects. Keep out of reach of children. Read label before use. Avoid release to the environment. Dispose of contents /container to appropriately labeled containers designed for selective waste treatment, emptied by an authorized company. Follow the instructions of the Safety Data Sheet.
- Keep in tightly sealed original and labeled containers. Keep in dry and cool places, protect against overheating (> 30 °C) and freezing - the product freezes and irreversibly loses its performance in temperature below 0 °C. Protect against direct sunshine. Incompatible materials: avoid contact with aluminum, copper and alloys of these metals. Shelf life in conditions as specified is 12 months from the production date shown on the packaging.

Packaging

Plastic buckets: 4.5 kg, 10 kg
Pallet: 540 kg in 4.5 kg buckets; 650 kg in 10 kg buckets

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-03-02



ATLAS WODER S

watertight cement mortar

- flexible, vapour permeable
- protects against pressurised water
- for sealing tapes embedding
- high bonding, sets with no contraction
- for mineral substrates

Use

Protects substrates against pressurised water – can form internal and external coat waterproofing of walls and floors, fire water or water reservoirs, pool beaches, etc.
Protects substrates exposed to precipitation and ground water action – balconies, terraces, façades, cellar walls, foundations, stairs, plinths (e.g. before tiling or applying decorative ATLAS DEKO M type renders).
Protects substrates against moisture formed indoors – plasters and screeds in wet rooms (bathrooms, baths, showers, kitchens, wash rooms), particularly in wet zones of these rooms - around shower cabins, wash basins, bathtubs, sinks, etc. Particularly recommended for walk-through shower systems.
Forms watertight coat – light, medium, or heavy type waterproofing (depending on the thickness of the applied layer).
Enables installation of flexible protection of corners and expansion joints – along with ATLAS SEALING TAPE and CORNERS or ATLAS HYDROBAND tapes and corners embedded, secures the edges of joints between walls and screeds as well as the expansion joints.
Waterproofs surfaces around walls and floors, around passages of water and sewage system pipes – together with ATLAS FLOOR and WALL RINGS or ATLAS HYDROBAND wall rings embedded.
Recommended for old, damp buildings – vapour permeability in combination with watertightness makes the mortar ideal for waterproofing partitions in heritage buildings.

Types of waterproofed substrates – mineral, cement and cement-lime plasters, screeds, concrete, reinforced concrete, masonry elements, plasterboards.

Properties

Resistant to water pressure of 5 bars (50 m water column).
High adhesion – for typical concrete substrates, minimum 1.2 MPa.
Resistant to UV radiation, frost and ageing.
Adheres to substrate without priming.
Sets practically without contraction – the linear contraction is limited to minimum - no contraction scratches or cracks, typical for cement mortars, occur during setting.
Coat waterproofing – forms a several millimeter thick coat, which has to be protected against mechanical damage. Can be covered with plasters, renders, tiles, natural stone, etc.
Can be used directly under tiles – replaces bitumen membranes and traditional foils requiring execution of screed before fixing the tiles.

Technical data

ATLAS WODER S is manufactured as a dry mix of high quality cement, powder resins of the latest generation, mineral fillers and modifiers.

Bulk density (of dry mix)	approx. 1.1 g/dm^3
Wet density (after mixing)	approx. 1.4 g/dm^3
Dry density (after setting)	approx. 1.3 g/dm^3
Mixing ratio for application with a trowel water/dry mix	approx. 0.25 l/1 kg approx. 6.25 l/25 kg
Mixing ratio for application with a brush water/dry mix	approx. 0.35 l/1 kg approx. 8.75 l/25 kg
Min./max. coat thickness	1 mm / 3 mm
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Bonding	min. 1.2 MPa
Resistance to water of pressure	5 bars (50 m water column)
Water vapour permeability coefficient μ	approx. 500
Pot life	approx. 2 hours
Open time	min. 30 minutes
Foot traffic and subsequent coat application	after 5 hours*
Fixing the cladding	after 24 hours*
Resistance to pressurised water	after 7 days*

*** The time shown in the table is recommended for the application in the temperature 23°C and humidity 55% (approx.).**

Technical requirements

The product has been given the ITB Technical Approval No. AT-15-5031/2013, Declaration of Conformity No. 038 of 28.06.2013. The product has been given the Radiation Hygiene Certificate.

Waterproofing

Substrate preparation
The substrate should be:
- **even and sound** – i.e. strong, stable and free from dust, dirt, salt efflorescence and weakly adhering substrate elements, remains of old paints, oils and other substances which may impair the mortar bonding. Any substrate scratches and defects must be widened mechanically and filled with cement mortar, e.g. ATLAS TEN-10. Dusty substrates and those made of gypsum materials must be grinded and dusted.
- **stable in standard conditions:**

- concrete - 1 day since formwork removal (tiling after 28 days)
- cement-based screeds - 3 days (tilling after 14 days)
- ATLAS POSTAR 80 screed - 1 day (tilling after 1 day)

- **primed** – the substrate should be initially intensively wet and matt-wet during the mortar application.

Mass preparation
Pour the mortar from the bag into a container with the suitable amount of water (see Technical Data for ratio) and mix using a drill with a mixer until homogenous. So prepared mortar should be used up within approx. 2 hours.

Waterproofing
The mortar must be applied upon the waterproofed surface in minimum two coats. The first coat is applied with a brush, starting from points where additional ATLAS SEALING TAPES, CORNERS and RINGS are to be used. These accessories are embedded in the freshly applied WODER S mass. The tapes should overlap with min. 5 cm. It is recommended to apply the mass onto the substrate as well as on the tape back. The tapes must not be pleated after installation. The second coat can be applied with a brush, a roller or a steel float when the initial one is properly set.

Finishing works
The set coat (after approx. 24 hours) has to be protected against mechanical damage with plaster, render, floor or facing. The waterproofed surfaces must be protected against pressurised water within approx. 3 days.

Consumption

The total layer thickness must be adjusted respectively to the conditions of water action on the waterproofed surface.

Operation conditions	Layer thickness [mm]	Consumption [kg/m^2]
dampness	1.5	approx. 2.0
filtering through	2.0	approx. 3.0
water tanks	3.0	approx. 4.0

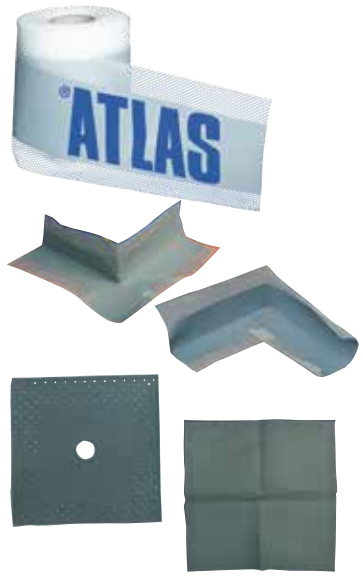
Important additional information

- Low temperatures and increased humidity extend the setting time of the mortar. Avoid work in strong sunlight.
- Any passages under water pressure should be protected with twisted ring sealers.
- Not treated surfaces should be protected against soiling.
- Metals: zinc, copper, aluminum or flashings should be coated with polyurethane resin prior to the mortar application.
- When waterproofing water tanks, it is acceptable to execute coves made of ATLAS TEN-10 or ATLAS FILER in the wall corners.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with the ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%..

Packaging

Paper bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

The information in this Technical Data Sheet constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations. At the time of publication of this product data sheet all previous ones become void. Date of update: 2014-01-13



ATLAS SEALING TAPES, CORNERS and RINGS

accessories for ATLAS WODER type waterproofing

- for sealing edges and expansion joints
- highly flexible
- on balconies and terraces
- in kitchens, bathrooms, cellars
- elements of the waterproofing system

Use

Element of ATLAS WODER waterproofing system – with ATLAS UNI GRUNT priming emulsion and ATLAS WODER E damp proofing. They protect substrates against water and moisture ingress. Can also be used with ATLAS WODER DUO and ATLAS WODER W water- and damp proofing.

Designed for sealing specific places (embedded in ATLAS WODER E, ATLAS WODER W or ATLAS WODER DUO membranes):

- **SEALING TAPE** - for wall and screed edges as well as for expansion joints,
- **SEALING CORNERS** - formed of sealing tape, for sealing internal and external corners of rooms,
- **WALL RING 120 x 120 mm** – flexible sleeve for sealing pipe passages in walls,
- **FLOOR RING 425 x 425 mm** – flexible sleeve for sealing floor drains.

Protects against moisture formed indoors – plasters and screeds in wet rooms (bathrooms, baths, showers, kitchens, wash rooms), particularly in wet zones of these rooms - around shower cabins, wash basins, bathtubs, sinks, etc.

Protects against moisture formed outdoors – balconies, terraces, cellar walls, etc.

Recommended for protection of elements particularly exposed to damage when in contact with moisture - gypsum (plasterboards and plasters) and anhydrite products, cellular concrete, etc.

Types of sealed substrates – PVC, steel sheet, cement, lime-cement or gypsum plasters, cement and anhydrite screeds, concrete and ferroconcrete elements, plasterboards, OSB, ATLAS WODER type waterproofing membranes.

Properties

High strength – the mesh is made of extremely tear resistant polyester – transversely elastic; the sealing layer is made of highly resistant thermoplastic elastomer.

Flexibility – transversely deformable – it is elastic and retains waterproofing properties even after considerable deformation, which makes it an ideal sealant for joints between adjoining structural elements, which are subject to different stress, e.g. joints between walls and floors.

Technical data

The sealing accessories are made of extremely tear resistant polyester – transversely elastic. The sealing layer in the central zone is made of highly resistant thermoplastic elastomer.

Weight	37.5 g / rm
Total thickness	0.65 mm
Maximum pressure	3.30 bar
Ozone resistance (DIN 53509 part 1, ISO 1434-1)	resistant
Resistance to water pressure of 1.5 bar (15 meters water column)	resistant
UV resistance (200 h)	resistant
Temperature resistance	from -30°C up to +90°C

Technical requirements

The product has been given the ITB Technical Approval AT-15-5032/2013 for the ATLAS WODER E system.

Accessories installation

Substrate preparation

The substrate under the waterproofing membranes ATLAS WODER E, ATLAS WODER W or ATLAS WODER DUO should be prepared according to the guidelines listed in their Technical Data Sheets. It should be clean, free of dust, lime deposit and other contaminants.

Sealing

Places where accessories are to be installed should be coated with waterproofing membrane ATLAS WODER E, ATLAS WODER W or ATLAS WODER DUO. The accessories should be embedded in the membrane directly after its application. After protecting all critical areas, the entire tape and accessories surface as well as the whole proofed area should be coated with the same waterproofing membrane, which is used for the first coat.

The membrane should be applied in minimum two coats. The first one is always applied with a brush or a roller, and the second one – using a steel float, a brush or a roller. The first coat should be intensively rubbed into the substrate. The second coat can be applied once the first one dries completely (after approx. 3 hours).

Important additional information

- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mass can be removed with ATLAS SZOP 2000 agent.
- When using ATLAS WODER E and ATLAS WODER W membranes - harmful to aquatic life with long lasting effects. Keep out of reach of children. Read label before use. Avoid release to the environment. Dispose of contents/container to appropriately labeled containers designed for selective waste treatment, emptied by an authorized company. Follow the instructions of the Safety Data Sheet.
- When using ATLAS WODER DUO and ATLAS WODER S membranes - contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.

Packaging

Sealing tape – 50 rm and 10 rm
External corner, grey – 25 pieces
Internal corner, grey – 25 pieces
Wall ring 120 x 120 mm – 25 pieces
Floor ring 425 x 425 mm – 10 pieces

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2013-09-24

ATLAS HYDROBAND

sealing tapes and bathroom kit

- flexible
- extremely durable
- double non-woven fabric for improved adhesion
- creased tape for easier installation
- sealing wall and floor corners and expansion joints

Use

Protect substrates against penetration of water and moisture – in conjunction with UNI-GRUNT and waterproofing membranes: ATLAS WODER E, ATLAS WODER W, ATLAS WODER DUO or ATLAS WODER S.
Complete BATHROOM KIT for sealing shower basins - with:
• **7 rm of ATLAS HYDROBAND sealing tape** – 120 mm wide (central strip – 70 mm, perforated side strips – 25 mm each) – for wall and screed edges as well as for expansion joints,
• **1 ATLAS HYDROBAND sealing corner** – formed of sealing tape, for sealing internal corners of rooms,
• **2 wall flanges 120 x 120 mm** – flexible sleeves for sealing pipe passages through walls.
Improves watertightness in areas where the use of ATLAS WODER type water- and damp proofing is not sufficient – in corners of wet and damp rooms, along the joints between floors and walls, along expansion joints.
Protects against moisture formed indoors – plasters and screeds in wet rooms (bathrooms, baths, showers, kitchens, wash rooms), particularly in wet zones of these rooms - around shower cabins, wash basins, bathtubs, sinks, etc.
Protects against moisture formed outdoors – balconies, terraces, façades, cellars, water tanks, underground garages, drains, etc.
Recommended for protection of elements particularly exposed to damage when in contact with moisture - gypsum (plasterboards and plasters) and anhydrite products, cellular concrete, OSB boards, etc.

Types of sealed substrates – PVC, steel sheet, cement, lime-cement or gypsum plasters, cement and anhydrite screeds, concrete and ferroconcrete elements, plasterboards, OSB, ATLAS WODER type waterproofing membrane.

Properties

Special crease in the sealing part – makes it easier to turn the tape up against the wall.
Improved adhesion to waterproofing membranes – the sealing layer of the tape is coated with non-woven polyester fabric on both sides.
High tensile strength – the mesh is made of polyester knit fabric of extremely high tear resistance, whereas the sealing layer is made of durable thermoplastic elastomer.
Flexible – it is elastic and retains waterproofing properties even after considerable deformation, which makes it an ideal sealant for joints between adjoining structural elements, which are subject to different stress, e.g. joints between walls and floors.

Technical data

The sealing tape and corners consist of mesh made of openwork polyester non-woven coated with thermoplastic elastomer which is coated with polyester non-woven from both sides.

Areal weight	approx. 570 g/m^2
Total thickness	3.30 bar
Maximum pressure	from -30 up to + 90° C
Breaking strength – lengthwise	>10.0 MPa
Ultimate elongation – lengthwise	>25%
Resistance to ozone (DIN 53509 part 1, ISO 1434-1)	resistant
Resistance to water pressure of 1.5 bar (15 meters water column)	resistant
UV resistance (200 h)	resistant
Temperature resistance	from -30 °C to +90 °C

Technical requirements

The product has been given the ITB Technical Approval AT-15-6187/2010. Domestic Declaration of Conformity No. 15-6187/2011/2 of 15.04.2011. Factory Production Control Certificate No. ITB-0474/Z.

Accessories installation

Substrate preparation

The substrate under the waterproofing membranes ATLAS WODER S, ATLAS WODER E, ATLAS WODER W or ATLAS WODER DUO should be prepared according to the guidelines listed in their Technical Data Sheets. It should be clean, free of dust, lime deposit and other contaminants.

Sealing

Places where accessories are to be installed should be coated with waterproofing membrane ATLAS WODER S, ATLAS WODER E, ATLAS WODER W or ATLAS WODER DUO. The accessories should be embedded in the membrane directly after its application. After protecting all critical areas, the entire tape and accessories surface as well as the whole proofed area should be coated with the same waterproofing membrane, which is used for the first coat.

The membrane should be applied in minimum two coats. The first one is always applied with a brush or a roller, and the second one – using a steel float, a brush or a roller. The second coat can be applied once the first one dries completely (after approx. 3 hours for ATLAS WODER E, ATLAS WODER W and ATLAS WODER DUO and after complete drying for ATLAS WODER S).

Important additional information

- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mass can be removed with ATLAS SZOP 2000 agent.
- When using ATLAS WODER E and ATLAS WODER W membranes - harmful to aquatic life with long lasting effects. Keep out of reach of children. Read label before use. Avoid release to the environment. Dispose of contents/container to appropriately labeled containers designed for selective waste treatment, emptied by an authorized company. Follow the instructions of the Safety Data Sheet.
- When using ATLAS WODER DUO and ATLAS WODER S membranes - contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.

Packaging

Sealing tape: 50 m roll.
The Bathroom Kit includes:
- sealing tape - 7 rm
- internal corner, grey - 1 piece,
- wall flange 120 x 120 mm - 2 pcs.

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2012-01-13

ATLAS HYDROBAND 3G

sealing tapes, corners and rings without perforation

- highly resistant to corrosive media
- UV-resistant
- flexible
- high tensile strength

Use

Protect substrates against penetration of water and moisture (also under pressure) – in conjunction with waterproofing membranes: ATLAS WODER E, ATLAS WODER W, ATLAS WODER DUO or ATLAS WODER S.
Improve watertightness in areas where the use of ATLAS WODER type water- and damp proofing is not sufficient – particularly in corners of wet and damp rooms, along the joints between floors and walls, along expansion joints and construction joints. Form a full set for wet zones waterproofing:

- **ATLAS HYDROBAND 3G tape** - available in three widths: 125 mm, 250 mm and 400 mm, for sealing joints between screeds and walls as well as expansion joints,
- **ATLAS HYDROBAND 3G internal corner – heat-formed of sealing tape, for sealing internal corners of rooms,**
- **ATLAS HYDROBAND 3G external corner – heat-formed of sealing tape, for sealing external corners of rooms,**
- **ATLAS HYDROBAND 3G wall ring (120 mm x 120 mm) – for sealing around wall-mounted taps and small diameter pipe passages in walls,**
- **ATLAS HYDROBAND 3G floor ring (425mm x 425 mm) – for sealing floor dr**ains and pipe passages > 25 mm in diameter.

Protect against moisture formed indoors – plasters and screeds in wet rooms (bathrooms, baths, showers, kitchens, wash rooms), particularly in wet zones of these rooms - around shower cabins, wash basins, bathtubs, sinks, etc.
Protect against moisture formed outdoors – balconies, terraces, façades, cellars, water tanks, underground garages, drains, etc.
Recommended for protection of elements particularly exposed to damage when in contact with moisture - gypsum (plasterboards and plasters) and anhydrite products, cellular concrete, OSB boards, etc.

Types of sealed substrates – PVC, steel sheet, cement, lime-cement or gypsum plasters, cement and anhydrite screeds, concrete and ferroconcrete elements, plasterboards, OSB, ATLAS WODER type waterproofing membranes.

Properties

Very good resistance to aggressive environment – alkalis and dilute acids.
Vast lateral expandability and flexibility of tape – it is elastic and retains waterproofing properties even after considerable deformation, which makes it an ideal sealant for joints between adjoining structural elements, which are subject to different stress, e.g. joints between walls and floors.
High tensile strength - owing to the use of resistant materials: polypropylene knit fabric and thermoplastic elastomer.

Technical data

The tape consists of three, specially coated layers:
- two outer layers of non-woven polypropylene
- resistant to weathering coat of thermoplastic elastomer.

Areal weight:	approx. 43 g/m^2
Total thickness:	approx. 0.7 mm
Temperature resistance	from -30 up to + 90° C
Maximum inner breaking pressure	1.5 bar
Ultimate elongation – lengthwise	70 %
Ultimate elongation – lateral	335 %
Tensile strength – lengthwise	104 N/15 mm
Tensile strength – lateral	23 N/15 mm
Resistance to water pressure of 1.5 bar (15 m water column)	resistant
UV resistance (500 h)	resistant

Technical requirements

The product has been given the ITB Technical Approval AT-15-6187/2010. Domestic Declaration of Conformity No. 15-6187/2013/5 of 31.05.2013. Factory Production Control Certificate No. ITB-0474/Z.

Tape installation

Substrate preparation

The substrate under the waterproofing membranes ATLAS WODER S, ATLAS WODER E, ATLAS WODER W or ATLAS WODER DUO should be prepared according to the guidelines listed in their Technical Data Sheets. It should be clean, free of dust, lime deposit and other contaminants.

Sealing

Places where accessories are to be installed should be coated with waterproofing membrane ATLAS WODER S, WODER E, WODER W or WODER DUO. The accessories should be embedded in the membrane directly after its application. After protecting all critical areas, the entire tape and accessories surface as well as the whole proofed area should be coated with the same waterproofing membrane, which is used for the first coat.
The membrane should be applied in minimum two coats. The first one is always applied with a brush or a roller, and the second one – using a steel float, a brush or a roller. The first coat should be intensively rubbed into the substrate. The second coat can be applied once the first one dries completely (after approx. 3 hours – the data apply to the temperature approx. 21-25 °C and humidity 45-55%).

Important additional information

- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mass can be removed with ATLAS SZOP 2000 agent.
- When using ATLAS WODER E and ATLAS WODER W membranes - harmful to aquatic life with long lasting effects. Keep out of reach of children. Read label before use. Avoid release to the environment. Dispose of contents/container to appropriately labeled containers designed for selective waste treatment, emptied by an authorized company. Follow the instructions of the Safety Data Sheet.
- When using ATLAS WODER DUO and ATLAS WODER S membranes - contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.

Packaging

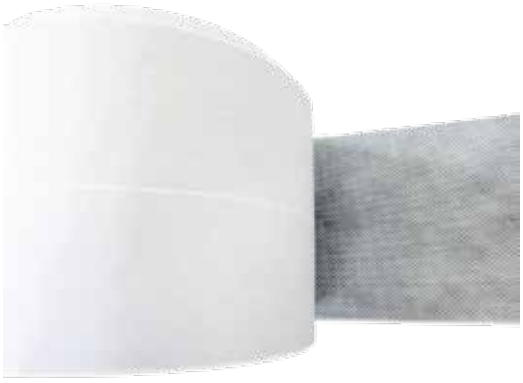
Tape width	125 mm	250 mm	400 mm
Roll length	50 m and 10 m	10 m	10 m
Collective package	box	box	foil-wrapped package

Internal corners are packed in collective packages, 10 pieces each.
External corners are packed in collective packages, 10 pieces each.
Wall rings are packed in collective packages, 10 pieces each.
Floor rings are packed in collective packages, 10 pieces each.

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2013-11-08

ATLAS BUTYL TAPE

self-adhesive sealing tape



- self-adhesive
- for sealing expansion joints and wall or floor edges
- very good adhesion to PVC and metal sheet elements
- on balconies and terraces
- in bathrooms, kitchens

Use

Protects substrates against penetration of water and moisture – in conjunction with waterproofing membranes: ATLAS WODER E, ATLAS WODER W, ATLAS WODER DUO or ATLAS WODER S.
Provides watertightness along joints between walls and floors as well as along expansion joints – particularly useful when it is necessary to seal the terrace surface:
- with the balcony door threshold,
- with the flashings.

Protects against moisture forming outdoors – balconies and terraces, etc.
Protects substrates against moisture formed indoors – plasters and screeds in wet rooms (bathrooms, baths, showers, kitchens, wash rooms), particularly in wet zones of these rooms - around shower cabins, wash basins, bathtubs, sinks, etc.
Recommended for protection of elements particularly exposed to damage when in contact with moisture - gypsum (plasterboards and plasters) and anhydrite products, cellular concrete, OSB boards, etc.

Types of sealed substrates – PVC, steel sheet, cement, lime-cement or gypsum plasters, cement and anhydrite screeds, concrete and ferroconcrete elements, plasterboards, OSB, ATLAS WODER type waterproofing membranes.

Properties

Longitudinal rigidity.
High tensile strength.
Self-adhesive layer with removable protective lining.
Excellent adhesion to ATLAS WODER type waterproofing membranes.
Provides appropriate adhesion for tile adhesives.
Colour: grey

Technical data

The tape consists of two layers: polypropylene non-woven fabric and butyl rubber coating.

Areal weight:	approx. 72 g/m
Width	100 mm and 150 mm
Thickness	0.85 mm (without the protective lining)
Temperature during application	from -5° C to + 60° C
Resistance to temperature	from -35° C to + 60° C
Maximum inner breaking pressure	0.4 bar
Ultimate elongation – lengthwise	54 %
Ultimate elongation – lateral	81 %
Breaking strength – lengthwise	32 N/15 mm
Breaking strength – lateral	23 N/15 mm
Resistance to water pressure	0.2 bar (2 m water column)

Tape installation

Substrate preparation
The substrate should be even, smooth, clean, free of dust, lime deposit and other contaminants.

Sealing
Remove the protective foil from the self-adhesive layer and apply the tape along the elements to be sealed. After applying the tape it is necessary to apply a protective layer, e.g. made of ATLAS WODER DUO, ATLAS WODER S or ATLAS WODER E and lay ceramic tiles, natural stone, mosaic render, etc.

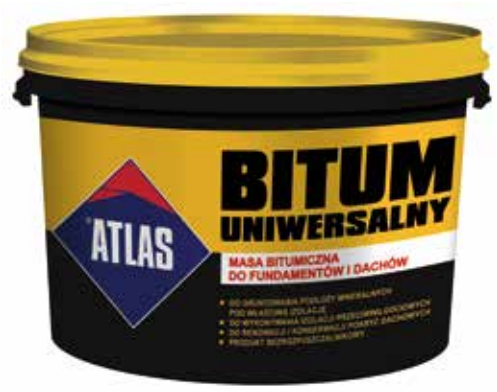
Packaging

Tape width	100 mm	150 mm
Roll length	10 m	20 m

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2013-04-12

ATLAS GENERAL-PURPOSE BITUMEN MASS

bitumen mass for foundations and roofs



- primes mineral substrates for application of main damp proofing
- for damp proofing
- for renovation and repairs of roofing membranes
- solvent-free

Use

Priming mineral substrates before application of main damp proofing – e.g. SMB BITUMINOUS MEMBRANE ATLAS.
Forms light type damp proofing – e.g. upon foundations.
Renovation and conservation of roofing membranes.

Properties

Very good bonding to mineral substrates.
Can be used on dry or damp substrate.
Quick and easy in use.
Thixotropic.
Solvent-free, contains no polyvinyl phenols and biphenyls.
Protects against damp and water.
Resistant to atmospheric factors action.
Ecological.

Technical data

ATLAS GENERAL-PURPOSE BITUMEN MASS is a dispersive asphalt-rubber mass, cold-applied. It is manufactured on the basis of aqueous emulsion of bitumen, rubber and improvers.

Density	approx. 1.1 kg/dm^3
Min. coat thickness used in a single application	2 mm
Mass preparation temperature, ambient and substrate temperature during work	from +5 °C to +25 °C
Coat forming time	approx. 6 hours
Time between subsequent coats application	approx. 6 hours
Resistance to rain	after approx. 8 hours

Technical requirements

The product conforms to PN-B-24000:1997 standard, type Dn. Domestic Declaration of Conformity IZ001 of 2012-08-28.

Mass use

Substrate preparation
The substrate should be:
- even,
- clean,
- dry or matt-wet,
- smooth,
- free of grease, dripstones and other anti-adhesive substances; substrates coated with cement laitance should be mechanically cleaned,
- primed.

Substrate priming
Dilute ATLAS GENERAL-PURPOSE BITUMEN MASS with water in 1:1 ratio. Apply the mass upon substrate with a brush or a roofing brush.

Repairs of roofing membranes
Cut or squeeze blisters in damaged roofing membranes, repair and clean the points, cut membrane pieces should be filled with an adhesive for roofing membranes or stuck/welded with patches of roofing felt. After filling the gaps and drying, ATLAS GENERAL-PURPOSE BITUMEN MASS is applied with two coats, the second one when the previous one dries. Strengthen the contact points of roofing membranes with chimneys, ventilation ducts, etc. with reinforcing fabric, which should be folded up to appropriate height. Sprinkle fresh last coat with mineral granules. This action significantly extends durability of applied coating.

Damp proofing
Apply undiluted mass with a brush or a float, so the dry residue keeps min. 1 mm thick. Each application should be carried out when the previous coat dries. Application should not be carried out during precipitation and in strong sunshine.

Consumption

Average consumption:
- approx. 0.2 kg/m^2 per coat (priming)
- approx. 1.5 kg/m^2/mm (damp-proofing)
- 0.5 kg/m^2 per coat (on roofing membranes).

Important additional information

- Do not use with tar materials.
- The tools must be cleaned before the mass dries – with water, after drying – with nitro thinners.
- Keep out of reach of children. Follow the instructions of the Safety Data Sheet.
- All parameters listed refer to use in temperature +23°C and relative humidity 55%. Higher temperature and lower air humidity accelerate, lower temperatures and higher air humidity extend the time of processing and setting.
- Shelf life of product kept in original sealed packaging, in dry rooms in temperature above +5°C is 12 months from the production date shown on the packaging.

Packaging

Plastic buckets: 10 kg, 20 kg
Pallet: 480 kg in 10 kg buckets, 540 kg in 20 buckets

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-04-04

ATLAS SMB BITUMINOUS MEMBRANE

self-adhesive asphalt membrane

- SBS – modified
- waterproof and damp-proof
- vapour barrier
- for balconies, terraces, foundations
- for cellars, underground garages

Use

Waterproofing underground building elements, e.g. foundations, retaining walls, etc.
Waterproofing terraces and balconies.
Can be used indoors – in cellars, underground garages, halls, warehouses, etc.
Execution of vapour barrier layers of terraces – diffusion equivalent of a single layer Sd = 488 m.

Types of waterproofed substrates – concrete, cement screeds, galvanized steel sheet, extruded polystyrene boards, polystyrene boards.

Properties

Self – adhesive properties.
Keeps elasticity parameters even in temperature -30°C.
Easy in use – unlike heat–welded membranes does not require the use of torches, etc.
Membrane dimensions – width 1.0 m, length 15.0 m, thickness 1.5 mm

Technical data and requirements

ATLAS SMB BITUMINOUS MEMBRANE is a roll bitumen membrane formed in one-side thick foil coating with SBS-modified asphalt.

CE 1434 13	PN-EN 13969:2006 and PN-EN 13969:2006/A1:2007
Asphalt product for damp proofing (Type A) and for waterproofing underground elements (Type T). For indoor and outdoor use. 1m x 15m x 1.5 mm, polyethylene foil, asphalt modified with SBS, back side protected with an anti-adhesion divider. For fixing with the membrane self-adhesive properties.	
Reaction to fire	E
Watertightness	meets the requirements (60 kPa)
Impact resistance	350 mm (A method)
Joint strength in direction:	- along 200N/50mm±50N/50 mm - across 225N/50mm±50N/50 mm
Elasticity	-30°C
Tensile strength in direction:	- along 225N/50mm ± 50N/50mm - across 225N/50mm ± 50N/50 mm
Expansion in direction:	- along 200% ± 50% - across 200% ± 50%
Static load resistance (method B)	10 kg
Tear strength in direction:	- along 125 ± 50 N - across 125 ± 50 N
Durability: - after ageing - after chemical action	- meets the requirements - according to the appendix A of the standard
Release/content of hazardous substances	See: Safety Data Sheet

CE 1434 13	PN-EN 14967:2007
Asphalt product for damp proofing. For indoor and outdoor use. 1m x 15m x 1.5 mm, polyethylene foil, asphalt modified with SBS, back side protected with an anti-adhesion divider. For fixing with the membrane self-adhesive properties.	
Reaction to fire	E
Watertightness	meets the requirements (60 kPa)
Impact resistance	350 mm (A method)
Elasticity	-30°C
Tensile strength in direction:	-
Expansion in direction:	-
Static load resistance	-
Durability: - after ageing - after chemical action	- meets the requirements - according to the appendix A of the standard
Release/content of hazardous substances	See: Safety Data Sheet

The product conforms to PN-EN 13969:2006 and PN-EN 13969:2006/A1:2007 standards. Factory Production Control Certificate no. 1434-CPD-0176.
The product conforms to PN-EN 14967:2007 standard.
EC Declaration of Performance no. 043-CPR-2013/07/01.
The product has been given the Hygienic Certificate no. 85/322/95/2013.

Waterproofing

Substrate and membrane preparation
Substrate should be dry, even, mechanically strong, with no loose contaminants, oily stains or water. Absorptive substrate, such as concrete or screed, should be primed with GENERAL-PURPOSE BITUMINOUS COMPOUND.
In lower ambient temperature, the membrane should be stored within 24 hours before use in temperature not lower than +18°C. The substrate onto which the membrane is to be applied, should be dry, free from frost and rime.

Membrane fixing
Membrane should be fixed, using its self – adhesive properties. Remove the foil from the back side when unrolling the roll. Press the whole membrane surface onto the substrate, particularly carefully on overlaps. It is advised to conduct the fixing in temperature above 0°C, which enables quick bonding of the membrane to the substrate. When applying the subsequent rolls, it is obligatory to keep the membrane overlaps:
- approx. 9 cm wide on joints along the membrane band,
- approx. 12 cm wide on the joints across the membrane band.

Every time, when finishing the installation, it is obligatory to check the correctness of joints on overlaps.
The upper edge of the membrane used as the vertical waterproofing should be fixed to concrete mechanically, e.g. with the use of fixings with rings. The perfect solution is to end the upper edge with a pressing bead. It ensures clamp and tightness of the joint all along the membrane.
At zones where the membrane passes from horizontal onto vertical surface, it should be additionally heated on vertical overlaps with a small torch, which improves the bonding strength.

Important additional information

- The back side of the membrane band is protected from sticking with paper or foil, which should be removed during the membrane installation.
- The membrane rolls must be protected during transport and storage against dampness, direct sunlight, kept in a single layer in vertical position, in a way preventing its moving and damaging. The membrane rolls should be stored on even ground, max. 1,200 pcs, keep the distance of 80 cm from the next product batch and min. 120 cm from the heaters.
- Follow the transport safety regulations during transport.

Packaging

Number of rolls on a pallet: 15 pcs.

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-11-06

ATLAS BUILDING BOARD

multi-use extruded polystyrene board

- light load-bearing element
- levels surfaces beneath ceramic tiles
- element of drywall system
- on walls and floors, indoors and outdoors

Use

Leveling surfaces beneath ceramic tiles, mosaics, structural renders and paint coats – alternative for plasterboards, leveling mortars, traditional gypsum, cement and cement-lime plasters.
Construction of partition walls.
Installation of casing around sanitary equipment – baths, shower trays, recessed installations, plumbing, pipes, etc.
Construction of ready-to-use elements in bathrooms and spa – benches, seats, massage benches, couches, etc. Possibility of installation of electrical heating system, which significantly improves comfort of use.
Installation of non-structural elements, including arc-shaped ones – straight and curved ones.
For places exposed to intensive damp and water drops action – in bathrooms, shower cubicles, steam rooms, etc.
On standard and deformable substrates – cement mortars, anhydrite and cement screeds, cement, cement-lime and gypsum plasters, concrete, walls made of cellular concrete, ceramic or silicate bricks or hollow blocks (with obligatory joints grouting), gypsum blocks, terrazzo, existing ceramic and stone cladding, paint coatings bonded to substrates, wooden floors (thick. > 25 mm), OSB and chipboards (thick. > 25 mm on floors and > 18 mm on walls), vertical steel and wooden frame.
In residential, public access, healthcare, recreation and sport, commercial and service, industrial, sacral buildings – in kitchens, bathrooms, laundries, garages, wash rooms, rooms washed with plenty of water, sauna, communication routes, on terraces, balconies, façades.
With any type of cladding – glazed, terracotta, porcelain-gres, clinker, stone, ceramic and glass mosaics, composite panels, marble and natural stone, sound proofing boards.

Properties

Resistant to water action – board is made of low absorbable polystyrene with hydrophobic cement-polymer coating.
Forms rigid construction of high resistance to mechanical load.
Forms substrate assuring perfect bonding to cement binders (adhesives, plasters).
Light, easy in transportation – core made of extruded polystyrene ensures low weight, even of large size boards, therefore makes board transportation and fixing easy with no reduction of strength.
Easy and quick in use – any casing shape available, from straight angles to arc-shapes; boards can be cut with knives, hand saws, jigsaws and electric saws.

Technical data and requirements

ATLAS BUILDING BOARD is manufactured in the form of core made of extruded polystyrene, reinforced from both sides with fiberglass mesh and coated with high quality cement and synthetic resins.

Core relative density	≥ 32 kg/m^3
Thermal conductivity λ_D	0.037 W/mK
Max. temperature of use	+ 70°C
Dimension tolerance (acc. to PN-EN 822:2013, PN-EN 823:2013) - length - width - thickness	 ± 10 mm ± 8 mm 0/+3 mm
Flatness tolerance (acc. to PN-EN 825:2013)	≤ 14 mm/m
Rectangularity tolerance (acc. to PN-EN 824:2013)	≤ 5 mm/m
Compressive strength at 10% deformation	≥ 0.3 MPa
Water absorbability - after 1 h -after 24 h	 ≤ 1 kg/m^2 ≤ 1 kg/m^2
Flexural strength perpendicular to front surface: - after 28 days in laboratory conditions - after 7 days in laboratory conditions and 21 days in water - after 7 days in laboratory conditions and 14 days in temperature +70°C - after 7 days in laboratory conditions, 21 days in water and 25 freeze-thaw cycles	 ≥ 0.4 MPa ≥ 0.4 MPa ≥ 0.4 MPa ≥ 0.14 MPa
Reaction to fire - class	E

The product has been given the ITB Technical Approval No. AT-15-9012/2015, Declaration of Conformity No. 29/2012 of 29.12.2015.

Installation

Substrate preparation

The substrate should be:

- **clean** – free from residues of old mortars, plasters, any loosening pieces, dust and other substances which would impair bonding,
- **rigid and sound** – particularly frames,
- **primed** – any absorbable substrates, e.g. walls made of ceramic brick, cellular concrete, gypsum substrates.

When using ATLAS BUILDING BOARDS outdoors (e.g. beneath ceramic tiles on terraces) and in zones exposed to intensive water action (shower cubicles), one should coat them with damp proofing (e.g. ATLAS WODER DUO) and protect joints with sealing tapes.

ATLAS BUILDING BOARD – fixing methods:

	Method	Use
1	Full surface coating with adhesive mortar	- substrate leveling - eliminating differences in vertical/horizontal levels - installation of substrates beneath cladding
2	Point coating with adhesive and mechanical fixing	- in case of poor bonding of substrate surface - substrate leveling - eliminating differences in level > 10 mm
3	With frame and fixings with washers	- installation of partition walls - installation of pipes and wiring casing - construction of room elements

General principles on use

Boards should be fixed with cement adhesive mortars. In case of significant substrate irregularities, one should use additional mechanical fixing with anchors. Adjoining boards can be joined with polyurethane or hybrid sealants and adhesives. For the time of assembling and drying, construction should be stabilized with special long thread screws. In order to prevent screw penetration through boards, use screws with special washers extending the contact surface.

Installation with full surface coating with adhesive mortar:

1. Clean and prime substrate.
2. Fill any substrate gaps and irregularities.
3. Apply adhesive mortar with a notched trowel.
4. Press boards towards adhesive coat, so whole board surface keeps contact with adhesive.
5. Check and correct board level (vertical and horizontal).
6. In order to improve rigidness and sealing, adjoining boards front edges can be joined with polyurethane sealant and adhesive.
7. Float joints with adhesive mortar, seal with sealing tape then – particularly important for zones exposed to damp.

Installation with point coating with adhesive and mechanical fixing:

1. Mark points where adhesive will be applied.
2. Drill the board through.
3. Apply adhesive mortar upon marked points.
4. In order to improve rigidness and sealing, adjoining boards front edges can be joined with polyurethane sealant and adhesive.
5. Place and press board towards wall, check and correct board level (vertical and horizontal).
6. When adhesive mortar sets, drill anchoring holes (after 24 h for ATLAS PLUS adhesive).
7. Install anchors in holes previously drilled in wall (drilled through board and set adhesive). Hammer-in the anchors.
8. Float joints with adhesive mortar, seal with sealing tape then – particularly important for zones exposed to damp.

Installation with frame:

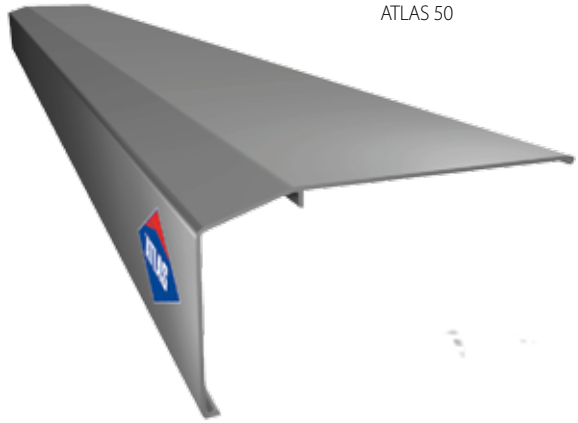
1. Check the frame rigidness and make sure its elements are placed in a way allowing appropriate fixings installation.
2. Cut board to size.
3. Screw the board to frame. Make sure it does not displace during assembly. Boards in rows should be staggered.
4. In order to improve rigidness and sealing, adjoining boards front edges can be joined with polyurethane sealant and adhesive.
5. Float joints with adhesive mortar, seal with sealing tape then – particularly important for zones exposed to damp.

Boards dimensions and packaging

Type	Thickness [mm]	Width [mm]	Length [mm]	Pallet [pcs]	Pallet gross weight [kg]
ATLAS BUILDING BOARD	12	600	1,200	120	320
ATLAS BUILDING BOARD	12	600	2,500	120	584
ATLAS BUILDING BOARD	20	600	1,200	72	208
ATLAS BUILDING BOARD	20	600	2,500	72	395
ATLAS BUILDING BOARD	30	600	1,200	48	160
ATLAS BUILDING BOARD	30	600	2,500	48	294
ATLAS BUILDING BOARD	50	600	1,200	30	116
ATLAS BUILDING BOARD	50	600	2,500	30	224
ATLAS BUILDING BOARD SCORED – one side coated 1S	20	600	1,200	72	136
ATLAS BUILDING BOARD SCORED – one side coated 1S	20	600	2,500	72	244
ATLAS BUILDING BOARD SCORED – one side coated 1S	30	600	1,200	48	102
ATLAS BUILDING BOARD SCORED – one side coated 1S	30	600	2,500	48	179
ATLAS BUILDING BOARD SCORED – one side coated 1S	50	600	1,200	30	86
ATLAS BUILDING BOARD SCORED – one side coated 1S	50	600	2,500	30	155
ATLAS BUILDING BOARD SCORED – two side coated 2S	12	600	1,200	120	320
ATLAS BUILDING BOARD SCORED – two side coated 2S	12	600	2,500	120	584
ATLAS BUILDING BOARD SCORED – two side coated 2S	20	600	1,200	72	208
ATLAS BUILDING BOARD SCORED – two side coated 2S	20	600	2,500	72	395
ATLAS BUILDING BOARD SCORED – two side coated 2S	30	600	1,200	48	160
ATLAS BUILDING BOARD SCORED – two side coated 2S	30	600	2,500	48	294
ATLAS BUILDING BOARD SCORED – two side coated 2S	50	600	1,200	30	116
ATLAS BUILDING BOARD SCORED – two side coated 2S	50	600	2,500	30	224

*Two side coated boards available on request.

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-06-28

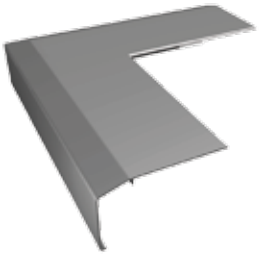


ATLAS 50

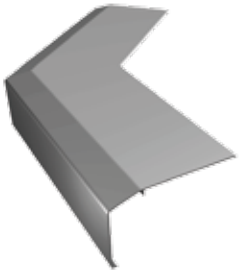
ATLAS 50

aluminum eaves profile for balconies and terraces

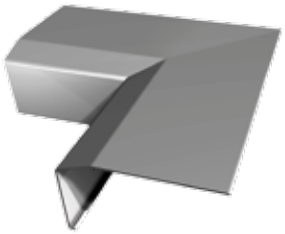
- element of drainage systems
- resistant to weather conditions
- resistant to mechanical damage
- fast and easy to install



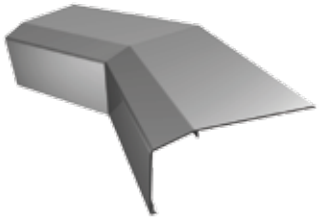
Outer corner 90°



Outer corner 135°



Inner corner 90°



Inner corner 135°

Connector

Use

Ensures efficient drainage of rainwater - from balconies or other horizontal building elements finished with ceramic cladding.
Makes it possible to keep the eaves area watertight - since the construction of the profiles used in the system enables their tight combination with the waterproofing and flooring.

Substrate types – cement-based and other substrates with sufficient rigidity or load capacity.

Properties

Quick and easy to install.
Long-lasting durability - resistant to weather conditions, corrosion, aggressive environment, high pH and UV radiation.
Manufactured in three colour versions: grey (RAL 7037), brown (RAL 8019) and graphite (RAL 7024). It is possible to order elements with any RAL colour.
Possibility of ordering corners of any angle or arc-shaped ones.

Technical data

The finishing profiles and accessories are made of polyester-coated aluminum.

Weight of the main eaves profiles of ATLAS 50 system: 750 g/m
Polyester coat thickness: ca. 70 µm

General guidelines on profiles installation

Substrate and profiles preparation
The substrate must be sound, even and clean. Cement-based substrates should be fully set and stable. There should be an offset (a decrease of approx. 3 mm) along the edge of the balcony or terrace of the width of the profile to be installed (80 mm), so that, after the installation of the profile, its surface keeps the same level as the screed. In order to do that, the package holds an ABS template, which should be embedded in the screed layer during the screed installation. Once the screed is set, the ABS template should be removed. This way the ready offset , in which the profile can be installed, is achieved.
Before installation, the profiles should be carefully measured and cut to fit the edge being finished.

Installation of system components

Trowel the surface with ATLAS WODER S, ATLAS WODER E or ATLAS WODER DUO waterproofing membrane. Start the eaves elements assembly from the CORNERS. Make sure the profile endings adjoining the wall are not attached rigidly (keep an expansion joint of approx. 5 mm). Connections: MAIN PROFILE - CORNER and MAIN PROFILE - MAIN PROFILE, should be executed with the use of CONNECTORS. The connections should keep an expansion joint of 1-2 mm and should be sealed from the screed side with permanently flexible material, e.g. ATLAS ARTIS silicone. Recoat the installed profile with waterproofing membrane and then embed ATLAS HYDROBAND 3G sealing tape. Apply another coat of waterproofing membrane after approx. 3 hours.

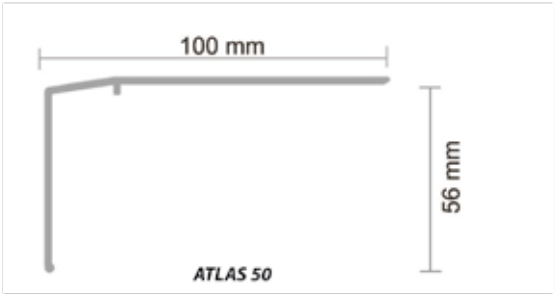
Important additional information

- The profiles should only be cut using hand or mechanical saw suitable for aluminum cutting. Profiles must not be cut with tools causing a thermal effect (rapid temperature increase), e.g. an angle grinder.
- Installation work should be carried out in conditions suitable for the use of waterproofing and assembling materials according to their respective technical data sheets. Protect the floated surfaces from excessive drying and moisture.
- Use eye protection. Remove any fresh material contaminating the profiles with water, and hardened material — with an appropriate cleaning agent, safe for top coatings.
- The profiles should be transported in original packaging, in horizontal position, protected from mechanical damage. Store the profiles indoors, protecting them from dirt, warping and scratching, in boxes, arranged in layers (maximum 10 layers).

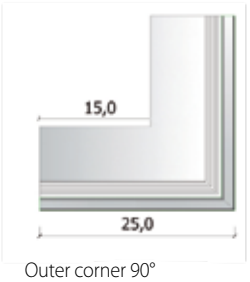
System components

Atlas 50 Main Profile - brown
Atlas 50 Main Profile - grey
Atlas 50 Main Profile - graphite
Atlas 50 Outer Corner 90 - brown
Atlas 50 Outer Corner 90 - grey
Atlas 50 Outer Corner 90 - graphite
Atlas 50 Inner Corner 90 - brown
Atlas 50 Inner Corner 90 - grey
Atlas 50 Inner Corner 90 - graphite
Atlas 50 Outer Corner 135 - brown
Atlas 50 Outer Corner 135 - grey
Atlas 50 Outer Corner 135 - graphite
Atlas 50 Inner Corner 135 - brown
Atlas 50 Inner Corner 135 - grey
Atlas 50 Inner Corner 135 - graphite
Atlas 50 Connector - brown
Atlas 50 Connector - grey
Atlas 50 Connector - graphite

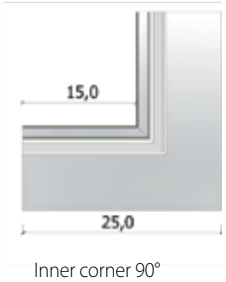
Profiles cross-sections



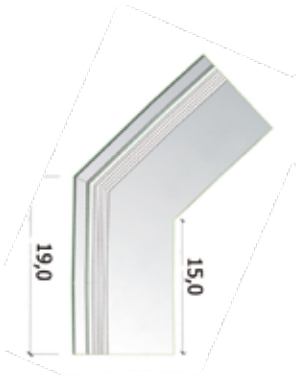
Corner view



Outer corner 90°



Inner corner 90°



Outer corner 135°

Inner corner 135°

Packaging

Type of element	Type of packaging	No. of units in packaging
Main profile: 2 m long	cardboard box	4
Inner or outer corner	cardboard box	2
Connector	cardboard box	10
ABS template	cardboard box (template packed with main profiles)	2

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-03-26

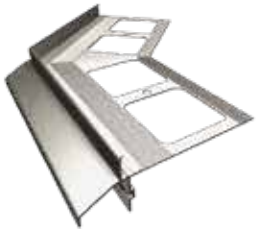
ATLAS 100

ATLAS 150

ATLAS 100 outer corner 90°

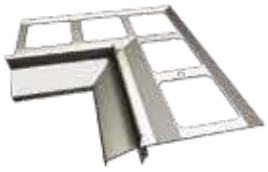
ATLAS 150 outer corner 90°

ATLAS 100 outer corner 135°



ATLAS 150 outer corner 135°

ATLAS 100 inner corner 90°



ATLAS 150 inner corner 90°

ATLAS 100 inner corner 135°

ATLAS 150 inner corner 135°

Connector

Ending

ATLAS 100 & 150

aluminum eaves profiles for balconies and terraces

- element of drainage systems
- resistant to weather conditions
- resistant to mechanical damage
- fast and easy to install

Use

Ensures efficient drainage of rainwater from balconies or other horizontal building elements finished with ceramic cladding.
Makes it possible to keep the eaves area watertight, since the construction of the profiles used in the system enables their tight combination with the waterproofing and flooring.

Substrate types – cement-based and other substrates with sufficient rigidity or load capacity.

Properties

Equipped with a drip carrying water off beyond the wall surface.
Possibility of attaching a gutter underneath - only ATLAS 150 system.
Holds backer rod fixed, separating the profiles from the finishing coats - it is placed over the draining holes.
Quick and easy to install.
Long-lasting durability — resistant to weather conditions, corrosion, aggressive environment, high pH and UV radiation.
The system is manufactured in three colour versions: grey (RAL 7037), brown (RAL 8019) and graphite (RAL 7024). It is possible to order any color from the RAL colour chart (minimum order is 10 Main Profile units). Delivery time of custom orders is 14 working days.
Possibility of ordering corners of any angle or arc-shaped ones. Delivery time of custom orders is 14 working days.

Technical data

The finishing profiles and accessories are made of polyester-coated aluminum.

Weight of the main eaves profiles of ATLAS 100 system: 610 g/m	
Weight of the main eaves profiles of ATLAS 150 system: 1090 g/m	
Polyester coat thickness	ca. 70 µm

General guidelines on profiles installation

Substrate and profiles preparation

The substrate must be sound, even and clean. Cement-based substrates should be fully set and stable. There should be an offset (a decrease of approx. 3 mm) along the edge of the balcony or terrace of the width of the profile to be installed (80 mm), so that, after the installation of the profile, its surface keeps the same level as the screed. In order to do that, the package holds an ABS template, which should be embedded in the screed layer during the screed installation. Once the screed is set, the ABS template should be removed. This way the ready offset , in which the profile can be installed, is achieved.
Before installation, the profiles should be carefully measured and cut to fit the edge being finished.

Installation of system components

Trowel the surface with ATLAS WODER S, ATLAS WODER E or ATLAS WODER DUO waterproofing membrane. The installation of eaves profiles should start from the CORNERS. Apply the system ENDING on the profile adjoining the wall. Make sure the profile endings adjoining the wall are not attached rigidly (keep an expansion joint of approx. 5 mm). Connections: MAIN PROFILE - CORNER and MAIN PROFILE - MAIN PROFILE, should be executed with the use of CONNECTORS. The connections should keep an expansion joint of 1-2 mm and should be sealed from the screed side with permanently flexible material, e.g. ATLAS ARTIS silicone. Recoat the installed profile with waterproofing membrane and then apply ATLAS SEALING TAPE or ATLAS HYDROBAND (leaving the draining holes open). Apply another coat of waterproofing membrane after approx. 3 hours. Fill the space between the profile and tiles with appropriate flexible sealants, e.g. ATLAS ARTIS silicone.

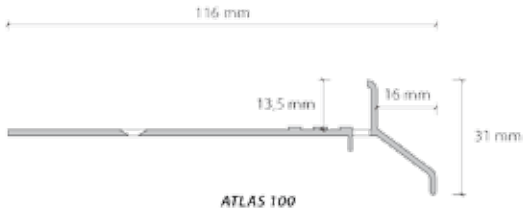
Important additional information

- The profiles should only be cut using hand or mechanical saw suitable for aluminium cutting. Profiles must not be cut with tools causing a thermal effect (rapid temperature increase), e.g. an angle grinder.
- Installation work should be carried out in conditions suitable for the use of waterproofing and assembling materials according to their respective technical data sheets. Protect the floated surfaces from excessive drying and moisture.
- Use eye protection. Remove any fresh material contaminating the profiles with water, and hardened material - with an appropriate cleaning agent, safe for top coatings.
- The profiles should be transported in original packaging, in horizontal position, protected from mechanical damage. Store the profiles indoors, protecting them from dirt, warping and scratching, in boxes, arranged in layers (maximum 10 layers).

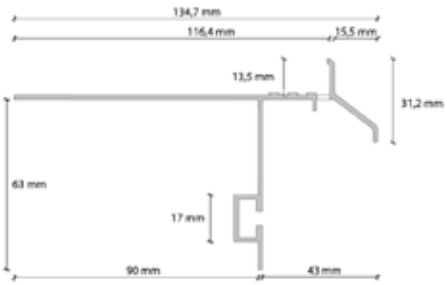
System components

SYSTEM ATLAS 100	SYSTEM ATLAS 150
Atlas 100 Main Profile - brown	Atlas 150 Main Profile - brown
Atlas 100 Main Profile - grey	Atlas 150 Main Profile - grey
Atlas 100 Main Profile - graphite	Atlas 150 Main Profile - graphite
Atlas 100 Outer Corner 90 - brown	Atlas 150 Outer Corner 90 - brown
Atlas 100 Outer Corner 90 - grey	Atlas 150 Outer Corner 90 - grey
Atlas 100 Outer Corner 90 - graphite	Atlas 150 Outer Corner 90 - graphite
Atlas 100 Inner Corner 90 - brown	Atlas 150 Inner Corner 90 - brown
Atlas 100 Inner Corner 90 - grey	Atlas 150 Inner Corner 90 - grey
Atlas 100 Inner Corner 90 - graphite	Atlas 150 Inner Corner 90 - graphite
Atlas 100 Outer Corner 135 - brown	Atlas 150 Outer Corner 135 - brown
Atlas 100 Outer Corner 135 - grey	Atlas 150 Outer Corner 135 - grey
Atlas 100 Outer Corner 135 - graphite	Atlas 150 Outer Corner 135 - graphite
Atlas 100 Inner Corner 135 - brown	Atlas 150 Inner Corner 135 - brown
Atlas 100 Inner Corner 135 - grey	Atlas 150 Inner Corner 135 - grey
Atlas 100 Inner Corner 135 - graphite	Atlas 150 Inner Corner 135 - graphite
Atlas 100 Connector - brown	Atlas 150 Connector - brown
Atlas 100 Connector - grey	Atlas 150 Connector - grey
Atlas 100 Connector - graphite	Atlas 150 Connector - graphite
Atlas 100 Ending - brown	Atlas 150 Ending - brown
Atlas 100 Ending - grey	Atlas 150 Ending - grey
Atlas 100 Ending - graphite	Atlas 150 Ending - graphite

Profiles cross-sections



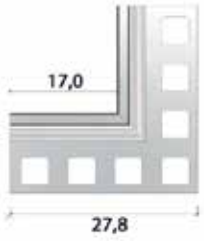
ATLAS 100



ATLAS 150

Corner view

Outer corner 90°



Inner corner 90°

Outer corner 135°

Inner corner 135°

Packaging

Type of element	Type of packaging	No. of units in packaging
Main profile: 2 m long	foil	1
Inner or outer corner	foil	1
Connector	cardboard box	5
Ending: 1 set (1 left-hand and 1 right-hand piece)	cardboard box	2

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2013-07-19

ATLAS 200

ATLAS 300

ATLAS 200 & 300

aluminum eaves profiles for balconies and terraces

- element of drainage systems
- resistant to weather conditions
- resistant to mechanical damage
- fast and easy to install

ATLAS 200 outer corner 90°

ATLAS 300 outer corner 90°

ATLAS 200 outer corner 135°

ATLAS 300 outer corner 135°

ATLAS 200 inner corner 90°

ATLAS 300 inner corner 90°

ATLAS 200 inner corner 135°

ATLAS 300 inner corner 135°

gutter bracket 75 mm

connector

Use

Ensures efficient drainage of rainwater from the surfaces of terraces or other horizontal building elements finished with ceramic cladding.
Makes it possible to keep the eaves area watertight, since the construction of the profiles used in the system enables their tight combination with the waterproofing and flooring.
Enables the discharge of moisture from beneath the cladding – owing to the use of ATLAS MAT 630 and its drainage properties.
Reduces the possibility of thermal damage – owing to the use of ATLAS MAT 630 and its drainage and crack-relief properties.

Substrate types – cement-based and other substrates with sufficient rigidity or load capacity.

Properties

The possibility of using the drainage and crack-relief mats ATLAS MAT 630.
The possibility of attaching a gutter underneath.
Holds backer rod fixed, separating the profiles from the finishing coats - it is placed over the draining holes.
Quick and easy to install.
Long-lasting durability – resistant to weather conditions, corrosion, aggressive environment, high pH and UV radiation.
The system is manufactured in three colour versions: – grey (RAL 7037), brown (RAL 8019) and graphite (RAL 7024). It is possible to order any color from the RAL colour chart (minimum order is 10 Main Profile units). Delivery time of custom orders is 14 working days.
Possibility of ordering corners of any angle or arc-shaped ones. Delivery time of custom orders is 14 working days.

Technical data

The finishing profiles and accessories are made of polyester-coated aluminum.

Weight of the main eaves profiles of particular systems: ATLAS 200 - 1180 g/m ATLAS 300 - 1540 g/m	
Polyester coat thickness	ca. 70 µm

General guidelines on profiles installation

Substrate and profiles preparation

The substrate must be sound, even and clean. Cement-based substrates should be fully set and stable. There should be an offset (a decrease of approx. 3 mm) along the edge of the balcony or terrace of the width of the profile to be installed (80 mm), so that, after the installation of the profile, its surface keeps the same level as the screed. In order to do that, the package holds an ABS template, which should be embedded in the screed layer during the screed installation. Once the screed is set, the ABS template should be removed. This way the ready offset , in which the profile can be installed, is achieved.
Before installation, the profiles should be carefully measured and cut to fit the edge being finished.

Installation of system components

Trowel the surface with ATLAS WODER S, ATLAS WODER E or ATLAS WODER DUO waterproofing membrane and then lay the main profile on it and fasten mechanically. Use CONNECTORS for the joints between the MAIN PROFILES and CORNERS. The connections should be sealed from the screed side with permanently flexible material, e.g. ATLAS ARTIS silicone. Make sure the profile endings adjoining the walls are not attached rigidly (keep an expansion joint of approx. 5 mm). Use the ENDINGS included in the system. Recoat the installed profile with waterproofing membrane and then apply ATLAS SEALING TAPE or ATLAS HYDROBAND (leaving the draining holes open). Apply another coat of waterproofing membrane after approx. 3 hours. Fill the space between the profile and tiles with appropriate flexible sealants, e.g. ATLAS ARTIS silicone. Carry out the installation of the drainage mat according to the guidelines in ATLAS MAT 630 Technical Data Sheet.

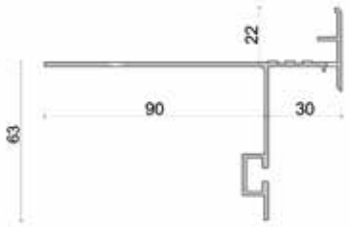
Important additional information

- The profiles should only be cut using hand or mechanical saw suitable for aluminium cutting. Profiles must not be cut with tools causing a thermal effect (rapid temperature increase), e.g. an angle grinder.
- Installation work should be carried out in conditions suitable for the use of waterproofing and assembling materials according to their respective technical data sheets. Protect the floated surfaces from excessive drying and moisture.
- Use eye protection. Remove any fresh mortar contaminating the profiles with water, and hardened material — with an appropriate cleaning agent, safe for top coatings.
- The profiles should be transported in original packaging, in horizontal position, protected from mechanical damage. Store the profiles indoors, protecting them from dirt, warping and scratching, in boxes, arranged in layers (maximum 10 layers).

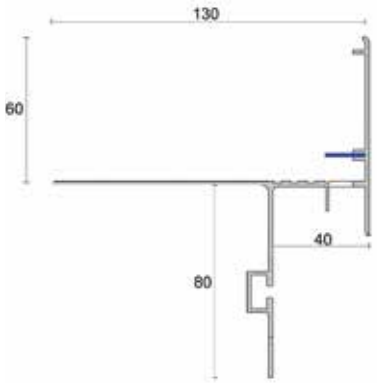
System components

SYSTEM ATLAS 200	SYSTEM ATLAS 300
Atlas 200 Main Profile - brown	Atlas 300 Main Profile - brown
Atlas 200 Main Profile - grey	Atlas 300 Main Profile - grey
Atlas 200 Main Profile - graphite	Atlas 300 Main Profile - graphite
Atlas 200 Outer Corner 90 - brown	Atlas 300 Outer Corner 90 - brown
Atlas 200 Outer Corner 90 - grey	Atlas 300 Outer Corner 90 - grey
Atlas 200 Outer Corner 90 - graphite	Atlas 300 Outer Corner 90 - graphite
Atlas 200 Inner Corner 90 - brown	Atlas 300 Inner Corner 90 - brown
Atlas 200 Inner Corner 90 - grey	Atlas 300 Inner Corner 90 - grey
Atlas 200 Inner Corner 90 - graphite	Atlas 300 Inner Corner 90 - graphite
Atlas 200 Outer Corner 135 - brown	Atlas 300 Outer Corner 135 - brown
Atlas 200 Outer Corner 135 - grey	Atlas 300 Outer Corner 135 - grey
Atlas 200 Outer Corner 135 - graphite	Atlas 300 Outer Corner 135 - graphite
Atlas 200 Inner Corner 135 - brown	Atlas 300 Inner Corner 135 - brown
Atlas 200 Inner Corner 135 - grey	Atlas 300 Inner Corner 135 - grey
Atlas 200 Inner Corner 135 - graphite	Atlas 300 Inner Corner 135 - graphite
Atlas 200 Connector - brown	Atlas 300 Connector - brown
Atlas 200 Connector - grey	Atlas 300 Connector - grey
Atlas 200 Connector - graphite	Atlas 300 Connector - graphite
Atlas 200 Ending - brown	Atlas 300 Ending - brown
Atlas 200 Ending - grey	Atlas 300 Ending - grey
Atlas 200 Ending - graphite	Atlas 300 Ending - graphite
Atlas Mat 630	Atlas Mat 630

Profiles cross-sections

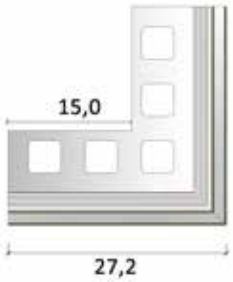


ATLAS 200

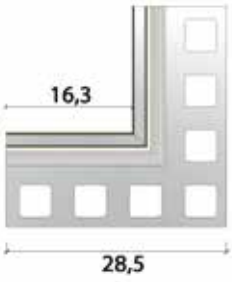


ATLAS 300

Corner view



Outer corner 90°



Inner corner 90°

Outer corner 135°

Inner corner 135°

Packaging

Type of element	Type of packaging	No. of units in packaging
Main profile: 2 m long	foil	1
Inner or outer corner	foil	1
Connector	cardboard box	5
Ending: 1 set (1 left-hand and 1 right-hand piece)	cardboard box	2

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2013-06-03

ATLAS MAT 630

drainage and crack-relief mat

- reduces tension in the terrace floor
- drains the moisture

Use

A drainage and crack-relief layer for use under tiles with eaves profile systems:
• ATLAS 200 – for ceramic tiled terraces (drainage and crack-relief function),
• ATLAS 300 – for concrete as well as ceramic tiled and stone tiled terraces (drainage system).

Types of waterproofed substrates –ATLAS WODER S, ATLAS WODER E or ATLAS WODER DUO waterproofing applied onto cement screed or other rigid substrates of appropriate load capacity.

Properties

Enables fixing ceramic, natural or reconstituted stone tiles onto critical substrates (OSB boards, wooden floors, substrate with insufficient surface load capacity or contaminated substrates).
Ensures ventilation and moisture drainage from beneath the tiling.
Prevents thermal damage.

Technical data

The drainage mat consists of PVC sheet laminated with fibreglass mesh.

Weight:	630 g/m^2
Total thickness:	6.5 mm
Colour:	green

General guidelines on mat installation

Substrate preparation
The substrate must be even and stable. Cement-based substrates should be fully set and cured. The substrate should be executed with appropriate slopes. Before laying the mat it is necessary to install ATLAS 200 or ATLAS 300 eaves profiles.

Note:
If the mat is applied onto substrates exposed to water load (steps, balconies, terraces), the substrate must be protected with a waterproofing membrane, e.g. ATLAS WODER DUO, ATLAS WODER S or ATLAS WODER E. Perimeter and surface expansion joints must be protected with sealing tapes, e.g. ATLAS HYDROBAND 3G.

Drainage mat application
The mat has to be carefully measured and cut with a knife or scissors to fit the floor dimensions. The mats should be arranged side by side, with the lengthwise embossment along the direction of water flow and the mesh side up. The mesh, 9 cm in width, extending loosely beyond the edge, should overlap the adjoining mat. When applying the mat on ATLAS 200 and ATLAS 300 or floors with drains, care must be taken to leave the drainage holes in the profiles or in the terrace drain flange open. Apply ATLAS PLUS line adhesive onto the mat strips up to the mesh level, providing a spot contact with the substrate in holes and good contact between the mat and the substrate. This should be done directly after the mat placing. The surface of mat with adhesive may be exposed to load when the adhesive sets. When the substrate is so prepared, tiles may be fixed onto it with the use of adhesives from the ATLAS PLUS range.

Important additional information

- In the event of any doubts as to the suitability of the substrate, the Technical Department of ATLAS must be consulted.
- Installation work should be carried out in conditions suitable for the use of waterproofing and assembling materials according to their respective technical data sheets. Protect the floated surfaces from excessive drying and moisture.
- Remove any fresh material contaminating the profiles with water; hardened material should be removed using a suitable cleaning agent, safe for lacquer coatings. Protect the mat from sunlight during transport and storage. The material should be transported only in rolls in their original wrapping. The rolls should be kept in the upright position (lap mesh up).

Packaging

Roll, 1 m wide (plus lap mesh 0.1 m), length - 25 m
Collective package: 6 rolls on a pallet.

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-05-22

ATLAS BACKER ROD

flexible expansion joints backer

- flexible
- resistant to ageing
- non-absorbent
- easy to install

Use

Backing and sealing:
- expansion joints in ATLAS 100 and ATLAS 150 eaves systems for terraces and balconies.
- construction joints prior to application of sealing coatings – e.g. thermal insulation, windows and doors assembling, execution of expansion joints in floors and walls, etc.

Forms sufficiently strong base for the material sealing the joint, e.g. silicone.

Properties

Flexible – easily adjustable to the shape of the joint.
Resistant to ageing – does not deteriorate under changeable weather conditions when closed in the expansion joint sealed with silicone or other sealant; resistant to wide range of chemicals.
With closed-cell structure – impervious to water and water vapour.
Reduces the amount of material needed to fill and seal the joint.
Supports the sealants used in the expansion joint..

Technical data

The backer rod is made of foamed polyethylene. It conforms to the DIN 18540 standard.

Tensile strength	very good
Density	30-40 kg/m^3, ASTM D 1667
Temperature resistance	from -40°C to +95°C
Absorbability	non-absorbent due to closed-cell structure
Temperature during work	from -20°C to +40°C

General guidelines on backer rod installation

The diameter of the backer rod should be approx. 25% larger than the width of the joint to be filled – once installed in the joint, it should be compressed and should not move during the sealant application. The joint should be cleaned of loose elements prior to the installation of the backer rod. Press the rod into the joint using a blunt, rounded tool and place at expected depth, so the sealant can keep its appropriate thickness. Avoid stretching or compressing the rod lengthwise during the installation.
Once installed, the rod should not contact the bed of the joint.

Important additional information

- Store the backer rod in dry conditions.
- Any damage to the backer rod surface may cause the sealant bonding and disturb the uniform distribution of stress.

Packaging

Rod diameter	Type of packaging	Rod length
6 mm	reel	500 m
10 mm	reel	350 m
15 mm	reel	500 m
20 mm	reel	500 m
6 mm	foil bag	50 m
10 mm	foil bag	50 m
15 mm	foil bag	50 m
20 mm	foil bag	50 m

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2013-02-25

PRIMERS

PRIMERS

Priming

Priming preparations are designed to provide each consecutively applied layer with proper bonding to substrate. Appropriate choice of priming method is in many cases more than half of the success. The type of priming substance has to be selected in accordance to substrate type, its absorptiveness and cleanliness, but also to type of coat applied upon the substrate.

Primers strengthening and regulating substrate absorptiveness

Traditional priming emulsions – ATLAS UNI-GRUNT, ATLAS UNI-GRUNT PLUS and ATLAS optiGRUNT – are manufactured on the basis of high quality water dispersion of acrylics. Owing to significant penetration ability, they permeate deep into the substrate, reinforce it and unify parametres of the whole primed surface. Apart from that, they regulate substrate absorption and prevent retention of excessive amount of water from the coat placed upon it, e.g. finishing coats, tile adhesives, screeds, etc. This way the conditions for mortar setting are improved and contribute to reaching the designed technological parameters, mainly adhesiveness and resistance.

Primers improving bonding

When substrate is characterized by very low adhesiveness and low absorptivity, application of priming emulsion cannot provide appropriate bonding. This type of difficult substrates includes: concrete, terrazzo, OSB boards, difficult to remove layers of adhesives, paints, tars, ceramic tiles, etc. In such situations ATLAS GRUNTO-PLAST mass should be used in order to form a contact coat.

Function of aggregate

ATLAS GRUNTO-PLAST contains aggregate, which makes the coated surfaces rough. First of all, such roughness facilitates application of consecutive layers (no slipping of the applied material). Secondly, it "expands" effective substrate surface – bonding of the subsequent layer depends directly on size of surface contacting the substrate.

Function of resin

ATLAS GRUNTO-PLAST is manufactured on the basis of resins giving the mass very high bonding both to the substrate and to the subsequent coat. Owing to significant content of resins, the primer protects freshly applied thin coat, e.g. of top finish, against discolouration caused by the substrate.

TABLE 4.1

PRODUCT				
	ATLAS UNI-GRUNT/ AVAL KT 17	ATLAS UNI-GRUNT PLUS/ AVAL KN 97	ATLAS OPTIGRUNT	ATLAS GRUNTO-PLAST
	Fast drying priming emulsion	Deep-penetrating priming emulsion	General-use priming emulsion	Adhesion layer for difficult substrates
Reference document	Primers and impregnators are not classified as construction materials,they are not covered by standards and therefore require no technical approvals.			
TECHNICAL DATA				
Density [g/cm^3]	1.0	1.0	1.0	1.5
Way of application	roller/brush	roller/brush	roller/brush	roller/brush
Substrate temperature and temperature during work [°C]	5-25	5-25	5-25	5-30
Consumption [kg/m^2]	0.05-0.20	0.05-0.20	0.05-0.20	0.3
Further works since priming [h]	2	4	2	24
SAMPLE SUBSTRATES				
Bricks, ceramic hollow blocks, cellular concrete, silicates	✓		✓	
Cement, cement-lime and gypsum plasters, plasterboards	✓		✓	
Old cement screeds	✓	✓		
Anhydrite screeds	✓	✓		
Concrete screeds	✓			✓
Formwork concrete				✓
OSB boards				✓
Terrazzo				✓
Old ceramic tiles				✓

ATLAS UNI-GRUNT

fast drying priming and strengthening emulsion

- unifies substrate absorptiveness
- strengthens substrates
- under floors and screeds
- under adhesives, plasters, top finishes, paints
- high yield

Use

Improves setting conditions of mortars – contributes to reaching their expected technical parameters.
Strengthens surface of primed mineral substrates – permeates the surface, strengthens and improves its load capacity.
Prevents retention of excessive amount of water from the coat applied upon the substrate – limits the substrate absorptiveness.
Unifies absorptiveness of the whole primed surface – the applied layer has similar setting conditions, irrespective of local changes of substrate parameters.
Forms temporary protective layers on floors and screeds – improves floor resistance against dusting, facilitates cleaning (must not be considered as the top finish coat).
Improves the yield of paints, top finishes and adhesives – by sealing the structure of primed surface, it improves the yield of materials used for the execution of the subsequent layer.

Types of primed substrates – absorbent, excessively absorptive and weak: concrete, plasterboards, gypsum and cement plasters, rough walls made of any type of bricks, blocks, hollow blocks, as well as concrete and anhydrite screeds.
Types of finishing layers – cladding, plasters, screeds, finishing coats, wallpapers, paints (follow paint manufacturer's guidelines), WODER E, WODER W, WODER DUO or WODER S water- and damp proofing.

Properties

Very short drying time – finishing coats can be applied just after 2 hours.
Solvent-free – manufactured on the basis of water dispersion of acrylic resin.
Non-saponifiable during application.
Transparent after drying.
Water vapour permeable.
Inflammable – can be used in premises without windows..

Technical data

ATLAS UNI-GRUNT is a priming impregnator manufactured on the basis of high quality water dispersion of acrylics. The priming paint of setting characteristics: maximum content of VOC in the product 1.92 g/l, maximum allowable content of VOC 30 g/l.

Density of emulsion	approx. 1.0 g/cm^3
Substrate and ambient temperature during work	from +5°C up to +25°C
Further work after priming	after 2 hours

Technical requirements

The product is not classified as a construction material. The product has been given the Hygiene Evaluation and the Radiation Hygiene Certificate.

Priming

Substrate preparation
The substrate should be dry, free from dust, dirt, oils, grease and wax. Remove any loose, poorly bonded layers before the emulsion application.
Emulsion preparation
ATLAS UNI-GRUNT is manufactured as a ready-to-use emulsion. It must not be mixed with other materials or thickened. It is admissible to dilute it in weight ratio:
- 1:1 for the first priming, in case of double priming of very weak substrates,
- 1:3 in case of priming substrates under ATLAS paints for indoor use.

Priming
It is advisable to apply the emulsion upon the substrate in undiluted form, once, using a roller or a brush, with thin and uniform coat. For the first priming of very absorptive and weak substrates, emulsion diluted with water in 1:1 ratio can be used. When the first coat dries, repeat the priming with undiluted emulsion.
Surface use
Painting, wallpapering, tiling, etc., can commence when emulsion dries, i.e. after approx. 2 hours since application. The primer should form matt surface after drying.

Consumption

The average consumption is 0.05 ÷ 0.2 kg of emulsion for 1 m^2. In practice, the consumption depends on the substrate absorptiveness.

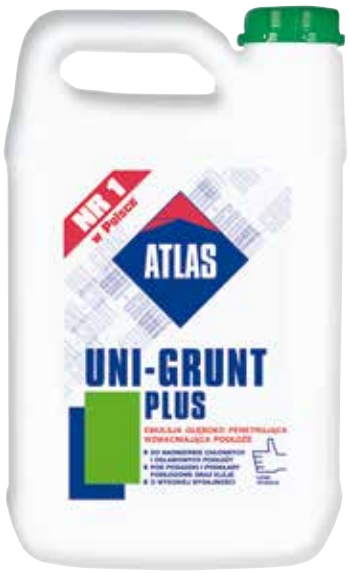
Important additional information

- When priming gypsum substrates before painting, one should follow guidelines of the paint manufacturer.
- Clean the tools with clean water directly after use.
- Possible emulsion stains can be removed with ATLAS SZOP 2000 agent.
- Keep out of reach of children. Avoid contact with skin and eyes. Follow the instructions of the Safety Data Sheet.
- The emulsion must be transported and stored in tightly sealed packaging, in dry conditions and positive temperature. Protect against overheating. The emulsion shelf life is 12 months from the production date shown on the packaging.

Packaging

Plastic drums: 1 kg, 5 kg, 10 kg
Pallet: 576 kg in 1 kg drums, 540 kg in 5 kg drums, 600 kg in 10 kg drums

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-11-19



ATLAS UNI-GRUNT PLUS

deep penetrating priming and strengthening emulsion

- for excessively absorptive substrates
- for weak and poor substrates
- under floors and screeds
- under adhesives
- high yield

Use

Improves setting conditions of floors and screeds applied on the primed substrate – contributes to reaching their expected technical parameters.
Strengthens substrates structurally – penetrates the substrate up to a few milimetres deep and therefore improves its load capacity when prepared for subsequent layers.
Prevents retention of excessive amount of water from the coat applied upon the substrate – limits the substrate absorptiveness and prevents occurrence of bubbles on surface of freshly applied floors or screeds.
Unifies absorptiveness of the whole primed surface – the applied layer has similar setting conditions, irrespective of local changes of substrate parameters.
Forms temporary protective layers on floors and screeds – improves floor resistance against dusting, facilitates cleaning (must not be considered as the top finish coat).
Improves the yield of adhesives, floors and screeds – by sealing the structure of primed surface, it improves the yield of materials used for the execution of the subsequent layer.

Types of primed substrates – absorbent, excessively absorptive and weak concrete and anhydrite floors, screeds, etc.
Types of finishing layers – ceramic and stone cladding, floors, screeds, WODER E, WODER W, WODER DUO or WODER S water- and damp proofing.

Properties

Improved penetration ability – penetrates floor or screed deeply, therefore offers not only surface action.
Short drying time – finishing coats can be applied just after 4 hours.
Solvent-free – manufactured on the basis of water dispersion of acrylic resin.
Non-saponifiable during application.
Transparent after drying.
Water vapour permeable.
Inflammable – can be used in premises without windows.

Technical data

ATLAS UNI-GRUNT PLUS is a priming impregnator manufactured on the basis of high quality water dispersion of acrylics. The priming paint of setting characteristics: maximum content of VOC in the product 2.75 g/l, maximum allowable content of VOC 30 g/l.

Density of emulsion	approx. 1.0 g/cm^3
Substrate and ambient temperature during work	from +5°C up to +25°C
Further work after priming	after 4 hours

Technical requirements

The product is not classified as a construction material. The product has been given the Radiation Hygiene Certificate.

Priming

Substrate preparation
The substrate should be dry, free from dust, dirt, oils, grease and wax. Remove any loose, poorly bonded layers before the emulsion application.
Emulsion preparation
ATLAS UNI-GRUNT PLUS is manufactured as a ready-to-use emulsion. It must not be mixed with other materials or thickened.
Priming
It is advisable to apply the emulsion upon the substrate in undiluted form, once, using a roller or a brush, with thin and uniform coat.
Surface use
Tiling, flooring, etc., can commence when emulsion dries, i.e. after approx. 4 hours since application.

Consumption

The average consumption is 0.05 ÷ 0.2 kg of emulsion for 1 m^2. In practice, the consumption depends on the substrate absorptiveness.

Important additional information

- Clean the tools with clean water directly after use.
- Possible emulsion stains can be removed with ATLAS SZOP 2000 agent.
- Keep out of reach of children. Avoid contact with skin and eyes. Follow the instructions of the Safety Data Sheet.
- The emulsion must be transported and stored in tightly sealed packaging, in dry conditions and positive temperature. Protect against overheating. The emulsion shelf life is 12 months from the production date shown on the packaging.

Packaging

Plastic drums: 1 kg, 5 kg
Pallet: 576 kg in 1 kg drums, 540 kg in 5 kg drums

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-01-10

ATLAS optiGRUNT

general-use priming emulsion

- unifies substrate absorptiveness
- fast-drying
- under paints, adhesives, plasters, top finishes
- strengthens the substrate

Use

For appropriate preparation of substrates prior to further finishing work: painting with paints for indoor use, tiling, application of gypsum top finishes, plasters, screeds, water- and damp proofing.
Limits substrate absorptiveness – improves bonding to substrates, keeps water vapour permeability of walls, facilitates application of subsequent layers, e.g. paints, adhesives.
Forms temporary protective layers on floors and screeds – improves floor resistance against dusting, facilitates cleaning (must not be considered as the top finish coat).

Types of finishing layers – cladding, plasters, screeds, finishing coats, wallpapers, paints (follow paint manufacturer's guidelines), water- and damp proofing.

Properties

Very short drying time – finishing coats can be applied just after 2 hours.
Solvent-free – manufactured on the basis of water dispersion of acrylic resin.
Non-saponifiable during application.
Transparent after drying.
Water vapour permeable.
Inflammable – can be used in premises without windows.

Technical data

ATLAS optiGRUNT is a priming impregnator manufactured on the basis of high quality water dispersion of acrylics. The priming paint of setting characteristics: maximum content of VOC in the product 1.8 g/l, maximum allowable content of VOC 30 g/l.

Density of emulsion	approx. 1.0 g/cm^3
Substrate and ambient temperature during work	from +5°C up to +25°C
Further work after priming	after 2 hours

Technical requirements

The product is not classified as a construction material.

Priming

Substrate preparation
The substrate should be clean, dry, free from dust, crack-free, well bonded to substrate. Protect any neighbouring surfaces with foil before the emulsion application. Hard to remove after drying.
Emulsion preparation
ATLAS optiGRUNT is manufactured as a ready-to-use emulsion. Mix well before use.
Priming
Apply the emulsion upon the substrate using a roller or a brush, with thin and uniform coat
Surface use
Painting, wallpapering, tiling, etc., can commence when emulsion dries, i.e. after approx. 2 hours since application.

Consumption

The average consumption is 0.05 ÷ 0.2 kg of emulsion for 1 m^2. In practice, the consumption depends on the substrate absorptiveness.

Important additional information

- When priming gypsum substrates before painting, one should follow guidelines of the paint manufacturer.
- Clean the tools with clean water directly after use.
- Possible emulsion stains can be removed with ATLAS SZOP 2000 agent.
- Keep out of reach of children. Avoid contact with skin and eyes. Follow the instructions of the Safety Data Sheet.
- The emulsion must be transported and stored in tightly sealed packaging, in dry conditions and positive temperature. Protect against overheating. The emulsion shelf life is 12 months from the production date shown on the packaging.

Packaging

Plastic drums: 5 kg
Pallet: 540 kg in 5 kg drums

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At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-07-07

ATLAS GRUNTO-PLAST
contact coat for difficult substrates

- strengthens substrates and improves bonding
- on existing tiles, terrazzo, dados
- on non-absorptive concrete, OSB boards
- under adhesives, top finishes, water- and damp proofing
- on walls and floors (also with heating systems)

Use

Primer for difficult substrates – improves bonding of adhesives, water- and damp proofing, finishing coats to substrates of low absorptiveness, to extremely smooth substrates or those coated with old PVC adhesives, paints, etc.
Improves bonding – strongly bonds to substrates and freshly applied layers.
Facilitates the application of subsequent layers – rough surface reduces the "slip" of the applied material.
Protects fresh layers against adverse effects of the substrate – forms chemical barrier between substrate and freshly applied layer, limits the influence of one upon the other – limits colour protrusion from the substrate and formation of stains on the surface of finishing coat.
Prevents wooden substrates from excessive damp – resulting from contact with freshly applied wet layer.

Types of primed substrates – non-absorptive substrates, e.g. concrete, old tiles, terrazzo, OSB board.
Types of subsequent layers – adhesives for tiles, plasters, screeds, finishing coats, WODER E, WODER W, WODER DUO or WODER S water- and damp proofing.

Properties

Contains aggregate – improves bonding owing to significant expansion of the effective surface between layers (forms rough surface).
Manufactured in white colour.

Technical data

ATLAS GRUNTO-PLAST is manufactured as a ready-to-use mass based on acrylic

Density	approx. 1.5 g/cm^3
Bonding to concrete	>1.0 MPa
Substrate and ambient temperature during work	from +5°C up to +30°C
Further work after priming	after approx. 24 hours

Technical requirements

The product is not classified as a construction material.

Priming

Substrate preparation
The substrate should be dry, free from dust, dirt, oils, grease and wax. Remove any loose, poorly bonded layers before the emulsion application.
Mass preparation
ATLAS GRUNTO-PLAST is manufactured as a ready-to-use mass. It must not be mixed with other materials, thinned or thickened. Just before use, the mass should be mixed in order to unify the consistency.
Priming
Apply the mass upon the prepared substrate with uniform coat using a roller or a brush.
Application of finishing layers
Tiling, floating, water- and damp proofing can commence when mass fully dries, i.e. after approx. 24 hours since application.

Consumption

The average consumption is 0.3 kg of mass for 1 m^2.

Important additional information

- Clean the tools with clean water directly after use.
- During application and drying, the primed surface should be protected against direct sunshine, wind action and precipitation.
- Follow the instructions of the Safety Data Sheet.
- Keep in tightly sealed original and labeled containers. Keep in dry and cool places, protect against overheating (> 30 °C) and freezing - the product freezes and irreversibly loses its performance in temperature below 0 °C. Protect against direct sunshine. Incompatible materials: avoid contact with aluminum, copper and alloys of these metals. Shelf life in conditions as specified is 12 months from the production date shown on the packaging.

Packaging

Plastic buckets: 5 kg
Pallet: 625 kg in 5 kg buckets

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-11-22

FLOORS AND SCREEDS

FLOORS AND SCREEDS

Floors

Floor is a system of layers consisting of substrate (usually ceiling or ground), damp proofing or vapour barrier, acoustic or thermal insulation, separating layer, screed and top floor. The choice of individual floor layers depends on actual type of load and function of a room. Floor is directly exposed to intensive functional load: static – resulting from weight of objects placed upon, and dynamic - caused by foot or vehicle traffic, etc.

Screed

Screed is a floor layer installed in order to form specific level or to build substrate appropriately sound for the top floor layer. It can be applied with a few arrangements:

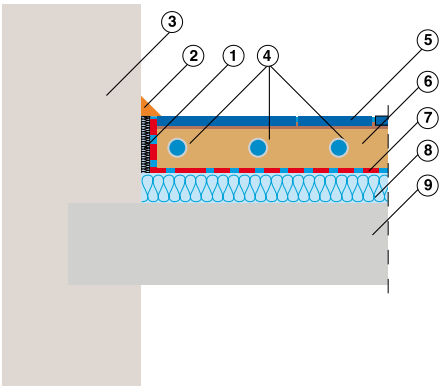
- **bonded – poured directly upon substrate, e.g. ceiling,**
- **on layer separating from substrate – e.g. foil damp proofing,**
- **floating – on layer of acoustic or thermal insulation,**
- **heating – with water or electric floor heating system embedded.**

Basing on the binder type used during production, ATLAS screeds are classified (in accordance to PN-EN 13813:2003 standard) as:

- anhydrite (CA)
- cement (CT)

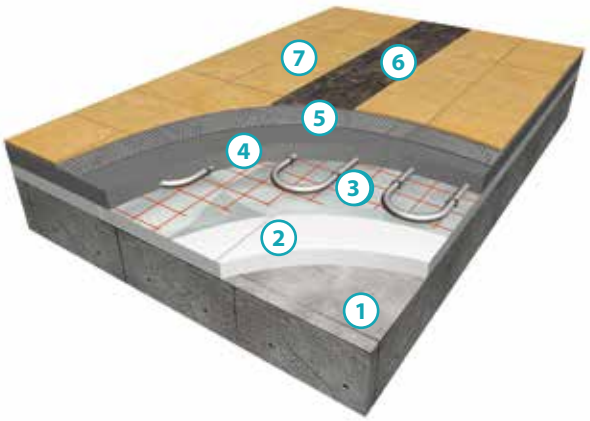
Top floor

Top floor is the surface, finishing floor layer.

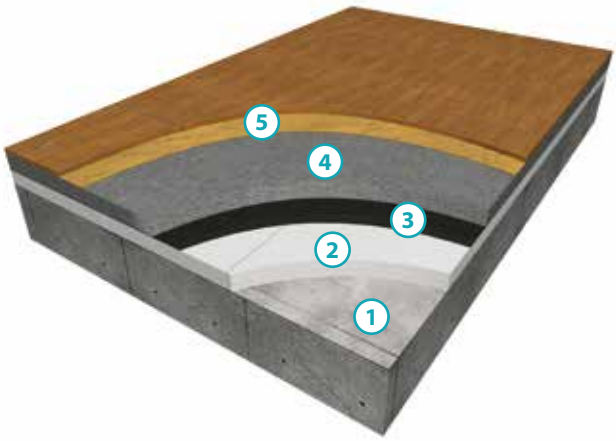


1. ATLAS EXPANSION JOINT PROFILE with apron
2. Floor finishing bead
3. Wall
4. Floor heating system
5. Floor top finish, e.g. ceramic tiles on ATLAS PLUS adhesive
6. Screed ATLAS SAM 150, ATLAS SAM 200, ATLAS POSTAR 20, ATLAS POSTAR 40, ATLAS POSTAR 80 and ATLAS POSTAR 100
7. Damp proofing, e.g. PE foil 0.2 mm thick
8. Thermal and acoustic insulation
9. Reinforced concrete slab

Cross - section of floor layers with the use of ATLAS products.



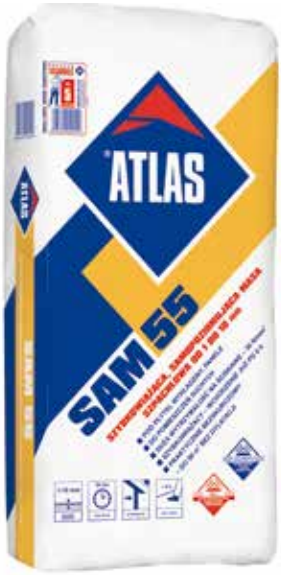
1. Concrete ceiling
2. Thermal or acoustic insulation
3. Heating system embedded in screed, applied on foil
4. Cement floor ATLAS POSTAR 80
5. ATLAS PLUS MEGA adhesive
6. Large size ceramic tiles
7. ATLAS ARTIS GROUT



1. Concrete ceiling
2. Thermal or acoustic insulation
3. PE foil
4. Cement floor ATLAS POSTAR 80
5. Fixed parquet

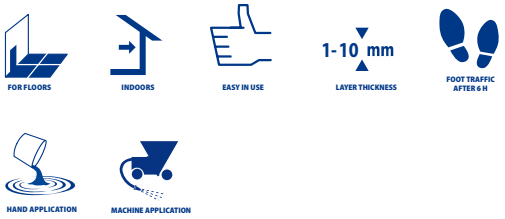
TABLE 5.1

PRODUCT							
	ATLAS SAM 55	ATLAS SAM 100/ AVAL KN 10	ATLAS SAM 150	ATLAS SAM 200	ATLAS SWS/ ATLAS SAM 500	ATLAS SMS 15	ATLAS SMS 30
	Fast setting, self-leveling compound	Fast setting, self-leveling screed	Fast setting, self-leveling screed	Self-leveling screed	Fast setting, self-leveling screed	Fast setting, self-leveling compound	Fast setting, self-leveling screed
Reference document	PN-EN 13813:2003						
Classification	CA-C30-F5	CA-C35-F6	CA-C20-F5	CA-C16-F5	CA-C20-F4	CT-C25-F7	CT-C30-F7
TECHNICAL DATA							
Self-spreading	✓	✓	✓	✓	✓	✓	✓
Layer thickness [mm]	1-10	5-30	15-60	25-60	20-60	1-15	3-30
Mixing ratio water/dry mix [l/ 25 kg]	5.0-6.25	5.0-5.5	4.0 - 4.75	4.25-4.75	5.00-5.25	5.0-5.25	5.00-5.50
Consumption for 1 cm thickness [kg/m^2]	18	20	20	20	18	16.6	16.5
Compressive strength [N/mm^2]	≥30	≥35	≥20	≥16	≥20	≥25	≥30
Flexural strength [N/mm^2]	≥5	≥6	≥5	≥5	≥4	≥7	≥7
Abrasion resistance acc. to Bohm method							
Linear contraction [%]	< 0.03	< 0.03	< 0.03	< 0.03	< 0.05	<0.06	< 0.06
Foot traffic [h]	6	6	6	48	6	4	4
Tiles fixing [days]	3	14-21	21-28	21-28	21-28	1	1
Parquet fixing [days]]		21-28				7	7
Installation of panels or carpet flooring [days]	7-10	21-28	21-28	21-28	21-28	7	7
Start of heating (in screeds with heating) [days]			28	28	7		
Manual application	✓	✓	✓	✓	✓	✓	✓
Machine application (mixing-and-pumping units)	✓	✓	✓	✓	✓	✓	✓
SCREED TYPE							
Bonded	✓	✓	✓	✓	✓	✓	✓
On separation layer			✓	✓	✓		
Floating			✓	✓	✓		
With heating system			✓	✓	✓		
USE IN FLOOR STRUCTURE							
Smoothing layer	✓	✓				✓	✓
PLACE OF APPLICATION							
Indoors - dry	✓	✓	✓	✓	✓	✓	✓
Indoors - wet						✓	✓



ATLAS SAM 55 (1-10 mm)
fast setting, self-leveling compound

- anhydrite-gypsum based
- high compressive strength ≥ 30 N/mm²
- resistant to concentrated load
- almost contractionless – no need of expansion joints for up to 50 m²
- for large projects – well spreading and fast setting



Use

Levels surfaces within 1 - 10 mm thickness range – both when substrate has only local irregularities and when it is whole executed with slight slope.
Elevates floor level in the whole room – e.g. when necessary to equalize the level of two adjacent rooms.
Recommended for leveling surfaces of existing screeds with heating systems – when screed irregularities make the execution of top finish impossible and additional thin layer of compound must be applied.
Can be used in dry rooms – as the screed based on high quality anhydrite, it can only be used indoors in dry rooms: in living rooms, hallways, halls, salons, offices, corridors, waiting rooms, etc.
Forms screed beneath top finishes in rooms exposed to medium load – in offices, kindergartens, schools, etc.

Types of finishing layers – tiles, PVC and carpet flooring, floor panels.
Types of possible arrangements:
bonded - thickness 1 - 10 mm – on good quality substrates, e.g. concrete, cement or anhydrite screed (with or without floor heating).

Properties

Self-spreading - enables execution of smooth horizontal surfaces even in large rooms, with no use of battens and mass raking up with a darby.
Fast-setting - rapid strength build-up enables foot traffic just after 6 hours since the compound application.
Compressive strength: ≥ 30.0 N/mm².
Flexural strength: ≥ 5.0 N/mm².
Limited contraction – reduced to minimum possibility of shrinkage cracks during setting, which enables application on areas up to 50 m² large without expansion joints.
Suitable for manual and machine application – can be easily and quickly applied both manually and with machines equipped with helical pumps, therefore high efficiency is reached.

Technical data

ATLAS SAM 55 is manufactured as a dry mix based on high quality anhydrite, α-gypsum and Portland cement.

Bulk density (of dry mix)	approx. 1.30 kg/dm³
Mass bulk density (after mixing)	approx. 2.00 kg/dm³
Dry density (after setting)	approx. 1.85 kg/dm³
Mixing ratio (water/dry mix)	approx. 0.20 ÷ 0.25 l/1 kg approx. 5.00 ÷ 6.25 l/25 kg
Min./max. compound thickness	1 mm / 10 mm
Maximum aggregate size	0.5 mm
Linear changes	< 0.03%
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Pot life (between mass mixing until work end)	approx. 30 minutes*
Foot traffic	after 6 hours*
Full setting and drying	2 – 3 days*
Start of heating	after approx. 7 days*
Fixing the cladding	screed moisture not higher than 1.5% (in case of impermeable or wooden coverings follow the manufacturer's guidelines)

*The time shown in the table is recommended for the application in the temperature 20°C and humidity 55-60% (approx.).

Technical requirements

The product conforms to PN-EN 13813 standard. EC Declaration of Performance No. 091/CPR.

CE 0767	PN-EN 13813:2003 (EN 13813:2012)
Screed based on calcium sulphate CA-C30-F5	self-leveling, for indoor use, in dry rooms
Reaction to fire – class	$A1_{fl}$
Corrosive substance release	CA
pH value	> 7
Compressive strength	≥ 30.0 N/mm²
Flexural strength	≥ 5.0 N/mm²
Water permeability, vapour permeability, acoustic insulation, noise damping, heat resistance, chemical resistance	NPD

The product has been given the Radiation Hygiene Certificate.

Compound installation

Substrate preparation

The substrate should be stable and appropriately strong, due to the risk of mass outflow, should keep bath-like shape. General requirements for substrates:

- cement screeds – min. 28 days old,
- concrete – min. 3 months old,
- anhydrite screeds – mechanically grinded and dusted.

Substrate irregularities (cracks and gaps) should be primed with ATLAS UNI-GRUNT emulsion or ATLAS GRUNTO-PLAST mass and leveled with ATLAS ZW 330 mortar. Dry, fixed substrate should be dusted and thoroughly primed with ATLAS UNI-GRUNT or ATLAS UNI-GRUNT PLUS emulsion (absorptive substrates), or ATLAS GRUNTO-PLAST mass (non-absorptive substrates) and left to dry.

Any steel elements in contact with compound should be protected against corrosion.

Expansion joints

Separate compound from walls and other elements with ATLAS EXPANSION JOINT PROFILES. The intermediate expansion joints are not required for areas up to 50 m^2 large and those of diagonal below 10 m. Any existing structural expansion joints should be transferred onto the compound layer. Contraction joints should be executed around load-bearing columns and at room thresholds.

Mass preparation

Machine application. Pour the mortar to the basket in the mixing-and-pumping unit, set the mix water level providing appropriate consistency of the mass leaving the hose.

Manual application. Pour the mortar from the bag into a container with the suitable amount of water (see Technical Data for ratio) and mix, best with a low-speed mixer with a drill for gypsum, until homogenous. The mass is ready to use directly after mixing and keeps properties within approx. 30 minutes. Proper consistency should be verified by pouring the mass from 1 liter container onto an even, non-absorptive substrate (e.g. foil). It should form a "patch" of approx. 45 ÷ 50 cm diameter.

Mass application

The mass is poured mechanically with a mixing-and-pumping units, with continuous water flow and worm pump. ATLAS SAM 55 can also be poured manually, but only upon surfaces divided into application areas 10 ÷ 15 m^2 large. Before application, the future screed thickness is to be marked (on walls and in the application area), which can be done with, e.g. a level and portable height benchmarks. Pour the prepared mass evenly and continuously up to the desired height, avoid gaps. Just after filling an individual area, the mass has to be de-aerated with, e.g. de-aeration roller or a brush with long and hard hair. Move the brush shaking along and across the application area. This action facilitates the mass spreading and leveling. The application area should be filled, leveled and de-aerated within approx. 30 minutes.

Maintenance

Avoid direct sunlight and draughts, provide proper room ventilation within the first two days of compound setting. If white tarnish occurs on the screed surface, remove it mechanically with a grinder and dust the whole surface then. Grinding accelerates the process of compound drying. The time of drying depends on layer thickness as well as thermal and humidity conditions in a room.

Finishing works

Depending on the setting conditions, humidity, type and permeability of the top finish materials, the finishing works can commence after approx. 2-3 days. Prime the dry screed surface with ATLAS UNI-GRUNT or ATLAS UNI-GRUNT PLUS before the work commencement.

Consumption

The average consumption is 18 kg of mortar for 1 m^2 for each 10 mm of layer thickness.

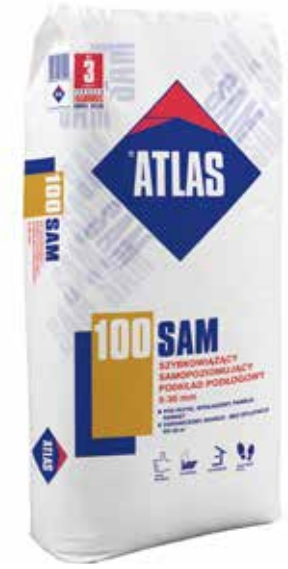
Important additional information

- Inappropriate amount of mix water results in deterioration of compound strength parameters and ingredients separation. Monitor the mass consistency and quality of mixing during compound application.
- Gradual heating of screed beneath the applied layer (by max. 3°C per day) can start only when the screed fully sets.
- Tools must be cleaned with clean water directly after use.
- Contains cement. Causes serious eye irritation. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions in the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 6 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

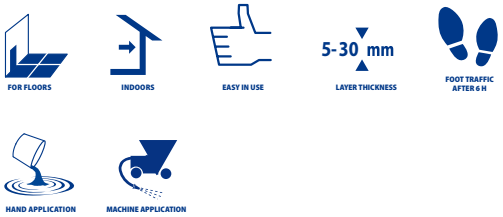
Paper bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-05-27



ATLAS SAM 100 (5-30 mm)
fast setting, self-leveling screed

- anhydrite-gypsum based
- high compressive strength ≥ 35.0 N/mm²
- resistant to concentrated load
- almost contractionless – no need of expansion joints for up to 50 m²
- under tiles, carpet flooring, parquet, panels



Use

Levels surfaces within 5 - 30 mm thickness range – both when substrate has only local irregularities and when it is whole executed with slight slope.
Elevates floor level in the whole room – e.g. when necessary to equalize the level of two adjacent rooms.
Recommended for leveling surfaces of existing screeds with heating systems – when screed irregularities make the execution of top finish impossible and additional thin layer of compound must be applied.
Can be used in dry rooms – as the screed based on high quality anhydrite, it can only be used indoors in dry rooms: in living rooms, hallways, halls, salons, offices, corridors, waiting rooms, etc.
Forms screed beneath top finishes in rooms exposed to medium load – in offices, kindergartens, schools, etc.

Types of finishing layers – tiles, PVC and carpet flooring, floor panels.
Types of possible arrangements:
bonded - thickness 5 - 30 mm – on good quality substrates, e.g. concrete, cement or anhydrite screed (with or without floor heating).

Properties

Self-spreading – enables execution of smooth horizontal surfaces even in large rooms, with no use of battens and mass raking up with a darby.
Fast-setting - rapid strength build-up enables foot traffic just after 6 hours since the compound application.
Compressive strength: ≥ 35.0 N/mm².
Flexural strength: ≥ 6.0 N/mm².
Limited contraction – reduced to minimum possibility of shrinkage cracks during setting, which enables application on areas up to 50 m² large without expansion joints.
Suitable for manual and machine application – can be easily and quickly applied both manually and with machines equipped with helical pumps, therefore high efficiency is reached.

Technical data

ATLAS SAM 100 is manufactured as a dry mix based on high quality anhydrite powder, α-gypsum and Portland cement.

Bulk density (of dry mix)	approx. 1.30 kg/dm³
Mass bulk density (after mixing)	approx. 2.10 kg/dm³
Dry density (after setting)	approx. 1.95 kg/dm³
Mixing ratio (water/dry mix)	approx. 0.20 ÷ 0.22 l/1 kg approx. 5.00 ÷ 5.50 l/25 kg
Min./max. screed thickness	5 mm / 30 mm
Maximum aggregate size	0.8 mm
Linear changes	< 0.03%
Resistance to shearing forces (after 28 days)	> 0.8 MPa
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Pot life (between mass mixing until work end)	min. 30 minutes*
Foot traffic	after 6 hours*
Full setting and drying	min. 2 weeks*
Start of heating	after approx. 7 days*
Fixing the cladding	screed moisture not higher than 1.5% (in case of impermeable or wooden coverings follow the manufacturer's guidelines)

*The time shown in the table is recommended for the application in the temperature 20°C and humidity 55-60% (approx.).

Technical requirements

The product conforms to PN-EN 13813 standard. EC Declaration of Performance No. 069/CPR.

CE 0767	PN-EN 13813:2003 (EN 13813:2012)
Screed based on calcium sulphate CA-C35-F6	self-leveling, for indoor use, in dry rooms
Reaction to fire – class	$A1_{fl}$
Corrosive substance release	CA
pH value	> 7
Compressive strength	≥ 35.0 N/mm²
Flexural strength	≥ 6.0 N/mm²
Water permeability, vapour permeability, acoustic insulation, noise damping, heat resistance, chemical resistance	NPD

The product has been given the Radiation Hygiene Certificate.

Screed installation

Substrate preparation

The substrate should be stable and appropriately strong, due to the risk of mass outflow, should keep bath-like shape. General requirements for substrates:

- cement screeds – min. 28 days old,
- concrete – min. 3 months old,
- anhydrite screeds – mechanically grinded and dusted.

Substrate irregularities (cracks and gaps) should be primed with ATLAS UNI-GRUNT emulsion or ATLAS GRUNTO-PLAST mass and leveled with ATLAS ZW 330 mortar. Dry, fixed substrate should be dusted and thoroughly primed with ATLAS UNI-GRUNT or ATLAS UNI-GRUNT PLUS emulsion (absorptive substrates), or ATLAS GRUNTO-PLAST mass (non-absorptive substrates) and left to dry.

Any steel elements in contact with screed should be protected against corrosion.

Expansion joints

Separate screed from walls and other elements with ATLAS EXPANSION JOINT PROFILES. The intermediate expansion joints are not required for areas up to 50 m^2 large and those of diagonal below 10 m. Any existing structural expansion joints should be transferred onto the screed layer. Contraction joints should be executed around load-bearing columns and at room thresholds.

Mass preparation

Machine application. Pour the mortar to the basket in the mixing-and-pumping unit, set the mix water level providing appropriate consistency of the mass leaving the hose.

Manual application. Pour the mortar from the bag into a container with the suitable amount of water (see Technical Data for ratio) and mix, best with a low-speed mixer with a drill for gypsum, until homogenous. The mass is ready to use directly after mixing and keeps properties within approx. 30 minutes. Proper consistency should be verified by pouring the mass from 1 liter container onto an even, non-absorptive substrate (e.g. foil). It should form a "patch" of approx. 45 ÷ 50 cm diameter.

Mass application

The mass is poured mechanically with a mixing-and-pumping units, with continuous water flow and worm pump. ATLAS SAM 100 can also be poured manually, but only upon surfaces divided into application areas 10 ÷ 15 m^2 large. Before application, the future screed thickness is to be marked (on walls and in the application area), which can be done with, e.g. a level and portable height benchmarks. Pour the prepared mass evenly and continuously up to the desired height, avoid gaps. Just after filling an individual area, the mass has to be de-aerated with, e.g. de-aeration roller or a brush with long and hard hair. Move the brush shaking along and across the application area. This action facilitates the mass spreading and leveling. The application area should be filled, leveled and de-aerated within approx. 30 minutes.

Maintenance

Avoid direct sunlight and draughts, provide proper room ventilation within the first two days of screed setting. If white tarnish occurs on the screed surface, remove it mechanically with a grinder and dust the whole surface then. Grinding accelerates the process of screed drying. The time of drying depends on layer thickness as well as thermal and humidity conditions in a room.

Finishing works

Depending on the setting conditions, humidity, type and permeability of the top finish materials, the finishing works can commence after approx. 2-3 weeks. Prime the dry screed surface with ATLAS UNI-GRUNT or ATLAS UNI-GRUNT PLUS before the work commencement,

Consumption

The average consumption is 20 kg of mortar for 1 m^2 for each 10 mm of layer thickness.

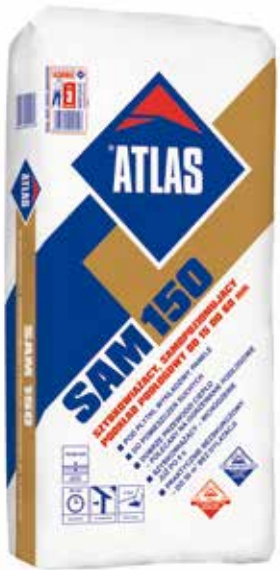
Important additional information

- Inappropriate amount of mix water results in deterioration of screed strength parameters and ingredients separation. Monitor the mass consistency and quality of mixing during screed application.
- Gradual heating of screed beneath the applied layer (by max. 3°C per day) can start only when the screed fully sets.
- Tools must be cleaned with clean water directly after use.
- Contains cement. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions in the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 9 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

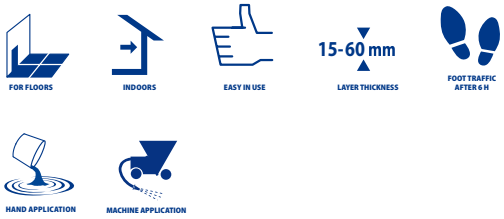
Foil bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-04-24



ATLAS SAM 150 (15-60 mm)
fast setting, self-leveling screed

- anhydrite-gypsum based
- fast setting – foot traffic just after 6 hours
- almost contractionless – no need of expansion joints for up to 50 m²
- conducts heat well – perfect for floor heating
- self-leveling – facilitates application



Use

Levels surfaces within 15 - 60 mm thickness range – both when substrate has only local irregularities and when it is whole executed with slight slope.
Elevates floor level in the whole room – e.g. when necessary to equalize the level of two adjacent rooms.
Perfect for installation of electric or water floor heating system – very good heat conductivity, better than offered by cement-based products; tightly covers heating installation.
For leveling surfaces of existing screeds with heating systems – when screed irregularities make the execution of top finish impossible and additional thin layer of compound must be applied.
Element of the acoustic insulation system for ceilings – in combination with elasticized polystyrene, ATLAS EXPANSION JOINT PROFILES and polyethylene foil.
Can be used in dry rooms – as the screed based on high quality anhydrite, it can only be used indoors in dry rooms: in living rooms, hallways, halls, salons, offices, corridors, waiting rooms, etc.

Types of finishing layers – tiles, PVC and carpet flooring, floor panels.
Types of possible arrangements:
bonded - thickness 15 - 60 mm – on good quality substrates, e.g. concrete, cement or anhydrite screed (with or without floor heating)
on separation layer - thickness 30 - 60 mm – on poor quality substrates, which do not provide appropriate bonding - dusty, cracked, oiled, dirty, very absorbable; separation layer can be made of, e.g. PE foil 0.2 mm thick
floating - thickness 35 - 60 mm – applied on thermal or acoustic insulation layer made of: polystyrene boards of appropriate hardness, hardened mineral wool panels, etc.
heating – the layer above the heating layer should be **min. 35 mm thick**

Properties

Self-spreading – enables execution of smooth horizontal surfaces even in large rooms, with no use of battens and mass raking up with a darby.
Compressive strength: ≥ 20.0 N/mm².
Flexural strength: ≥ 5.0 N/mm².
Limited contraction – reduced to minimum possibility of shrinkage cracks during setting, which enables application on areas up to 50 m² large without expansion joints.
Suitable for manual and machine application – can be easily and quickly applied both manually and with machines equipped with helical pumps, therefore high efficiency is reached.

Technical data

ATLAS SAM 150 is manufactured as a dry mix based on high quality anhydrite.

Bulk density (of dry mix)	approx. 1.40 kg/dm³
Mass bulk density (after mixing)	approx. 2.20 kg/dm³
Dry density (after setting)	approx. 2.00 kg/dm³
Mixing ratio (water/dry mix)	approx. 0.16 ÷ 0.19 l/1 kg approx. 4.00 ÷ 4.75 l/25 kg
Min./max. screed thickness	15 mm / 60 mm
Maximum aggregate size	0.8 mm
Linear changes	< 0.03%
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Pot life (between mass mixing until work end)	min. 30 minutes*
Foot traffic	after 6 hours*
Full setting and drying	3-4 weeks*
Start of heating	after approx. 28 days*
Fixing the cladding	screed moisture not higher than 1.5% (in case of impermeable or wooden coverings follow the manufacturer's guidelines)

*The time shown in the table is recommended for the application in the temperature 20°C and humidity 55-60% (approx.).

Technical requirements

The product conforms to PN-EN 13813 standard. EC Declaration of Performance No. 044/CPR.

CE 0767	PN-EN 13813:2003 (EN 13813:2012)
Screed based on calcium sulphate CA-C20-F5	self-leveling, for indoor use, in dry rooms
Reaction to fire – class	$A1_{fl}$
Corrosive substance release	CA
pH value	> 7
Compressive strength	≥ 20.0 N/mm²
Flexural strength	≥ 5.0 N/mm²
Water permeability, vapour permeability, acoustic insulation, noise damping, heat resistance, chemical resistance	NPD
Release/content of hazardous substances	See: Safety Data Sheet

The product has been given the Radiation Hygiene Certificate.

Screed installation

Substrate preparation

The substrate should be stable and appropriately strong, due to the risk of mass outflow, should keep bath-like shape. General requirements for substrates:

- cement screeds – min. 28 days old,
- concrete – min. 3 months old,
- anhydrite screeds – mechanically grinded and dusted.

Any steel elements in contact with screed should be protected against corrosion.

Bonded screed. Substrate irregularities (cracks and gaps) should be primed with ATLAS UNI-GRUNT emulsion or ATLAS GRUNTO-PLAST mass and leveled with ATLAS ZW 330 mortar. Dry, fixed substrate should be dusted and thoroughly primed with ATLAS UNI-GRUNT or ATLAS UNI-GRUNT PLUS emulsion (absorptive substrates), or ATLAS GRUNTO-PLAST mass (non-absorptive substrates) and left to dry.

Screed on separation layer. The separation layer, e.g. PE foil, must be spread tightly, without wrinkles and folded onto the walls (upon the expansion joint strips) at least to the height of the screed.

Floating screed. The insulation boards must be placed tightly with offset edges upon even surface. Place the separation layer upon the boards and fold it onto the wall.

Screed with heating system. The heating installation must be checked and fixed, fill up the pipes of water heating system with water. The screed should be installed with one layer (when the heating installation is firmly fixed). Follow guidelines listed in the project documentation and recommendations of the heating system manufacturer.

Expansion joints

Separate screed from walls and other elements with ATLAS EXPANSION JOINT PROFILES. The intermediate expansion joints are not required for areas up to 50 m^2 large and those of diagonal below 10 m. Any existing structural expansion joints should be transferred onto the screed layer. Contraction joints should be executed around load-bearing columns and at room thresholds.

Mass preparation

Machine application. Pour the mortar to the basket in the mixing-and-pumping unit, set the mix water level providing appropriate consistency of the mass leaving the hose.

Manual application. Pour the mortar from the bag into a container with the suitable amount of water (see Technical Data for ratio) and mix, best with a low-speed mixer with a drill for gypsum, until homogenous. The mass is ready to use directly after mixing and keeps properties within approx. 30 minutes. Proper consistency should be verified by pouring the mass from 1 liter container onto an even, non-absorptive substrate (e.g. foil). It should form a "patch" of approx. 45 ÷ 50 cm diameter.

Mass application

The mass is poured mechanically with a mixing-and-pumping units, with continuous water flow and worm pump. ATLAS SAM 150 can also be poured manually, but only upon surfaces divided into application areas 10 ÷ 15 m^2 large. Before application, the future screed thickness is to be marked (on walls and in the application area), which can be done with, e.g. a level and portable height benchmarks. Pour the prepared mass evenly and continuously up to the desired height, avoid gaps. Just after filling an individual area, the mass has to be de-aerated with, e.g. de-aeration roller or a brush with long and hard hair. Move the brush shaking along and across the application area. This action facilitates the mass spreading and leveling. The application area should be filled, leveled and de-aerated within approx. 30 minutes.

Maintenance

Avoid direct sunlight and draughts, provide proper room ventilation within the first two days of screed setting. If white tarnish occurs on the screed surface, remove it mechanically with a grinder and dust the whole surface then. Grinding accelerates the process of screed drying. The time of drying depends on layer thickness as well as thermal and humidity conditions in a room.

Finishing works

Depending on the setting conditions, humidity, type and permeability of the top finish materials, the finishing works can commence after approx. 3-4 weeks. Prime the dry screed surface with ATLAS UNI-GRUNT or ATLAS UNI-GRUNT PLUS before the work commencement,

Consumption

The average consumption is 20 kg of mortar for 1 m^2 for each 10 mm of layer thickness.

Important additional information

- Inappropriate amount of mix water results in deterioration of screed strength parameters and ingredients separation. Monitor the mass consistency and quality of mixing during screed application.
- Until the floor heating is fully turned on, temperature should be increased every 24 hours by maximum 2°C till the maximum operation temperature is achieved. The temperature should then be lowered at the same rate until the heating is turned off.
- Gradual heating of screed beneath the applied layer (by max. 3°C per day) can start only when the screed fully sets.
- Tools must be cleaned with clean water directly after use.
- Contains cement. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions in the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 6 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

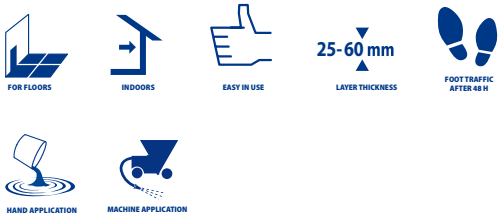
Packaging

Paper bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-05-27

ATLAS SAM 200 (25-60 mm)
self-leveling screed

- anhydrite-gypsum based
- almost contractionless – no need of expansion joints for up to 50 m²
- adjustable applied mass consistency
- conducts heat well – perfect for floor heating
- self-leveling – facilitates application



Use

Levels surfaces within 25 - 60 mm thickness range – both when substrate has only local irregularities and when it is whole executed with slight slope.
Elevates floor level in the whole room – e.g. when necessary to equalize the level of two adjacent rooms.
Perfect for installation of electric or water floor heating system – very good heat conductivity, better than offered by cement-based products; tightly covers heating installation.
For leveling surfaces of existing screeds with heating systems.
Element of the acoustic insulation system for ceilings – in combination with elasticized polystyrene, ATLAS EXPANSION JOINT PROFILES and polyethylene foil.
Can be used in dry rooms – as the screed based on high quality anhydrite, it can only be used indoors in dry rooms: in living rooms, hallways, halls, salons, offices, corridors, waiting rooms, etc.

Types of finishing layers – – tiles, PVC and carpet flooring, floor panels.
Types of possible arrangements:
bonded - thickness 25 - 60 mm – on good quality substrates, e.g. concrete, cement or anhydrite screed (with or without floor heating)
on separation layer - thickness 30 - 60 mm – on poor quality substrates, which do not provide appropriate bonding - dusty, cracked, oiled, dirty, very absorbable; separation layer can be made of, e.g. PE foil 0.2 mm thick
floating - thickness 35 - 60 mm – applied on thermal or acoustic insulation layer made of: polystyrene boards of appropriate hardness, hardened mineral wool panels, etc.
heating – the layer above the heating layer should be **min. 35 mm thick**

Properties

Self-spreading – enables execution of smooth horizontal surfaces even in large rooms, with no use of battens and mass raking up with a darby.
Compressive strength: ≥ 16.0 N/mm².
Flexural strength: ≥ 5.0 N/mm².
Limited contraction – reduced to minimum possibility of shrinkage cracks during setting, which enables application on areas up to 50 m² large without expansion joints.
Suitable for manual and machine application – can be easily and quickly applied both manually and with machines equipped with helical pumps, therefore high efficiency is reached.

Technical data

ATLAS SAM 200 is manufactured as a dry mix based on high quality anhydrite.

Bulk density (of dry mix)	approx. 1.40 kg/dm³
Mass bulk density (after mixing)	approx. 2.00 kg/dm³
Dry density (after setting)	approx. 1.90 kg/dm³
Mixing ratio (water/dry mix)	approx. 0.17 ÷ 0.19 l/1 kg approx. 4.25 ÷ 4.75 l/25 kg
Min./max. screed thickness	25 mm / 60 mm
Maximum aggregate size	0.8 mm
Linear changes	< 0.03%
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Pot life (between mass mixing until work end)	approx. 45 minutes*
Foot traffic	after 2 days*
Full setting and drying	3-4 weeks*
Start of heating	after approx. 28 days*
Fixing the cladding	screed moisture not higher than 1.5% (in case of impermeable or wooden coverings follow the manufacturer's guidelines)

*The time shown in the table is recommended for the application in the temperature 20°C and humidity 55-60% (approx.).

Technical requirements

The product conforms to PN-EN 13813 standard. EC Declaration of Performance No. 010/CPR.

CE	PN-EN 13813:2003 (EN 13813:2012)
Screed based on calcium sulphate CA-C16-F5	self-leveling, for indoor use, in dry rooms
Reaction to fire – class	$A1_{fl}$
Corrosive substance release	CA
pH value	> 7
Compressive strength	≥ 20.0 N/mm²
Flexural strength	≥ 5.0 N/mm²
Water permeability, vapour permeability, acoustic insulation, noise damping, heat resistance, chemical resistance	NPD
Release/content of hazardous substances	See: Safety Data Sheet

The product has been given the Radiation Hygiene Certificate.

Screed installation

Substrate preparation

The substrate should be stable and appropriately strong, due to the risk of mass outflow, should keep bath-like shape. General requirements for substrates:

- cement screeds – min. 28 days old,
- concrete – min. 3 months old,
- anhydrite screeds – mechanically grinded and dusted.

Any steel elements in contact with screed should be protected against corrosion.

Bonded screed. Substrate irregularities (cracks and gaps) should be primed with ATLAS UNI-GRUNT emulsion or ATLAS GRUNTO-PLAST mass and leveled with ATLAS ZW 330 mortar. Dry, fixed substrate should be dusted and thoroughly primed with ATLAS UNI-GRUNT or ATLAS UNI-GRUNT PLUS emulsion (absorptive substrates), or ATLAS GRUNTO-PLAST mass (non-absorptive substrates) and left to dry.

Screed on separation layer. The separation layer, e.g. PE foil, must be spread tightly, without wrinkles and folded onto the walls (upon the expansion joint strips) at least to the height of the screed.

Floating screed. The insulation boards must be placed tightly with offset edges upon even surface. Place the separation layer upon the boards and fold it onto the wall.

Screed with heating system. The heating installation must be checked and fixed, fill up the pipes of water heating system with water. The screed should be installed with one layer (when the heating installation is firmly fixed). Follow guidelines listed in the project documentation and recommendations of the heating system manufacturer.

Expansion joints

Separate screed from walls and other elements with ATLAS EXPANSION JOINT PROFILES. The intermediate expansion joints are not required for areas up to 50 m^2 large and those of diagonal below 10 m. Any existing structural expansion joints should be transferred onto the screed layer. Contraction joints should be executed around load-bearing columns and at room thresholds.

Mass preparation

Machine application. Pour the mortar to the basket in the mixing-and-pumping unit, set the mix water level providing appropriate consistency of the mass leaving the hose.

Manual application. Pour the mortar from the bag into a container with the suitable amount of water (see Technical Data for ratio) and mix, best with a low-speed mixer with a drill for gypsum, until homogenous. The mass is ready to use directly after mixing and keeps properties within approx. 30 minutes. Proper consistency should be verified by pouring the mass from 1 liter container onto an even, non-absorptive substrate (e.g. foil). It should form a "patch" of approx. 45 ÷ 50 cm diameter.

Mass application

The mass is poured mechanically with a mixing-and-pumping units, with continuous water flow and worm pump. ATLAS SAM 200 can also be poured manually, but only upon surfaces divided into application areas 10 ÷ 15 m^2 large. Before application, the future screed thickness is to be marked (on walls and in the application area), which can be done with, e.g. a level and portable height benchmarks. Pour the prepared mass evenly and continuously up to the desired height, avoid gaps. Just after filling an individual area, the mass has to be de-aerated with, e.g. de-aeration roller or a brush with long and hard hair. Move the brush shaking along and across the application area. This action facilitates the mass spreading and leveling. The application area should be filled, leveled and de-aerated within approx. 30 minutes.

Maintenance

Avoid direct sunlight and draughts, provide proper room ventilation within the first two days of screed setting. If white tarnish occurs on the screed surface, remove it mechanically with a grinder and dust the whole surface then. Grinding accelerates the process of screed drying. The time of drying depends on layer thickness as well as thermal and humidity conditions in a room.

Finishing works

Depending on the setting conditions, humidity, type and permeability of the top finish materials, the finishing works can commence after approx. 3-4 weeks. Prime the dry screed surface with ATLAS UNI-GRUNT or ATLAS UNI-GRUNT PLUS before the work commencement,

Consumption

The average consumption is 20 kg of mortar for 1 m^2 for each 10 mm of layer thickness.

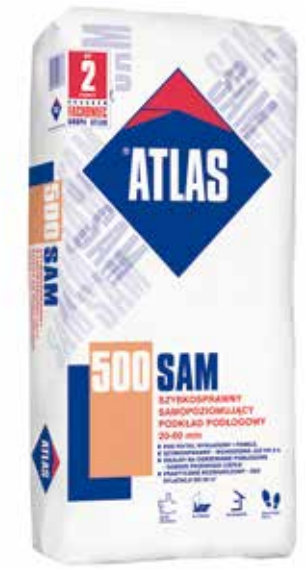
Important additional information

- Inappropriate amount of mix water results in deterioration of screed strength parameters and ingredients separation. Monitor the mass consistency and quality of mixing during screed application.
- Until the floor heating is fully turned on, temperature should be increased every 24 hours by maximum 2°C till the maximum operation temperature is achieved. The temperature should then be lowered at the same rate until the heating is turned off.
- Gradual heating of screed beneath the applied layer (by max. 3°C per day) can start only when the screed fully sets.
- Tools must be cleaned with clean water directly after use.
- Contains cement. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions in the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 9 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

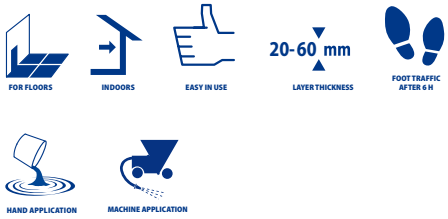
Foil bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-03-27



ATLAS SAM 500 (20-60 mm)
fast setting, self-leveling screed

- under tiles, carpet flooring and panels
- fast setting – foot traffic just after 6 hours
- almost contractionless – no need of expansion joints for up to 50 m²
- conducts heat well – perfect for floor heating



Use

Levels surfaces within 20 - 60 mm thickness range – both when substrate has only local irregularities and when it is whole executed with slight slope.
Perfect for installation of electric or water floor heating system – very good heat conductivity, better than offered by cement-based products; tightly covers heating installation. Heats up quick after installation activation.
Elevates floor level in the whole room – e.g. when necessary to equalize the level of two adjacent rooms.
Can be used in dry rooms – as the screed based on high quality anhydrite, it can only be used indoors in dry rooms: in living rooms, hallways, halls, salons, offices, corridors, waiting rooms, etc.
Recommended for offices, kindergartens, schools, apartments, etc. – owing to smooth surface and fine aggregate.

Types of finishing layers – tiles, PVC and carpet flooring, floor panels.
Types of possible arrangements:
- **bonded - thickness 20 - 60 mm** – on good quality substrates, e.g. concrete, cement or anhydrite screed (with or without floor heating)
- **on separation layer - thickness 30 - 60 mm** – on poor quality substrates, which do not provide appropriate bonding - dusty, cracked, oiled, dirty, very absorbable; separation layer can be made of, e.g. PE foil 0.2 mm thick
- **floating - thickness 35 - 60 mm** – applied on thermal or acoustic insulation layer made of: polystyrene boards of appropriate hardness, hardened mineral wool panels, etc.
- **heating** – the layer above the heating layer should be **min. 35 mm thick.**

Properties

Perfect self-spreadability – enables execution of smooth horizontal surfaces even in large rooms, with no use of battens and mass raking up with a darby.
Fast-setting - rapid strength build-up enables foot traffic just after 6 hours since the screed application.
Compressive strength: ≥ 20.0 N/mm².
Flexural strength: ≥ 4.0 N/mm².
Suitable for manual and machine application – can be easily and quickly applied both manually and with machines equipped with helical pumps, therefore high efficiency is reached.

Technical data

ATLAS SAM 500 is manufactured as a dry mix based on calcium sulphate.

Bulk density (of dry mix)	approx.. 1.40 kg/dm³
Mixing ratio (water/dry mix)	approx. 0.20 ÷ 0.21 l/1 kg approx. 5.00 ÷ 5.25 l/25 kg
Min./max. screed thickness	20 mm / 60 mm
Maximum aggregate size	2.0 mm
Linear changes	< 0.05%
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Pot life (between mass mixing until work end)	approx. 60 minutes*
Foot traffic	after 6 hours*
Start of heating	after approx. 7 days*
Fixing the cladding	screed moisture not higher than 1.5% (in case of impermeable or wooden coverings follow the manufacturer's guidelines)

*The time shown in the table is recommended for the application in the temperature 20°C and humidity 55-60% (approx.).

Technical requirements

The product conforms to PN-EN 13813 standard. EC Declaration of Performance No. 193/CPR.

CE	PN-EN 13813:2003 (EN 13813:2002)
Screed based on calcium sulphate CA-C20-F4	self-leveling, for indoor use, in dry rooms
Reaction to fire – class	$A1_{fl}$
Corrosive substance release	CA
pH value	≥ 7
Compressive strength – class	C20
Flexural strength - class	F4
Water permeability, vapour permeability, acoustic insulation, noise damping, heat resistance, chemical resistance	NPD
Release/content of hazardous substances	See: Safety Data Sheet

The product has been given the Radiation Hygiene Certificate.

Screed installation

Substrate preparation

The substrate should be stable and appropriately strong, due to the risk of mass outflow, should keep bath-like shape. General requirements for substrates:

- cement screeds – min. 28 days old,
- concrete – min. 3 months old,
- anhydrite screeds – mechanically grinded and dusted.

Bonded screed. Substrate irregularities (cracks and gaps) should be primed with ATLAS UNI-GRUNT emulsion or ATLAS GRUNTO-PLAST mass and leveled with ATLAS ZW 330, ATLAS ZW 50 or ATLAS TEN-10 mortar. Dry, fixed substrate should be dusted and thoroughly primed with ATLAS UNI-GRUNT or ATLAS UNI-GRUNT PLUS emulsion (absorptive substrates), or ATLAS GRUNTO-PLAST mass (non-absorptive substrates) and left to dry.

Screed on separation layer. The separation layer, e.g. PE foil, must be spread tightly, without wrinkles and folded onto the walls (upon the expansion joint strips) at least to the height of the screed.

Floating screed. The insulation boards must be placed tightly with offset edges upon even surface. Place the separation layer upon the boards and fold it onto the wall.

Screed with heating system. The heating installation must be checked and fixed, fill up the pipes of water heating system with water. The screed should be installed with one layer (when the heating installation is firmly fixed). Follow guidelines listed in the project documentation and recommendations of the heating system manufacturer.

Expansion joints

Separate screed from walls and other elements with ATLAS EXPANSION JOINT PROFILES. The intermediate expansion joints are not required for areas up to 50 m^2 large and those of diagonal below 10 m. Any existing structural expansion joints should be transferred onto the screed layer. Contraction joints should be executed around load-bearing columns and at room thresholds.

Mass preparation

Machine application. Pour the mortar to the basket in the mixing-and-pumping unit, set the mix water level providing appropriate consistency of the mass leaving the hose.

Manual application. Pour the mortar from the bag into a container with the suitable amount of water (see Technical Data for ratio) and mix, best with a low-speed mixer with a drill for gypsum, until homogenous. The mass is ready to use directly after mixing and keeps properties within approx. 30 minutes. Proper consistency should be verified by pouring the mass from 1 liter container onto an even, non-absorptive substrate (e.g. foil). It should form a "patch" of approx. 45 ÷ 50 cm diameter.

Mass application

The mass is poured mechanically with a mixing-and-pumping units, with continuous water flow and worm pump. ATLAS SAM 500 can also be poured manually, but only upon surfaces divided into application areas 10 ÷ 15 m^2 large. Pour the prepared mass evenly and continuously up to the desired height, avoid gaps. Just after filling an individual area, the mass has to be de-aerated with, e.g. a brush with long and hard hair or with a stippler. Move the brush shaking along and across the application area. This action facilitates the mass spreading and leveling. The application area should be filled, leveled and de-aerated within approx. 60 minutes.

Maintenance

Avoid direct sunlight and draughts, provide proper room ventilation within the first two days of screed setting. If white tarnish occurs on the screed surface, remove it mechanically with a grinder and dust the whole surface then. Grinding accelerates the process of screed drying. The time of drying depends on layer thickness as well as thermal and humidity conditions in a room.

Finishing works

Depending on the setting conditions, humidity, type and permeability of the top finish materials, the finishing works can commence after approx. 3-4 weeks. Prime the dry screed surface with ATLAS UNI-GRUNT or ATLAS UNI-GRUNT PLUS before the work commencement.

Consumption

The average consumption is 18 kg of mortar for 1 m^2 for each 10 mm of layer thickness.

Important additional information

- Inappropriate amount of mix water results in deterioration of screed strength parameters and ingredients separation. Monitor the mass consistency and quality of mixing during screed application.
- Until the floor heating is fully turned on, temperature should be increased every 24 hours by maximum 2°C till the maximum operation temperature is achieved. The temperature should then be lowered at the same rate until the heating is turned off.
- Gradual heating of screed beneath the applied layer (by max. 3°C per day) can start only when the screed fully sets.
- Tools must be cleaned with clean water directly after use.
- Due to its form – dust, product can mechanically irritate eyes and respiratory system. Follow the instructions of the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets), avoid direct sunshine, keep in dry, cool and well ventilated room. Protect against humidity – product gets irreversibly solid after contact with damp. Shelf life in conditions as specified is 9 months from the production date shown on the packaging.

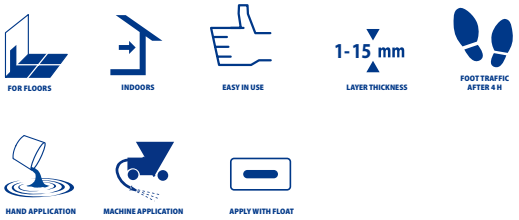
Packaging

Paper bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-06-22

ATLAS SMS 15 (1-15 mm)
fast setting, self-leveling compound

- under tiles, panels, carpet flooring, parquet
- foot traffic just after 4 hours
- tiling after 24 hours
- high compressive and flexural strength
- low linear contraction



Use

Levels surfaces within 1 - 15 mm thickness range - both when substrate has only local irregularities and when it is whole executed with slight slope.
Elevates floor level in the whole room – e.g. when necessary to equalize the level of two adjacent rooms.
Can be used in rooms, antechambers, halls, living rooms, offices, corridors, waiting rooms, kitchens and bathrooms.
Recommended for leveling surfaces of existing screeds with heating systems – when screed irregularities make the execution of top finish impossible and additional thin layer of compound must be applied.
Forms very smooth surface after application – particularly recommended as smoothing layer for screeds installed under carpet flooring.

Types of finishing layers – tiles, PVC and carpet flooring, floor panels, parquet.
Types of possible arrangements:
- **bonded - thickness 1 - 15 mm** – on good quality substrates, e.g. concrete, cement screed (with or without floor heating).

Properties

Perfect spreading - enables execution of horizontal surfaces even in large rooms, with no use of battens and mass raking up with a darby.
Fast-setting - rapid strength build-up enables foot traffic just after 4 hours since the compound application.
Compressive strength: ≥ 25.0 N/mm².
Flexural strength: ≥ 7.0 N/mm².
Very low linear shrinkage - minimum changes in linear dimensions during screed drying (≤ 0.6 mm/rm) limit the risk of cracking and loosening of weak substrates (of low cohesion).
Suitable for manual and machine application – can be easily and quickly applied both manually and with machines equipped with helical pumps, therefore high efficiency is reached.

Technical data

ATLAS SMS 15 is manufactured as a dry mix based on cement.

Bulk density (of dry mix)	approx. 1.20 kg/dm^3
Mass bulk density (after mixing)	approx. 2.00 kg/dm^3
Dry density (after setting)	approx. 1.80 kg/dm^3
Mixing ratio (water/dry mix)	0.20 ÷ 0.21 l/1 kg 5.00 ÷ 5.25 l/25 kg
Min./max. compound thickness	1 mm / 15 mm
Maximum aggregate size	0.5 mm
Linear changes	≤ 0.06%
Resistance to shearing forces (after 28 days)	≥ 1.0 MPa
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Pot life (between mass mixing until work end)	approx. 40 minutes*
Foot traffic	after 4-6 hours*
Fixing ceramic and stone cladding	after 24 hours*
Application of carpet, PVC flooring, linoleum, parquet	after approx. 7 days

*The time shown in the table is recommended for the application in the temperature 20°C and humidity 55-60% (approx.).

Technical requirements

The product conforms to PN-EN 13813 standard. EC Declaration of Performance No. 162/CPR.

CE	PN-EN 13813:2003 (EN 13813:2012)
Cement – based screed CT-C25-F7	self-leveling, for indoor use
Reaction to fire – class	$A1_{fl}$
Corrosive substance release	CT
Compressive strength – class	C25
Flexural strength - class	F7
Water permeability, vapour permeability, acoustic insulation, noise damping, heat resistance, chemical resistance	NPD
Release/content of hazardous substances	See: Safety Data Sheet

The product has been given the Radiation Hygiene Certificate.

Compound application

Substrate preparation

The substrate should be stable, sound and air dry, due to the risk of mass outflow, should keep bath-like shape. General requirements for substrates:

- cement screeds – min. 28 days old,
- concrete – min. 3 months old.

Substrate irregularities (cracks and gaps) should be leveled with ATLAS ZW 330 mortar. Dry, fixed substrate should be dusted and thoroughly primed with ATLAS UNI-GRUNT or ATLAS UNI-GRUNT PLUS emulsion and left to dry.

Expansion joints

Separate screed from walls with ATLAS EXPANSION JOINT PROFILES. The expansions joints should also be executed at room thresholds and around load-bearing posts. The existing structural expansion joints should be transferred onto the compound layer.

Mass preparation

Machine application – use mixing-and-pumping units with continuous flow of water. It is advisable to use pumps of efficiency 60 l/min. Pour the dry mix to the basket in the mixing-and-pumping unit, set the mix water level providing appropriate mass consistency. Proper consistency can be verified with the use of 0.5 liter or 1 liter container. The prepared mix, poured from a 0.5 liter container onto even, non-absorptive substrate (e.g. foil) should form a "patch" of approx. 35 ÷ 40 cm diameter (for 1.0 liter container - 50 ÷ 55 cm).

Manual application – pour the mortar from the bag into a container with the suitable amount of water (see Technical Data for ratio) and mix, best with a low-speed mixer with a drill for mortars, until homogenous. Remix after 5 minutes. The mass retains its properties for about 40-50 minutes. Proper consistency should be verified by pouring the mass from 1 liter container onto an even, non-absorptive substrate (e.g. foil). It should form a "patch" of approx. 50 ÷ 55 cm diameter.

Compound application

Before application, the future compound thickness is to be marked (on walls and in the application area), which can be done with, e.g. a level and portable height benchmarks. Pour the prepared mass evenly and continuously up to the desired height, avoid gaps. The application area should be arranged in the way allowing for mass application and de-aeration within approx. 40 minutes.

In case of manual application the excessive mass should be raked up towards oneself with a long metal float. Directly after each application area filling, the mass must be de-aerated with, e.g. a spike roller. It is recommended to perform de-aeration in two perpendicular directions just after the mass application.

Maintenance

The freshly applied compound should be protected against excessive drying, direct sunlight, low air humidity or draughts. In order to ensure favourable conditions for compound setting, depending on needs, sprinkle the freshly applied surface with water or cover it with foil. Proper maintenance leads to increase of strength of product but also extends the time of drying. The time of drying depends on layer thickness and ambient thermal and humidity conditions. Foot traffic is possible after approx. 4-6 hours and full load after approx. 7 days.

Finishing works

The time of finishing works execution depends on the setting conditions, humidity, type and permeability of the top finish materials and can commence after approx. 24 hours in case of tiling. PVC flooring can be installed when the screed dries fully. Parquet can be installed after approx. 7 days. Minimum compound thickness beneath parquet – 3 mm. Epoxy coats should be applied according to their manufacturer's guidelines (e.g. on substrate preparation, ambient conditions, etc.), however not earlier than after 7 days.

Prime the surface with ATLAS UNI-GRUNT or ATLAS UNI-GRUNT PLUS before fixing the cladding.

Consumption

The average consumption is 16.6 kg of mortar for 1 m^2 for each 10 mm of layer thickness.

Important additional information

- Inappropriate amount of mix water results in deterioration of screed strength parameters and ingredients separation. Monitor the mass consistency and quality of mixing during screed application.
- Tools must be cleaned with clean water directly after use.
- Contains cement. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions in the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 9 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%..

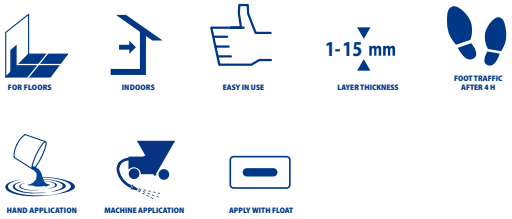
Packaging

Foil bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-03-24

ATLAS SMS 30 (3-30 mm)
fast setting, self-leveling screed

- under parquet, tiles, panels, carpet flooring
- foot traffic just after 4 hours
- for leveling floors during renovation
- limited linear contraction



Use

Levels surfaces within 3 - 30 mm thickness range - both when substrate has only local irregularities and when it is whole executed with slight slope.
Elevates floor level in the whole room – e.g. when necessary to equalize the level of two adjacent rooms.
Can be used in dry rooms – in living rooms, antechambers, halls, offices, corridors, waiting rooms, etc.
Can be used in rooms of higher humidity, e.g. house bathrooms.
Recommended as a screed under carpet flooring in offices, kindergartens, schools, apartments, etc. – owing to smooth surface and fine aggregate.

Types of finishing layers – tiles, PVC and carpet flooring, floor panels, parquet.
Types of possible arrangements:
bonded - thickness 3 - 30 mm – on good quality substrates, e.g. concrete, cement or anhydrite screed (with or without floor heating).

Properties

Perfect spreading - enables execution of smooth horizontal surfaces even in large rooms, with no use of battens and mass raking up with a darby.
Fast-setting - rapid strength build-up enables foot traffic just after 4 hours since application.
Compressive strength: ≥ 30.0 N/mm².
Flexural strength: ≥ 7.0 N/mm².
Very low linear shrinkage - minimum changes in linear dimensions during screed drying (≤ 0.6 mm/rm) limit the risk of cracking and loosening of weak substrates (of low cohesion).
Suitable for manual and machine application – can be easily and quickly applied both manually and with machines equipped with helical pumps, therefore high efficiency is reached.

Technical data

ATLAS SMS 30 is manufactured as a dry mix based on cement.

Bulk density (of dry mix)	approx. 1.20 kg/dm^3
Mass bulk density (after mixing)	approx. 2.00 kg/dm^3
Dry density (after setting)	approx. 1.80 kg/dm^3
Mixing ratio (water/dry mix)	0.20 ÷ 0.22 l/1 kg 5.00 ÷ 5.50 l/25 kg
Min./max. screed thickness	3 mm / 30 mm
Maximum aggregate size	0.5 mm
Linear changes	≤ 0.06%
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Pot life (between mass mixing until work end)	approx. 40 minutes*
Foot traffic	after min. 4 hours*
Full setting and drying	28 days*
Start of heating	after approx. 7 days*
Fixing the cladding	screed moisture not higher than 1.5% (in case of impermeable or wooden coverings follow the manufacturer's guidelines)

*The time shown in the table is recommended for the application in the temperature 20°C and humidity 55-60% (approx.).

Technical requirements

The product conforms to PN-EN 13813 standard. EC Declaration of Performance No. 163/CPR.

CE	PN-EN 13813:2003 (EN 13813:2002)
Cement – based screed CT-C30-F7	self-leveling, for indoor use
Reaction to fire – class	$A1_{fl}$
Corrosive substance release	CT
Compressive strength – class	C30
Flexural strength - class	F7
Water permeability, vapour permeability, acoustic insulation, noise damping, heat resistance, chemical resistance	NPD
Release/content of hazardous substances	See: Safety Data Sheet

The product has been given the Radiation Hygiene Certificate.

Screed installation

Substrate preparation

The substrate should be stable, sound and air dry, due to the risk of mass outflow, should keep bath-like shape. General requirements for substrates:

- cement screeds – min. 28 days old,
- concrete – min. 3 months old.

Substrate irregularities (cracks and gaps) should be primed with ATLAS UNI-GRUNT emulsion or ATLAS GRUNTO-PLAST mass and leveled with ATLAS ZW 330 or ATLAS TEN-10 mortars. Dry, fixed substrate should be dusted and thoroughly primed with ATLAS UNI-GRUNT or ATLAS UNI-GRUNT PLUS emulsion and left to dry.

Expansion joints

Separate screed from walls with ATLAS EXPANSION JOINT PROFILES. The expansions joints should also be executed at room thresholds and around load-bearing posts. The existing structural expansion joints should be transferred onto the screed layer.

Mass preparation

Machine application – use mixing-and-pumping units with continuous flow of water. It is advisable to use pumps of efficiency 60 l/min. Pour the dry mix to the basket in the mixing-and-pumping unit, set the mix water level providing appropriate mass consistency. Proper consistency can be verified with the use of 0.5 liter or 1 liter container. The prepared mix, poured from a 0.5 liter container onto even, non-absorptive substrate (e.g. foil) should form a "patch" of approx. 35 ÷ 40 cm diameter (for 1.0 liter container - 50 ÷ 55 cm).

Manual application – pour the mortar from the bag into a container with the suitable amount of water (see Technical Data for ratio) and mix, best with a low-speed mixer with a drill for mortars, until homogenous. Remix after 5 minutes. The mass retains its properties for about 40 minutes. Proper consistency should be verified by pouring the mass from 1 liter container onto an even, non-absorptive substrate (e.g. foil). It should form a "patch" of approx. 50 ÷ 55 cm diameter.

Mass application

Before application, the future screed thickness is to be marked (on walls and in the application area), which can be done with, e.g. a level and portable height benchmarks. Pour the prepared mass evenly and continuously up to the desired height, avoid gaps. The application area should be arranged in the way allowing for mass application and de-aeration within approx. 40 minutes.

In case of manual application the excessive mass should be raked up towards oneself with a long metal float. Directly after each application area filling, the mass must be de-aerated with, e.g. a spike roller. For screeds of thickness above 20 mm it is advisable to use a stippler. It is recommended to perform de-aeration in two perpendicular directions just after the mass application.

Maintenance

The freshly applied screed should be protected against excessive drying, direct sunlight, low air humidity or draughts. In order to ensure favourable conditions for screed setting, depending on needs, sprinkle the freshly applied surface with water or cover it with foil. Proper maintenance leads to increase of strength of product but also extends the time of drying. The time of drying depends on layer thickness and ambient thermal and humidity conditions. Foot traffic is possible after approx. 4 hours and full load after approx. 7 days.

Finishing works

The time of finishing works execution depends on the setting conditions, humidity, type and permeability of the top finish materials and can commence after approx. 24 hours in case of tiling. Parquet, panels and PVC flooring can be installed after approx. 7 days. Minimum screed thickness beneath parquet – 3 mm. Prime the surface with ATLAS UNI-GRUNT or ATLAS UNI-GRUNT PLUS before fixing the cladding.

Consumption

The average consumption is 16.5 kg of mortar for 1 m^2 for each 10 mm of layer thickness.

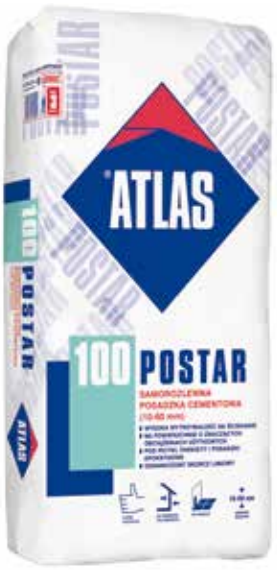
Important additional information

- Inappropriate amount of mix water results in deterioration of strength parameters of screed. Moreover, the use of too much mix water (overlow) can cause local dark discolouration. It is a surface phenomenon and disappears after grinding. Monitor the mass consistency and quality of mixing during screed application.
- Tools must be cleaned with clean water directly after use.
- Contains cement. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions in the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets), do not expose to direct sunshine, keep in dry, cool and well ventilated room. Protect against humidity – product gets irreversibly solid in contact with damp. Shelf life in conditions as specified is 9 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Foil bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-09-09



ATLAS POSTAR 100 (10-80 mm)
self-spreading cement floor

- very high compressive strength ≥ 50.0 N/mm²
- in warehouses, production halls, on driveways
- limited linear shrinkage
- self-spreading – easy in use
- for manual and machine application

Use

Levels surfaces within 10 - 80 mm thickness range - layer thickness depends on the expected structural arrangement (see table below). For leveling local irregularities as well as large scale flooring with slope.
Forms floor of high strength – recommended for loading ramps, driveways, underground car parks, terraces, balconies, warehouses, etc.
Can form top flooring layer as well as screed for other finishing materials.
Can be installed as screed with heating system – does not require elastifying admixtures, conducts heat well.
Can form screed for top flooring layers, e.g. parquet, epoxy floors and coats - characterised by high cohesion and resistance to setting forces, which occur within the joint with flooring layer, e.g. during expansion and contraction of wood resulting from the changes of humidity.

Types of finishing layers – ceramic and stone tiles, epoxy screeds and coats, PVC and carpet flooring, parquet, floor panels.
Types of possible arrangements:
bonded floor - thickness 10 - 60 mm – on good quality substrates, e.g. concrete, cement screed (with or without floor heating)
on separation layer - thickness 35 - 80 mm – on poor quality substrates, which do not provide appropriate bonding - dusty, cracked, oiled, dirty, very absorbable; separation layer can be made of, e.g. PE foil 0.2 mm thick.
floating - thickness 40 - 80 mm – applied on thermal or acoustic insulation layer made of: polystyrene boards of appropriate hardness, hardened mineral wool panels, etc.
heating – the layer above the heating layer should be **min. 35 mm thick.**

Properties

Perfect spreadability - enables execution of horizontal surfaces even in large rooms, with no use of battens and mass raking up with a darby.
Compressive strength: ≥ 50.0 N/mm².
Flexural strength: ≥ 7.0 N/mm².
Low linear shrinkage - minimum changes in linear dimensions during screed drying (approx. 0.6 mm/rm) limit the risk of cracking.
Suitable for machine application – easy and quick flooring even in large rooms.

Technical data

ATLAS POSTAR 100 manufactured as a dry mix of Portland cement, quartz fillers and modifiers.

Bulk density (of dry mix)	approx. 1.60 kg/dm³
Mass bulk density (after mixing)	approx. 2.25 kg/dm³
Dry density (after setting)	approx. 2.20 kg/dm³
Mixing ratio (water/dry mix)	0.13 ÷ 0.15 l/1 kg 3.25 ÷ 3.75 l/25 kg
Min./max. screed or floor thickness	10 mm / 80 mm
Maximum aggregate size	3.0 mm
Linear changes	≤ 0.06%
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Pot life	min. 30 minutes*
Foot traffic	after approx. 24 hours*
Fixing the cladding	after approx. 3 weeks*

*The time shown in the table is recommended for the application in the temperature 20°C and humidity 55-60% (approx.).

Technical requirements

ATLAS POSTAR 100 conforms to PN-EN 13813 standard. EC Declaration of Performance No. 084/CPR.

CE	PN-EN 13813:2003 (EN 13813:2002)
Cement based screed CT-C50-F7-A15	for indoor use
Reaction to fire – class	$A1_{fl}$
Corrosive substance release	CT
Compressive strength – class	C50 (≥ 50.0 N/mm²)
Flexural strength - class	F7 (≥ 7.0 N/mm²)
Böhme abrasion resistance - class	A15
Water permeability, vapour permeability, acoustic insulation, noise damping, heat resistance, chemical resistance	NPD
Release/content of hazardous substances	See: Safety Data Sheet

ATLAS POSTAR 100 has been given the ITB Technical Approval No. AT-15-6971/2012. Domestic Declaration of Conformity No. 084 of 30.04.2012. The product has been given the Radiation Hygiene Certificate.

Screed or floor installation

Substrate preparation

The substrate should be stable, sound and air dry, the method of its preparation depends on actual floor structural arrangement. General requirements for substrates:

- cement floors and screeds – min. 28 days old,
- concrete – min. 3 months old.

Bonded screed or floor. . The substrate must be free from layers which would impair bonding, particularly dust, lime, oils, grease, bitumen substances, paints, weak and loosening pieces of old substrates. Any substrate surface cracks should be widened, dusted and primed. Fill them with fast setting repair mortars ATLAS TEN-10 or ATLAS ZW 330. Prime once or twice with ATLAS UNI-GRUNT PLUS emulsion. Leave to dry (approx. 4 hours).

Screed or floor on separation layer. The separation layer, e.g. PE foil, must be spread tightly, without wrinkles and folded onto the walls (upon the expansion joint strips) at least to the height of the screed.

Floating floor or screed. The insulation boards must be placed tightly with offset edges upon even surface. Place the separation layer upon the boards and fold it onto the wall.

Screed with heating system. The heating installation must be checked and fixed, fill up the pipes of water heating system with water. The screed should be installed with one layer (when the heating installation is firmly fixed). Follow guidelines listed in the project documentation and recommendations of the heating system manufacturer.

Expansion joints

Separate floor or screed from walls and other elements within the application area with ATLAS EXPANSION JOINT PROFILES. The size of application area should not exceed:

- 36 m^2 with sides length up to 6 m indoors,
- 5 m^2 with sides length up to 3 m outdoors.

The expansions joints should also be executed at room thresholds and around load-bearing posts. The existing structural expansion joints should be transferred onto the floor or screed layer.

Mortar preparation

Manual application. Pour the mortar from the bag into a container with the suitable amount of water (see Technical Data for ratio) and mix until homogenous. Mix mechanically with a low speed mixer with a drill for gypsum, a flow mixer or a cement mixer. The mortar is ready to use directly after mixing and keeps properties within approx. 30 minutes.

Machine application. Pour the mortar into the basket of the mixing-and-pumping unit, set the mix water level providing appropriate consistency of the mass leaving the hose.

Mass application

The mass is poured mechanically with mixing-and-pumping units with continuous water flow and worm pump. It can also be poured manually. Before application, the future screed or floor thickness is to be marked within the application area, which can be done with, e.g. a level and portable height benchmarks. Pour the prepared mass evenly and continuously up to the desired height, avoid gaps. Just after filling an individual area, the mass has to be de-aerated with, e.g. de-aeration roller or a brush with long and hard hair. Move the brush shaking along and across the application area. The application area should be filled, leveled and de-aerated within approx. 30 minutes.

Screed drying and maintenance

During application and directly after, protect the installed layer against excessive drying, direct sunlight, low air humidity or draughts. In order to ensure favourable conditions for mortar setting, depending on needs, sprinkle the freshly applied surface with water or cover it with foil. The time of drying depends on the layer thickness and ambient thermal and humidity conditions. The use of screed or floor (foot traffic) can start after approx. 24 hours and full load after approx. 14 days.

Finishing works

The time of finishing works execution depends on the type of top finish and should start when screed parameters stabilize (after approx. 3-4 weeks), and in case of PVC flooring or parquet – after full drying. Prime the surface with ATLAS UNI-GRUNT PLUS before fixing the cladding.

Consumption

The average consumption is 20 kg of mortar for 1 m^2 for each 10 mm of layer thickness.

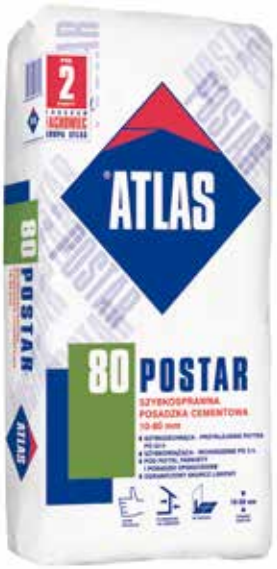
Important additional information

- Inappropriate amount of mix water results in deterioration of strength parameters of floor or screed. Monitor the mass consistency and quality of mixing during screed or floor application.
- Until the floor heating is fully turned on, temperature should be increased every 24 hours by maximum 2°C till the maximum operation temperature is achieved. The temperature should then be lowered at the same rate until the heating is turned off.
- Before the application of PCV flooring apply a smoothing layer made of ATLAS SMS 15 or ATLAS SMS 30.
- Tools must be cleaned with clean water directly after use.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions in the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Paper bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to building principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-08-04



ATLAS POSTAR 80 (10-80 mm)
fast setting cement floor

- fast drying – further works just after 24 hours
- fast setting - foot traffic after 3 hours
- limited linear shrinkage
- high compressive strength ≥ 40.0 N/mm²
- excellent cohesion, under parquets and epoxy floors

Use

Forms screed or floor 10 - 80 mm thick - layer thickness depends on the expected structural arrangement (see table below).
Recommended for quick repairs – fast setting - rapidly reaches the operational parameters, therefore the technological breaks are shorter and application of subsequent layers quicker: foot traffic just after 3 hours; fixing the tiles - just after 24 hours.
Can form screed for top flooring layers, e.g. parquet, epoxy floors and coats - characterised by high cohesion and resistance to setting forces, which occur within the joint with flooring layer, e.g. during expansion and contraction of wood resulting from the changes of humidity.
Forms floor characterised by high abrasion resistance – recommended for residential housing, warehouses, industrial premises, on driveways, terraces, etc.
Can be installed as screed with heating system – does not require elastifying admixtures, conducts heat well.
Enables forming a slope and repairs of concrete surfaces, stairs, slabs, floors.

Types of finishing layers – ceramic and stone tiles, epoxy screeds and coats, PVC and carpet flooring, parquet, floor panels.
Types of possible arrangements:
bonded - thickness 10 - 60 mm – on good quality substrates, e.g. concrete, cement screed (with or without floor heating)
on separation layer - thickness 35 - 80 mm – on poor quality substrates, which do not provide appropriate bonding - dusty, cracked, oiled, dirty, very absorbable; separation layer can be made of, e.g. PE foil 0.2 mm thick.
floating - thickness 40 - 80 mm – applied on thermal or acoustic insulation layer made of: polystyrene boards of appropriate hardness, hardened mineral wool panels, etc
heating – the layer above the heating layer should be **min. 35 mm thick.**

Properties

Fast-drying - the residual moisture content below 2.6% for screed approx. 4 cm thick after 24 hours since application (in standard conditions).
Fast setting – rapid strength build up within the first day of setting.
Thick plasticity - mortar consistency makes it easy to spread, float and to form even surface.
Compressive strength: ≥ 40.0 N/mm² - recommended for any surfaces exposed to medium and high load.
Flexural strength: ≥ 7.0 N/mm².
Abrasion resistance: ≤9.5 cm³/50 cm² - acc. to Böhme (Technical Approval AT-15-8462/2010).
Low linear shrinkage - minimum changes in linear dimensions during screed drying (approx. 0.6 mm/rm) limit the risk of cracking.

Technical data

ATLAS POSTAR 80 manufactured as a dry mix of Portland cement, quartz fillers and modifiers.

Bulk density (of dry mix)	approx. 1.75 kg/dm³
Mass bulk density (after mixing)	approx. 2.40 kg/dm³
Dry density (after setting)	approx. 2.20 kg/dm³
Mixing ratio (water/dry mix)	approx. 0.08 l/1 kg approx. 2.00 l/25 kg
Min./max. screed or floor thickness	10 mm / 80 mm
Maximum aggregate size	4.0 mm
Linear changes	≤ 0.06%
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +30°C
Pot life	min. 30 minutes*
Foot traffic	after approx. 3 hours*
Fixing the cladding	after approx. 24 hours*
Fixing the parquet, PCV or linoleum flooring	after approx. 24 hours*

*The time shown in the table is recommended for the application in the temperature 20°C and humidity 55-60% (approx.).

Changes in residual moisture content within time. The results of testing in standard conditions in temp. 20°C and humidity 55 - 60%. Perform humidity tests (with CM method) prior to each application of the flooring materials.

Time / layer thickness	1.5 cm	4 cm	7 cm
1 day	2.1 %	2.6 %	3.9 %
3 days	1.8 %	2.2 %	2.9 %
5 days	1.6 %	1.8 %	1.9 %

Technical requirements

ATLAS POSTAR 80 conforms to PN-EN 13813 standard. EC Declaration of Performance No. 099/CPR.

CE	PN-EN 13813:2003 (EN 13813:2002)
Cement based screed CT-C40-F7-A12	for indoor use
Reaction to fire – class	$A1_{fl}$
Corrosive substance release	CT
Compressive strength – class	C40 (≥ 40.0 N/mm^2)
Flexural strength - class	F7 (≥ 7.0 N/mm^2)
Abrasion resistance - class	A12
Water permeability, vapour permeability, acoustic insulation, noise damping, heat resistance, chemical resistance	NPD
Release/content of hazardous substances	See: Safety Data Sheet

ATLAS POSTAR 80 has been given the ITB Technical Approval No. AT-15- 8462/2010. Domestic Declaration of Conformity No. 099 of 01.10.2010. The product has been given the Radiation Hygiene Certificate.

Screed or floor installation

Substrate preparation

The substrate should be stable, sound and air dry, the method of its preparation depends on actual floor structural arrangement. General requirements for substrates:

- cement floors and screeds – min. 28 days old,
- concrete – min. 3 months old.

Bonded screed or floor. The substrate must be free from layers which would impair bonding, particularly dust, lime, oils, grease, bitumen substances, paints, weak and loosening pieces of old substrates. Any substrate surface cracks should be widened and dusted. Just before the application of the main mortar layer, the substrate should be moistened with water and contact coat applied.

The contact coat can be prepared with one of the following methods:

- with ATLAS POSTAR 80 modified with ATLAS ELASTIC EMULSION in ratio: 1 kg of dry mix + 0.12 l of water + 0.06 l of ATLAS ELASTIC EMULSION,
- with ATLAS ADHER mortar.

The contact coat has liquid consistency and can be applied with a brush. Rub it well into previously moistened substrate. When the contact coat dries, apply another one before the application of the main screed layer ("wet on wet" method).

Screed or floor on separation layer. The separation layer, e.g. PE foil, must be spread tightly, without wrinkles and folded onto the walls (upon the expansion joint strips) at least to the height of the screed.

Floating floor or screed. The insulation boards must be placed tightly with offset edges upon even surface. Place the separation layer upon the boards and fold it onto the wall.

Screed with heating system. The heating installation must be checked and fixed, fill up the pipes of water heating system with water. The screed should be installed with one layer (when the heating installation is firmly fixed). Follow guidelines listed in the project documentation and recommendations of the heating system manufacturer.

Expansion joints

Separate floor or screed from walls and other elements within the application area with ATLAS EXPANSION JOINT PROFILES. The size of application area should not exceed:

- 36 m^2 with sides length up to 6 m indoors,
- 5 m^2 with sides length up to 3 m outdoors.

The expansions joints should also be executed at room thresholds and around load-bearing posts. The existing structural expansion joints should be transferred onto the floor or screed layer.

Mortar preparation

Pour the mortar from the bag into a container with the suitable amount of water (see Technical Data for ratio) and mix until homogenous. Mix mechanically with a low speed mixer with a drill for mortars, a flow mixer or a cement mixer. The mortar is ready to use directly after mixing and keeps properties within approx. 30 minutes.

Mass application

Carry the works out according to flooring technology. Use wooden or metal battens to keep screed surface even. Place the battens so the screed or floor layer thickness corresponds to the expected one and is in no place lower than the minimum thickness assumed for a chosen structural arrangement (bonded, on separation layer, floating). In order to compact the mass and spread it more precisely, one can vibrate it with a darby or compact with a float. Collect the excessive mortar along the battens with zigzag moves. The application area should be filled and leveled within approx. 30 minutes. The surface can be floated and smoothed after approx. 3 hours.

Screed drying and maintenance

During application and directly after, protect the installed screed or floor against excessive drying, direct sunlight, low air humidity or draughts. In order to ensure favourable conditions for mortar setting, depending on needs, sprinkle the freshly applied surface with water or cover it with foil. Proper maintenance leads to increase of strength of product but also extends the time of drying. The time of drying depends on the layer thickness and ambient thermal and humidity conditions. The use of screed or floor (foot traffic) can start after approx. 3 hours and full load after approx. 7 days.

Finishing works

The time of finishing works execution depends on the setting conditions, humidity, type and permeability of the top finish materials and can commence after approx. 24 hours in case of tiling. PVC flooring can be installed when the screed dries fully. Parquet can be installed after approx. 7 days.

If in doubt on the actual residual moisture content, carry out appropriate measuring. The residual moisture content should not exceed:

3% - for tiling,

2% - for the application of self-levelling masses or vapour impermeable flooring, e.g. PVC, wooden flooring, epoxy floors.

Prime the surface with ATLAS UNI-GRUNT PLUS before fixing the cladding.

Consumption

The average consumption is 20 kg of mortar for 1 m^2 for each 10 mm of layer thickness.

Important additional information

- Inappropriate amount of mix water results in deterioration of strength parameters of of floor or screed. Monitor the mass consistency and quality of mixing during screed or floor application.
- Higher air humidity or low temperature extend the setting time of screed.
- Until the floor heating is fully turned on, temperature should be increased every 24 hours by maximum 2°C till the maximum operation temperature is achieved. The temperature should then be lowered at the same rate until the heating is turned off.
- Before the application of PCV flooring apply a smoothing layer made of ATLAS SMS 15 or ATLAS SMS 30.
- Tools must be cleaned with clean water directly after use.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions in the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

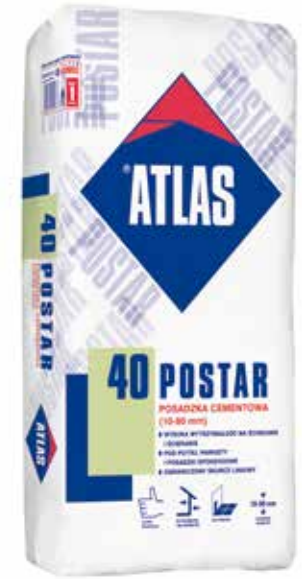
Paper bags: 25 kg

Pallet: 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to building principles and OHS regulations.

At the time of publication of this product data sheet all previous ones become void.

Date of update: 2015-04-24



ATLAS POSTAR 40 (10-80 mm)
cement floor

- high compressive strength ≥ 30.0 N/mm²
- in warehouses, production halls, on driveways
- under tiles, parquet, epoxy floor
- for places exposed to permanent damp
- bonded, on separation layer or floating

Use

Forms screed or floor 10 - 80 mm thick - layer thickness depends on the expected structural arrangement (see table below).
Can form screed for top flooring layers, e.g. parquet, epoxy floors and coats - characterised by high cohesion and resistance to setting forces, which occur within the joint with flooring layer, e.g. during expansion and contraction of wood resulting from the changes of humidity.
Recommended for installation of screeds and floors in residential housing, warehouses, industrial premises, on driveways, terraces, etc.
Enables forming a slope.
Can be installed as screed with heating system – does not require elastifying admixtures, conducts heat well.

Types of finishing layers – ceramic and stone tiles, epoxy screeds and coats, PVC and carpet flooring, parquet, floor panels.
Types of possible arrangements:
bonded - thickness 10 - 60 mm – on good quality substrates, e.g. concrete, cement screed (with or without floor heating)
on separation layer - thickness 35 - 80 mm – on poor quality substrates, which do not provide appropriate bonding - dusty, cracked, oiled, dirty, very absorbable; separation layer can be made of, e.g. PE foil 0.2 mm thick
floating - thickness 40 - 80 mm – applied on thermal or acoustic insulation layer made of: polystyrene boards of appropriate hardness, hardened mineral wool panels, etc.
heating – the layer above the heating layer should be **min. 35 mm thick.**

Properties

Thick plasticity - mortar consistency makes it easy to spread, float and to form even surface.
Compressive strength: ≥ 30.0 N/mm².
Flexural strength: ≥ 6.0 N/mm².
Low linear shrinkage - minimum changes in linear dimensions during screed drying (approx. 0.8 mm/rm) limit the risk of cracking.
Suitable for manual application - to be spread on battens.
The mix can be prepared in flow mixers.
The mortar can be supplemented with, so-called anti-frost additives allowing to carry out works in low temperature, i.e. below +5°C – the new range of temperature of mortar application, the way of preparation (especially the adjustment of mix water), principles of carrying out works and mortar setting conditions must be set according to the guidelines of the additive manufacturer. The amount of the anti-frost agent depends on the content of cement in the mortar – the ratio cement/fillers in ATLAS POSTAR 40 is 1:3.
Note. The manufacturer of the mortar does not bear responsibility for the result and the quality of the anti-frost agents used.

Technical data

ATLAS POSTAR 40 manufactured as a dry mix of Portland cement, quartz fillers and improvers.

Bulk density (of dry mix)	approx. 1.75 kg/dm³
Mass bulk density (after mixing)	approx. 2.25 kg/dm³
Dry density (after setting)	approx. 2.15 kg/dm³
Mixing ratio (water/dry mix)	0.08 ÷ 0.15 l/1 kg 2.00 ÷ 3.75 l/25 kg
Min./max. screed or floor thickness	10 mm / 80 mm
Contact coat ratio for bonded floor of thickness below 2.0-2.5 cm	1 kg of dry mix + 0.12 l of water + 0.06 l of ATLAS ELASTIC EMULSION
Maximum aggregate size	3.0 mm
Linear changes	≤ 0.08%
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Pot life	min. 1 hour*
Foot traffic	after approx. 24 hours*
Fixing the cladding	after approx. 3-4 weeks*

*The time shown in the table is recommended for the application in the temperature 20°C and humidity 55-60% (approx.).

Technical requirements

ATLAS POSTAR 40 conforms to PN-EN 13813 standard. EC Declaration of Performance No. 039/CPR.

CE	PN-EN 13813:2003 (EN 13813:2002)
Cement based screed CT-C30-F6-A22	for indoor use
Reaction to fire – class	$A1_{fl}$
Corrosive substance release	CT
Compressive strength – class	C30 (≥ 30 N/mm²)
Flexural strength - class	F6 (≥ 6 N/mm²)
Abrasion resistance - class	A22
Water permeability, vapour permeability, acoustic insulation, noise damping, heat resistance, chemical resistance	NPD
Release/content of hazardous substances	See: Safety Data Sheet

ATLAS POSTAR 40 has been given the ITB Technical Approval No. AT-15- 6972/2012. Domestic Declaration of Conformity No. 039 of 30.04.2012. The product has been given the Radiation Hygiene Certificate.

Screed or floor installation

Substrate preparation
The substrate should be stable, sound and air dry, the method of its preparation depends on actual floor structural arrangement. General requirements for substrates:
- cement floors and screeds – min. 28 days old,
- concrete – min. 3 months old.

Bonded screed or floor. The substrate must be free from layers which would impair bonding, particularly dust, lime, oils, grease, bitumen substances, paints, weak and loosening pieces of old substrates. Any substrate surface cracks should be widened and dusted. Just before the application of the main mortar layer, the substrate should be moistened with water and contact coat applied.
The contact coat can be prepared with one of the following methods:
- with ATLAS POSTAR 40 modified with ATLAS ELASTIC EMULSION in ratio: 1 kg of dry mix + 0.12 l of water + 0.06 l of ATLAS ELASTIC EMULSION,
- with ATLAS ADHER mortar.

The contact coat has liquid consistency and can be applied with a brush. Rub it well into previously moistened substrate. When the contact coat dries, apply another one before the application of the main screed layer.
Screed or floor on separation layer. The separation layer, e.g. PE foil, must be spread tightly, without wrinkles and folded onto the walls (upon the expansion joint strips) at least to the height of the screed.
Floating floor or screed. The insulation boards must be placed tightly with offset edges upon even surface. Place the separation layer upon the boards and fold it onto the wall.
Screed with heating system. The heating installation must be checked and fixed, fill up the pipes of water heating system with water. The screed should be installed with one layer (when the heating installation is firmly fixed). Follow guidelines listed in the project documentation and recommendations of the heating system manufacturer.

Expansion joints
Separate floor or screed from walls and other elements within the application area with ATLAS EXPANSION JOINT PROFILES. The size of application area should not exceed:
- 36 m^2 with sides length up to 6 m indoors,
- 5 m^2 with sides length up to 3 m outdoors.

The expansions joints should also be executed at room thresholds and around load-bearing posts. The existing structural expansion joints should be transferred onto the floor or screed layer.

Mortar preparation
Pour the mortar from the bag into a container with the suitable amount of water (see Technical Data for ratio) and mix until homogenous. Mix mechanically with a low speed mixer with a drill for mortars, a flow mixer or a cement mixer. The mortar is ready to use directly after mixing and keeps properties within approx. 1 hour.

Mass application
Carry the works out according to flooring technology. Use wooden or metal battens to keep floor or screed surface even. Place the battens so the floor or screed layer thickness corresponds to the expected one and is in no place lower than the minimum thickness assumed for a chosen structural arrangement (bonded, on separation layer, floating). In order to compact the mass and spread it more precisely, one can vibrate it with a darby or compact with a float. Collect the excessive mortar along the battens with zigzag moves. The application area should be filled and leveled within approx. 1 hour. The surface can be floated and smoothed after approx. 3 hours.

Screed drying and maintenance
During application and directly after, protect the installed layer against excessive drying, direct sunlight, low air humidity or draughts. In order to ensure favourable conditions for mortar setting, depending on needs, sprinkle the freshly applied surface with water or cover it with foil. Proper maintenance leads to increase of strength of product but also extends the time of drying. Reduce heating in a room where screed or floor has been installed. The time of drying depends on the layer thickness and ambient thermal and humidity conditions. The use of screed or floor (foot traffic) can start after approx. 24 hours and full load after approx. 14 days.

Finishing works
The time of finishing works execution depends on the type of top finish and should start when screed parameters stabilize (after approx. 3-4 weeks), and in case of PVC flooring or parquet – after full drying. Prime the surface with ATLAS UNI-GRUNT before fixing the cladding.

Consumption

The average consumption is 20 kg of mortar for 1 m^2 for each 10 mm of layer thickness.

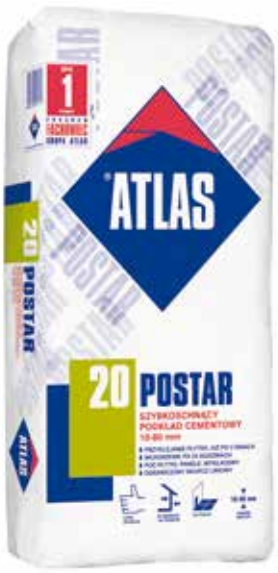
Important additional information

- Inappropriate amount of mix water results in deterioration of strength parameters of floor or screed.
- Until the floor heating is fully turned on, temperature should be increased every 24 hours by maximum 2°C till the maximum operation temperature is achieved. The temperature should then be lowered at the same rate until the heating is turned off.
- Before the application of PCV flooring apply a smoothing layer made of ATLAS SMS 15 or ATLAS SMS 30.
- Tools must be cleaned with clean water directly after use.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions in the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Paper bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to building principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-04-24



ATLAS POSTAR 20 (10-80 mm)
fast drying cement screed

- fast drying – further works just after 5 days
- foot traffic after 24 hours
- limited linear shrinkage
- high compressive strength ≥ 20.0 N/mm²
- for places exposed to permanent damp

Use

Forms screed 10 - 80 mm thick - layer thickness depends on the expected structural arrangement (see table below).
Recommended for installation of screeds in residential housing, public access buildings, etc.
Can be installed as screed with heating system – does not require elastifying admixtures, conducts heat well.
Enables forming a slope and repairs of concrete surfaces, stairs, slabs, floors.

Types of finishing layers – ceramic and stone tiles, PVC and carpet flooring, floor panels.
Types of possible arrangements:
bonded - thickness 10 - 80 mm – on good quality substrates, e.g. concrete, cement screed (with or without floor heating)
on separation layer - thickness 35 - 80 mm – on poor quality substrates, which do not provide appropriate bonding - dusty, cracked, oiled, dirty, very absorbable; separation layer can be made of, e.g. PE foil 0.2 mm thick
floating - thickness 40 - 80 mm – applied on thermal or acoustic insulation layer made of: polystyrene boards of appropriate hardness, hardened mineral wool panels, etc.
heating – – the layer above the heating layer should be **min. 35 mm thick.**

Properties

Fast-drying - the residual moisture content below 3% for screed approx. 4 cm thick after 5 - 6 days since application (in standard conditions).
Thick plasticity - mortar consistency makes it easy to spread, float and to form even surface (horizontal or sloped).
Compressive strength: ≥ 20.0 N/mm².
Flexural strength: ≥ 4.0 N/mm².
Low linear shrinkage - minimum changes in linear dimensions during screed drying (approx. 0.6 mm/rm) limit the risk of cracking.

Technical data

ATLAS POSTAR 20 manufactured as a dry mix of Portland cement, quartz fillers and additives.

Bulk density (of dry mix)	approx. 1.60 kg/dm³
Mass bulk density (after mixing)	approx. 2.20 kg/dm³
Dry density (after setting)	approx. 1.95 kg/dm³
Mixing ratio (water/dry mix)	approx. 0.11 l/1 kg approx. 2.75 l/25 kg
Min./max. screed thickness	10 mm / 80 mm
Maximum aggregate size	3.0 mm
Linear changes	≤ 0.06%
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +30°C
Pot life	min. 30 minutes*
Foot traffic	after approx. 24 hours*
Fixing the cladding	after approx. 5-6 days*

*The time shown in the table is recommended for the application in the temperature 20°C and humidity 55-60% (approx.).

Changes in residual moisture content within time. The results of testing in standard conditions in temp. 20°C and humidity 55 - 60%. Perform humidity tests (with CM method) prior to each application of the flooring materials.

Time / layer thickness	1.5 cm	4 cm	7 cm
2 days	2.0 %	2.4 %	3.6 %
7 days	1.5 %	2.1 %	2.7 %
14 days	1.4 %	1.6 %	1.8 %

Technical requirements

ATLAS POSTAR 20 conforms to PN-EN 13813 standard. EC Declaration of Performance No. 107/CPR.

CE	PN-EN 13813:2003 (EN 13813:2002)
Cement based screed CT-C20-F4	for indoor use
Reaction to fire – class	$A1_{fl}$
Corrosive substance release	CT
Compressive strength – class	C20 (≥ 20.0 N/mm^2)
Flexural strength - class	F4 (≥ 4.0 N/mm^2)
Water permeability, vapour permeability, acoustic insulation, noise damping, heat resistance, chemical resistance	NPD
Release/content of hazardous substances	See: Safety Data Sheet

ATLAS POSTAR 20 has been given the ITB Technical Approval No. AT-15- 8432/2010. Domestic Declaration of Conformity No. 107 of 11.08.2010. The product has been given the Radiation Hygiene Certificate.

Screed installation

Substrate preparation

The substrate should be stable, sound and air dry, the method of its preparation depends on actual floor structural arrangement. General requirements for substrates:

- cement floors and screeds – min. 28 days old,
- concrete – min. 3 months old

Bonded screed. The substrate must be free from layers which would impair bonding, particularly dust, lime, oils, grease, bitumen substances, paints, weak and loosening pieces of old substrates. Any substrate surface cracks should be widened and dusted. Just before the application of the main mortar layer, the substrate should be moistened with water and contact coat applied.

The contact coat can be prepared with one of the following methods:

- with ATLAS POSTAR 20 modified with ATLAS ELASTIC EMULSION in ratio: 1 kg of dry mix + 0.12 l of water + 0.06 l of ATLAS ELASTIC EMULSION,
- with ATLAS ADHER mortar.

The contact coat has liquid consistency and can be applied with a brush. Rub it well into previously moistened substrate. When the contact coat dries, apply another one before the application of the main screed layer.

Screed on separation layer. The separation layer, e.g. PE foil, must be spread tightly, without wrinkles and folded onto the walls (upon the expansion joint strips) at least to the height of the screed.

Floating screed. The insulation boards must be placed tightly with offset edges upon even surface. Place the separation layer upon the boards and fold it onto the wall.

Screed with heating system. The heating installation must be checked and fixed, fill up the pipes of water heating system with water. The screed should be installed with one layer (when the heating installation is firmly fixed). Follow guidelines listed in the project documentation and recommendations of the heating system manufacturer.

Expansion joints

Separate screed from walls and other elements within the application area with ATLAS EXPANSION JOINT PROFILES. The size of application area should not exceed:

- 36 m^2 with sides length up to 6 m indoors,
- 5 m^2 with sides length up to 3 m outdoors.

The expansions joints should also be executed at room thresholds and around load-bearing posts. The existing structural expansion joints should be transferred onto the screed layer.

Mortar preparation

Pour the mortar from the bag into a container with the suitable amount of water (see Technical Data for ratio) and mix until homogenous. Mix mechanically with a low speed mixer with a drill for mortars, a flow mixer or a cement mixer. The mortar is ready to use directly after mixing and keeps properties within approx. 30 minutes.

Mass application

Carry the works out according to flooring technology. Use wooden or metal battens to keep screed surface even. Place the battens so the screed layer thickness corresponds to the expected one and is in no place lower than the minimum thickness assumed for a chosen structural arrangement (bonded, on separation layer, floating). In order to compact the mass and spread it more precisely, one can vibrate it with a darby or compact with a float. Collect the excessive mortar along the battens with zigzag moves. The application area should be filled and leveled within approx. 30 minutes. The surface can be floated and smoothed after approx. 3 hours.

Screed drying and maintenance

During application and directly after, protect the installed layer against excessive drying, direct sunlight, low air humidity or draughts. In order to ensure favourable conditions for mortar setting, depending on needs, sprinkle the freshly applied surface with water or cover it with foil. Proper maintenance leads to increase of strength of product but also extends the time of drying. The time of drying of screed depends on the layer thickness and ambient thermal and humidity conditions. The use of screed (foot traffic) can start after approx. 24 hours and full load after approx. 14 days.

Finishing works

The time of finishing works execution depends on the setting conditions, humidity, type and permeability of the top finish materials and can commence after approx. 5 - 6 days in case of tiling. PVC flooring can be installed when the screed dries fully.

If in doubt on the actual residual moisture content, carry out appropriate measuring. The residual moisture content should not exceed:

3% - for tiling,

2% - for the application of self-levelling masses or vapour impermeable flooring, e.g. PVC.

Prime the surface with ATLAS UNI-GRUNT PLUS before fixing the cladding.

Consumption

The average consumption is 20 kg of mortar for 1 m^2 for each 10 mm of layer thickness..

Important additional information

- Inappropriate amount of mix water results in deterioration of strength parameters of screed. Monitor the mass consistency and quality of mixing during screed application.
- Higher air humidity or low temperature extend the setting time of screed.
- Until the floor heating is fully turned on, temperature should be increased every 24 hours by maximum 2°C till the maximum operation temperature is achieved. The temperature should then be lowered at the same rate until the heating is turned off.
- Before the application of PCV flooring apply a smoothing layer made of ATLAS SMS 15 or ATLAS SMS 30.
- Tools must be cleaned with clean water directly after use.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions in the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%..

Packaging

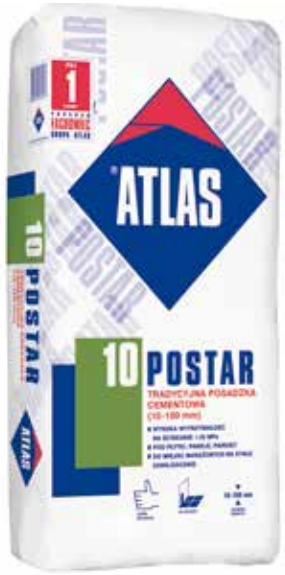
Paper bags: 25 kg

Pallet: 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to building principles and OHS regulations.

At the time of publication of this product data sheet all previous ones become void.

Date of update: 2015-05-08



ATLAS POSTAR 10 (10-100 mm)

traditional cement floor

- high compressive strength ≥ 25.0 N/mm²
- in warehouses, production halls
- under tiles, parquet, panels
- for places exposed to permanent damp
- bonded, on separation layer or floating

Use

Forms screed or floor 10 - 100 mm thick - layer thickness depends on the expected structural arrangement (see table below).
Can form screed for top flooring layers, e.g. parquet - characterised by high cohesion and resistance to setting forces, which occur within the joint with flooring layer, e.g. during expansion and contraction of wood resulting from the changes of humidity.
Recommended for installation of screeds and floors in residential housing, warehouses, industrial premises, etc.
Enables forming a slope.
Can be installed as screed with heating system - conducts heat well.

Types of finishing layers – ceramic and stone tiles, epoxy screeds, PVC and carpet flooring, parquet, floor panels.
Types of possible arrangements:
bonded - thickness 10 - 100 mm – on good quality substrates, e.g. concrete, cement screed (with or without floor heating)
on separation layer - thickness 35 - 100 mm – on poor quality substrates, which do not provide appropriate bonding - dusty, cracked, oiled, dirty, very absorbable; separation layer can be made of, e.g. PE foil 0.2 mm thick
floating - thickness 40 - 100 mm – applied on thermal or acoustic insulation layer made of: polystyrene boards of appropriate hardness, hardened mineral wool panels, etc.
heating – the layer above the heating layer should be **min. 35 mm thick.**

Properties

Thick plasticity - mortar consistency makes it easy to spread, float and to form even surface.
Compressive strength: ≥ 25.0 N/mm².
Flexural strength: ≥ 5.0 N/mm².
Low linear shrinkage - minimum changes in linear dimensions during screed drying (approx. 0.6 mm/rm) limit the risk of cracking.
Suitable for manual application - to be spread on battens.
The mix can be prepared in flow mixers.

Technical data

ATLAS POSTAR 10 manufactured as a dry mix of Portland cement, quartz fillers and improvers.

Bulk density (of dry mix)	approx. 1.60 kg/dm³
Mass bulk density (after mixing)	approx. 2.00 kg/dm³
Dry density (after setting)	approx. 2.20 kg/dm³
Mixing ratio (water/dry mix)	0.09 ÷ 0.12 l/1 kg 2.25 ÷ 3.00 l/25 kg
Min./max. screed or floor thickness	10 mm / 100 mm
Maximum aggregate size	3.0 mm
Linear changes	≤ 0.06%
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Pot life	min. 1 hour*
Foot traffic	after approx. 24 hours*
Fixing the cladding	after approx. 2 weeks*

*The time shown in the table is recommended for the application in the temperature 20°C and humidity 55-60% (approx.).

Technical requirements

ATLAS POSTAR 10 conforms to PN-EN 13813 standard. EC Declaration of Performance No. 173/CPR.

CE	PN-EN 13813:2003 (EN 13813:2002)
Cement based screed CT-C25-F5-A15	for indoor use
Reaction to fire – class	$A1_{fl}$
Corrosive substance release	CT
Compressive strength – class	C25 (≥ 25 N/mm²)
Flexural strength - class	F5 (≥ 5 N/mm²)
Böhme abrasion resistance - class	A15
Water permeability, vapour permeability, acoustic insulation, noise damping, heat resistance, chemical resistance	NPD
Release/content of hazardous substances	See: Safety Data Sheet

ATLAS POSTAR 10 has been given the ITB Technical Approval No. AT-15- 9621/2016. Domestic Declaration of Conformity No. 173 of 27.01.2016. The product has been given the Radiation Hygiene Certificate.

Screed or floor installation

Substrate preparation

The substrate should be stable, sound and air dry, the method of its preparation depends on actual floor structural arrangement. General requirements for substrates:

- cement floors and screeds – min. 28 days old,
- concrete – min. 3 months old.

Bonded screed or floor. The substrate must be free from layers which would impair bonding, particularly dust, lime, oils, grease, bitumen substances, paints, weak and loosening pieces of old substrates. Any substrate surface cracks should be widened and dusted. Just before the application of the main mortar layer, the substrate should be moistened with water and contact coat applied.

The contact coat can be prepared with one of the following methods:

- with ATLAS POSTAR 10 modified with ATLAS ELASTIC EMULSION in ratio: 1 kg of dry mix + 0.12 l of water + 0.06 l of ATLAS ELASTIC EMULSION,
- with ATLAS ADHER mortar.

The contact coat has liquid consistency and can be applied with a brush. Rub it well into previously moistened substrate. When the contact coat dries, apply another one before the application of the main screed layer.

Screed or floor on separation layer. The separation layer, e.g. PE foil, must be spread tightly, without wrinkles and folded onto the walls (upon the expansion joint strips) at least to the height of the screed.

Floating floor or screed. The insulation boards must be placed tightly with offset edges upon even surface. Place the separation layer upon the boards and fold it onto the wall.

Screed with heating system. The heating installation must be checked and fixed, fill up the pipes of water heating system with water. The screed should be installed with one layer (when the heating installation is firmly fixed). Follow guidelines listed in the project documentation and recommendations of the heating system manufacturer.

Expansion joints

Separate floor or screed from walls and other elements within the application area with ATLAS EXPANSION JOINT PROFILES. The size of application area should not exceed:

- 36 m^2 with sides length up to 6 m indoors,
- 5 m^2 with sides length up to 3 m outdoors.

The expansions joints should also be executed at room thresholds and around load-bearing posts. The existing structural expansion joints should be transferred onto the floor or screed layer.

Mortar preparation

Pour the mortar from the bag into a container with the suitable amount of water (see Technical Data for ratio) and mix until homogenous. Mix mechanically with a low speed mixer with a drill for mortars, a flow mixer or a cement mixer. The mortar is ready to use directly after mixing and keeps properties within approx. 1 hour.

Mass application

Carry the works out according to flooring technology. Use wooden or metal battens to keep floor or screed surface even. Place the battens so the floor or screed layer thickness corresponds to the expected one and is in no place lower than the minimum thickness assumed for a chosen structural arrangement (bonded, on separation layer, floating). In order to compact the mass and spread it more precisely, one can vibrate it with a darby or compact with a float. Collect the excessive mortar along the battens with zigzag moves. The application area should be filled and leveled within approx. 1 hour. The surface can be floated and smoothed after approx. 3 hours (if needed).

Screed drying and maintenance

During application and directly after, protect the installed layer against excessive drying, direct sunlight, low air humidity or draughts. In order to ensure favourable conditions for mortar setting, depending on needs, sprinkle the freshly applied surface with water or cover it with foil. Proper maintenance leads to increase of strength of product but also extends the time of drying. Reduce heating in a room where screed or floor has been installed. The time of drying depends on the layer thickness and ambient thermal and humidity conditions. The use of screed or floor (foot traffic) can start after approx. 24 hours and full load after approx. 14 days.

Finishing works

The time of finishing works execution depends on the type of top finish and should start when screed parameters stabilize (after approx. 2 weeks), and in case of PVC flooring or parquet – after full drying. Prime the surface with ATLAS UNI-GRUNT before fixing the cladding.

Consumption

The average consumption is 20 kg of mortar for 1 m^2 for each 10 mm of layer thickness.

Important additional information

- Inappropriate amount of mix water results in deterioration of strength parameters of floor or screed.
- Until the floor heating is fully turned on, temperature should be increased every 24 hours by maximum 2°C till the maximum operation temperature is achieved. The temperature should then be lowered at the same rate until the heating is turned off.
- Before the application of PCV flooring apply a smoothing layer made of ATLAS SMS 15 or ATLAS SMS 30.
- Tools must be cleaned with clean water directly after use.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions in the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%..

Packaging

Paper bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to building principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-04-01

ATLAS FLOOR EXPANSION JOINT PROFILES

- for cement and anhydrite-gypsum based screeds
- form perimeter and intermediate expansion joints
- with noise damping properties

FOR FLOORS INDOORS

Use

Installation of perimeter and intermediate expansion joints in floating floors.

Properties

Non-absorbent.
Easy in use – with self-adhesive element.
Allow for free screed action – reduce the risk of screed cracking resulting from deformation, e.g. thermal one.
Soundproofing - at walls and other vertical elements, e.g. columns.
Available in two types – with or without foil apron (with a foil apron one can attach the profile to the plastic foil separating the floor layers).

Technical data

ATLAS EXPANSION JOINT PROFILES are made of CONTACTFOAM polyethylene foam.

Cross-section thickness	8 mm
Profile height	70 mm (without an apron) 120 mm (with a foil apron)

Profiles installation

Screed or floor should be separated from walls and other elements situated within the application area with ATLAS EXPANSION JOINT PROFILES installed in accordance to the flooring technology. The profiles should be fixed in a way, so they reach from the floor slab level up to the top finish surface layer. ATLAS EXPANSION JOINT PROFILES are attached to wall with the self-adhesive profile element.

At walls and in other places where ATLAS EXPANSION JOINT PROFILES without an apron are installed, the plastic foil should be turned up slightly above the level of the screed to be poured. If ATLAS EXPANSION JOINT PROFILES with an apron are used, the foil should be placed upon the apron.

When installing ATLAS EXPANSION JOINT PROFILES with apron on floors with thermal or acoustic insulation, the foil apron should be turned upon the insulation boards.

Packaging

Roll: 50 rm

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to building principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2013-05-24

TABLE 5.2

PRODUCT					
	ATLAS POSTAR 10	ATLAS POSTAR 20	ATLAS POSTAR 40	ATLAS POSTAR 80	ATLAS POSTAR 100
	Traditional cement floor	Fast drying cement screed	Cement floor	Fast-setting cement floor	Self-spreading cement floor
Reference document	PN-EN 13813:2003				
	AT-15-9621/2016	AT-15-8432/2010 + Annex 1	AT-15-6972/2012	AT-15-8462/2010 + Annex 1	AT-15-6971/2012
Classification	CT-C25-F5-A15	CT-C20-F4	CT-C30-F6-A22	CT-C40-F7-A12	CT-C50-F7-A15
TECHNICAL DATA					
Self-spreading					✓
Thickness [mm]	10-100	10-80	10-80	10-80	10-80
Mixing ratio water/dry mix [l/ 25 kg]	2.25-3.00	2.75	2.00-3.75	2.00	3.25-3.75
Consumption for 1 cm thickness [kg/m^2]	20	20	20	20	20
Compressive strength [N/mm^2]	≥25	≥20	≥30	≥40	≥50
Flexural strength [N/mm^2]	≥5	≥4	≥6	≥7	≥7
Böhme abrasion resistance - class	A15		A22	A12	A15
Linear contraction [%]	<0.06	<0.06	<0.08	<0.06	<0.06
Floor access/ foot traffic [h]	24	24	24	3	24
Fixing the tiles [days]	14	1	21-28	1	21-28
Parquet installation [days]	21-28		21-28	7	21
Installation of panels or carpets [days]	21-28	14	21-28	7	21-28
Application of epoxy coat [days]	21-28		21-28	7	21-28
Start of heating (for screeds with heating) [days]	7	7	7	7	7
Manual application	✓	✓	✓	✓	✓
Machine application					✓
SCREED TYPE					
Bonded	✓	✓	✓	✓	✓
On separation layer	✓	✓	✓	✓	✓
Floating	✓	✓	✓	✓	✓
With heating system	✓	✓	✓	✓	✓
USE IN FLOOR STRUCTURE					
Top floor	✓		✓	✓	✓
PLACE OF APPLICATION					
Indoors - dry	✓	✓	✓	✓	✓
Indoors - wet	✓	✓	✓	✓	✓
Outdoors	✓	✓	✓	✓	✓

REPAIR MORTARS

REPAIR MORTARS

Damages to mineral surfaces

Concrete, cement plasters and cement screeds and floors deteriorate, particularly when they are not installed correctly. Lack of attention to maximum cohesion and appropriate content of cement, failing to observe correct water to cement ratio and lack of proper maintenance lead to degradation relatively fast. In order to prevent further deterioration and select successful technology of repairs, one should find reason of damage first.
Factors causing defects to mineral substrates, i.e. occurrence of cracks, gaps and bends, loss of tightness, biological contamination, reinforcement steel corrosion or reduction of pH value, can be divided into several groups:

- mechanical – resulting from vibration and impact
- chemical – acid rains, ground water, polluted air
- physical – water freezing and thawing
- biological – development of fungi or algae
- performance – poor jacket, lack of maintenance, too high water/cement ratio
- operational - overloading, change of purpose etc.

Repairs of plasters and floors

Filling minor gaps in posts, stairs, balcony edges is a task, which can be successfully executed on one's own with the following mortars: ATLAS TEN-10, ATLAS ZW 50, ATLAS ZW 300, ATLAS MONTER T-5.

Repairs of ferroconcrete elements – ATLAS BETONER system

System technological solution – for comprehensive repairs of damaged concrete and ferroconcrete elements.
Full set of materials for repair works – system enables selection of mortars depending on surface size and depth of gaps.
Wide range of application - for repairs of both structural and finishing elements: ceilings, terraces, balconies, binding joists, posts, walls, stairs, floors.
Enables forming and exact reconstruction of the original shape and form of the repaired element - system comprises cement mortars for application with various coat thicknesses.
Gives the repaired elements appropriate soundness, resistance and improves their appearance.

TABLE 6.1

PRODUCT			
	ATLAS ADHER	ATLAS FILER	ATLAS ENDER
Reference document	PN-EN 1504-3:2006		
Function of system element	Contact coat	Repair layer	Finish coat
TECHNICAL DATA			
Mixing ratio water/dry mix [l/ 25 kg]	8.0-8.75	2.5-3.25	4.0-4.5
Layer thickness [mm]	1,0	10-50	3-10
Pot life [min]	120	60	60
Open time [min]	15	10	15
Temperature of mortar preparation and application [°C]	5-25	5-25	5-25
Time period after execution of the previous stage of work		Immediately after application of ATLAS ADHER contact coat	After 24 hours since application of ATLAS FILER leveling layer
Bonding to concrete [MPa]	≥ 0,8	≥ 0,8	≥ 0,8
Compressive strength	R1 class	R2 class	R2 class
Floor access/use [h]		24	24
Load [days]		14	14
Examples of use	Ceilings, ferroconcrete posts, construction slabs of terraces and balconies, retaining walls, ferroconcrete beams, ferroconcrete slabs and platforms of flight of stairs		

TABLE 6.2

PRODUCT					
	ATLAS ZW 50	ATLAS ZW 330 *	ATLAS MONTER T-5	ATLAS MONTER T -15	ATLAS TEN -10
	General-use leveling mortar	Fast-setting leveling mortar	Fast-setting assembly mortar	Fast-setting assembly mortar	Fast-setting cement mortar
	PN-EN 998-1:2012 PN-EN 13813:2003	PN-EN 998-1:2012 PN-EN 13813:2003			PN-EN-13813:2003
Reference document		AT-15-9437/2015	AT-15-8722/2011	AT-15-4332/2011 +Annex 1	AT-15-4411/2011 + Annex 1
TECHNICAL DATA					
Mixing ratio water/dry mix [l/kg]	0.14-0.17	0.17-0.22	ca. 0.25	0.12-0.13	0.12-0.15
Pot life [min]	120	120	5	15	40
Open time [min]	20	20	5	15	40
Min/max. thickness [mm]	3/50	3/30**	1/25***	20/50	5/30
Bonding [N/mm^2]	≥ 0.3	≥ 0.6	≥ 2.0	≥ 1.2	≥ 0.5
Compressive strength [N/mm^2]	25.0	≥ 20.0	after 6h > 10.0 after 24h > 25.0 after 28 days - 60	after 24h > 25.0 after 28 days > 60	40.0
Flexural strength [N/mm^2]	5.0	≥ 4.0	after 6h > 2.0 after 24h > 4.0 after 28 days – 9.0	after 24h > 3.5 after 28 days > 9.0	7.0
Tile fixing/further works [h]	12 (thick. 5 mm)	5 (thick. 5 mm)	6	6	24
Floor access/use [h]	12	8	0.5	0.5	3
PLACE OF APPLICATION					
Walls outdoors and indoors	✓	✓	✓		✓
Floors outdoors and indoors	✓	✓	✓	✓	✓
TYPE OF APPLICATION					
Repairs of small local surfaces	✓	✓	✓	✓	✓
Repairs of large floor surfaces	✓	✓			✓
Elements assembling			✓	✓	
TYPE OF SURFACE DAMAGE TO BE REPAIRED					
Cracking	✓	✓	✓	✓	✓
Deeper cavities		✓	✓	✓	✓

* Product can be used to execute screeds
** In order to obtain thicker layer from 31 to 60 mm, add quartz sand (grain size up to 2 mm) in weight ratio 1:4 (sand : dry mix)
*** In case of thickness above 25 mm, mix MONTER T-5 with quartz sand in 1:1 ratio

ATLAS ADHER

contact coat of ATLAS BETONER system

- repairs of concrete or ferroconcrete substrates
- forms contact coat of the system
- high bonding to concrete and steel
- does not cause corrosion of steel
- very low linear contraction

Use

Element of concrete and ferroconcrete repair system ATLAS BETONER.
Contact coat – improves bonding to substrate of the subsequent system layer.

Types of repaired surfaces – concrete and ferroconcrete elements.
Types of top finishes – leveling layer made of ATLAS FILER or finish coat made of ATLAS ENDER mortars.

Properties

High bonding to concrete and reinforcing steel – owing to special composition based on high quality cements and powder resins of new generation.
Precisely coats surface irregularities – liquid consistency allows for effective, easy and fast application of the mortar.
Very low linear contraction.
Does not cause corrosion of reinforcement.

Technical data

ATLAS ADHER is manufactured as a dry mix of high quality cement binder, quartz fillers and improvers.

Bulk density (of dry mix)	approx. 1.1 kg/dm^3
Mass bulk density (after mixing)	approx. 1.4 kg/dm^3
Mixing ratio (water/dry mix)	0.32 ÷ 0.35 l/1 kg 8.00 ÷ 8.75 l/25 kg
Mortar thickness	1 mm
Bonding to concrete	min. 1.0 MPa
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Maturing time	approx. 5 minutes
Pot life	approx. 2 hours
Open time	min. 15 minutes

Technical requirements

The product conforms to PN-EN 1504-3:2006 standard. EC Declaration of Performance No. 085-1/CPR.

CE 11	PN-EN 1504-3:2006 (EN-1504-3:2005)
Repair mortar R1 class	designed for reconstruction and repairs of nonstructural damaged and uneven surfaces and concrete floors, indoors and outdoors
Compressive strength	≥ 10.0 MPa
Chloride ions content	≤ 0.05 %
Bonding to concrete substrate	≥ 0.8 MPa
Limited shrinkage, bonding after testing	NPD
Thermal compatibility, Part 1. Freeze-thaw cycles (50 cycles)	No cracks and scratches
Resistance to slip	Class II
Capillary absorption	NPD
Reaction to fire - class	F
Release/content of hazardous substances	See: Safety Data Sheet

The product has been given the Radiation Hygiene Certificate.

Substrate repairs

Substrate preparation

Concrete substrate should be stable, even and structurally sound, i.e. strong enough (stripping strength min. 1.5 MPa) and free from layers which would impair mortar adhesion. Clean the repaired surface of any loose or poorly bonded concrete layers and clean it from dust, dirt, lime, oil, grease, wax, remains of emulsion and oil paint. Concrete substrates which are significantly damaged, dirty, chemically or biologically corroded, must undergo special treatment, such as: shot blasting, milling, fumigation, etc.

Clean any exposed reinforcement elements from rust and any other pollution up to SA 2 degree of purity, e.g. by sand-blasting. Additionally, hack off concrete around bars which surface is fully or in significant part exposed, so the new coating made of ATLAS FILER mortar can be min. 1.5 cm thick. Then, the reinforcement can be coated with special paints with corrosion inhibitors, which additionally protect against corrosion.

Wet the substrate slightly (do not leave puddles) prior to the application of ATLAS ADHER mortar.

Mortar preparation

Pour the mortar from the bag into a clean container with the suitable amount of water (see Technical Data for ratio) and mix using a mixer with a drill until homogenous. The mass can be used after approx. 5 minutes and remixing, and should be used up within approx. 2 hours.

Contact coat application

Distribute ATLAS ADHER mortar evenly onto the substrate, rub it well with a brush or a paintbrush, going slightly beyond the area of the repaired surface. Keep the size of surface to be coated so the next layer made of ATLAS FILER or ATLAS ENDER mortars can be applied on the contact coat with "wet on wet" method. If the contact coat dries before application of the subsequent mortar, a new one should be applied.

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Consumption

The average consumption is 1.2 kg of dry mix for 1 m^2 for each 1 mm of layer thickness.

Important additional information

- During application and directly after, the repaired surface should be protected against precipitation and excessive drying. The drying time of the contact coat depends on the substrate absorbability as well as the ambient temperature and humidity.
- Tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with the ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%..

Packaging

Paper bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-07-02

ATLAS FILER

repair layer of ATLAS BETONER system

- repairs of concrete or ferroconcrete substrates
- forms the main repair layer of the system
- high mechanical strength
- elasticity
- enables forming a slope

Use

Element of concrete and ferroconcrete repair system ATLAS BETONER – forms the main repair layer.
Enables correction of substrate irregularities – both in case of local filling as well as whole surface repairs.
Designed for repairs of ceilings, terraces, balconies, binding joists, poles, walls and stairs.
Enables forming and exact reconstruction of the original shape and form of the repaired element.

Types of repaired surfaces – concrete and ferroconcrete elements.
Types of top finishes – finish coat made of ATLAS ENDER mortar or ceramic cladding; can also form the top finish itself.

Properties

Enables forming a slope – which is an important factor, especially for outdoor surfaces, on terraces and balconies.
Elastic – enables repairing elements subject to deformation.
Very high mechanical strength:
• compressive – min. 43.0 MPa
• flexural – min. 9.0 MPa

Technical data

ATLAS FILER is manufactured as a dry mix of high quality cement binder, quartz fillers and improvers.

Bulk density (of dry mix)	approx. 1.5 kg/dm^3
Mass bulk density (after mixing)	approx. 2.2 kg/dm^3
Dry density (after setting)	approx. 2.0 kg/dm^3
Mixing ratio (water/dry mix)	0.10 ÷ 0.13 l/1 kg 2.5 ÷ 3.25 l/25 kg
Min./max. mortar thickness	10 mm/50 mm
Bonding to concrete coated with ATLAS ADHER after 28 days	min. 1.0 MPa
Compressive strength after 28 days	min. 43.0 MPa
Flexural strength after 28 days	min. 9 MPa
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Maturing time	approx. 5 minutes
Pot life	approx. 1 hour
Open time	min. 10 minutes
Foot traffic	after approx. 24 hours
Application of finishing layer made of ATLAS ENDER mortar	approx. 24 hours
Fixing the tiles	after approx. 14 days
Full load	after approx. 14 days

Technical requirements

The product conforms to PN-EN 1504-3:2006 standard. EC Declaration of Performance No. 085-2/CPR.

CE	PN-EN 1504-3:2006 (EN-1504-3:2005)
Repair mortar R2 class	designed for reconstruction and repairs of nonstructural damaged and uneven surfaces and concrete floors, indoors and outdoors
Compressive strength	≥ 15.0 MPa
Chloride ions content	≤ 0.05 %
Bonding to concrete substrate	≥ 0.8 MPa
Limited shrinkage, bonding after testing	≥ 0.8 MPa
Thermal compatibility, Part 1. Freeze-thaw cycles (50 cycles)	No cracks and scratches
Resistance to slip	Class II
Capillary absorption	≤ 0.5 kg/(m^2 · h$^{0.5}$)
Reaction to fire - class	A1

The product has been given the Radiation Hygiene Certificate.

Substrate repairs

Substrate preparation
Concrete substrate should be stable, even and structurally sound, i.e. strong enough and free from layers which would impair mortar adhesion. Clean the repaired surface of any loose or poorly bonded concrete layers and clean it from dust, dirt, lime, oil, grease, wax, remains of emulsion and oil paint. Coat the substrate with contact coat made of ATLAS ADHER mortar according to its technology of use.

Mortar preparation
Pour the mortar from the bag into a clean container with the suitable amount of water (see Technical Data for ratio) and mix using a mixer with a drill (or in cement mixer) until homogenous. The mass can be used after approx. 5 minutes and remixing, and should be used up within approx. 1 hour.

Repair layer application
Distribute ATLAS FILER mortar evenly with a steel float or a guide all over the contact coat made of ATLAS ADHER with "wet on wet" method. Press the mortar firmly to the substrate when spreading, in particular when filling defects. Depending on the purpose of the leveling layer, smooth its surface with a steel float or give it a coarse texture, using a float with sponge.

Surface use
The surface can be used (walked upon) after approx. 24 hours and load can be applied after approx. 14 days. The execution of finish coat made of ATLAS ENDER mortar can commence after 24 hours. The time of commencement of finishing works depends on the type of the planned facing and should follow the requirements of its manufacturer. Fixing ceramic tiles should start not earlier than after stabilization of the repair layer parametres, i.e. after approx. 2-3 weeks and installation of PVC flooring or parquet – when the mortar dries completely.

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Consumption

The average consumption is 20 kg of dry mix for 1 m^2 for each 10 mm of layer thickness.

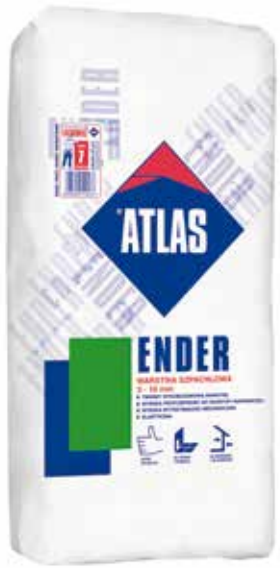
Important additional information

- During application and directly after (within approx. 3 days), the repaired surface should be protected against excessive drying, direct sunlight, low humidity and draughts. Within this time, in order to provide favourable conditions for mortar setting, its surface can be sprinkled with water or covered with foil, if required. Reduce the heating in room where works are carried out as well. The drying time of the layer depends on its thickness as well as the ambient temperature and humidity.
- Tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with the ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Paper bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-07-02



ATLAS ENDER

finish coat of ATLAS BETONER system

- repairs of concrete or ferroconcrete substrates
- forms the finish coat of the system
- high mechanical strength
- elasticity
- forms smooth surface

Use

Element of concrete and ferroconcrete repair system ATLAS BETONER.
Outer, finish repair coat – for top finishing previously leveled and shaped surfaces.
Designed for repairs of ceilings, terraces, balconies, binding joists, poles, walls and stairs.

Types of repaired surfaces – concrete and ferroconcrete elements.
Types of top finishes – forms the finish coat; can be painted with paints for concrete.

Properties

With fine aggregate – forms smooth surface on the repaired elements.
Elastic – enables repairing elements subject to deformation.
Very high mechanical strength:
- compressive – min. 19.0 MPa
- flexural – min. 4.5 MPa

Technical data

ATLAS ENDER is manufactured as a dry mix of high quality cement binder, quartz fillers and improvers.

Bulk density (of dry mix)	approx. 1.4 kg/dm^3
Mass bulk density (after mixing)	approx. 1.4 kg/dm^3
Dry density (after setting)	approx. 1.5 kg/dm^3
Mixing ratio (water/dry mix)	0.16 ÷ 0.18 l/1 kg 4.0 ÷ 4.50 l/25 kg
Min./max. mortar thickness	3 mm / 10 mm
Bonding to ATLAS FILER layer	min. 1.0 MPa
Compressive strength after 28 days	min. 19.0 MPa
Flexural strength after 28 days	min. 4.5 MPa
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Maturing time	approx. 5 minutes
Pot life	approx. 1 hour
Open time	min. 15 minutes
Foot traffic	after approx. 24 hours
Full load	after approx. 14 days

Technical requirements

The product conforms to PN-EN 1504-3:2006 standard. EC Declaration of Performance No. 085-3/CPR.

CE	PN-EN 1504-3:2006 (EN-1504-3:2005)
Repair mortar R2 Class	designed for reconstruction and repairs of nonstructural damaged and uneven surfaces and concrete floors, indoors and outdoors
Compressive strength	≥ 15.0 MPa
Chloride ions content	≤ 0.05 %
Bonding to concrete substrate	≥ 0.8 MPa
Limited shrinkage, bonding after testing	≥ 0.8 MPa
Thermal compatibility, Part 1. Freeze-thaw cycles (50 cycles)	No cracks and scratches
Resistance to slip	Class II
Capillary absorption	≤ 0.5 kg/(m^2 · h$^{0.5}$)
Reaction to fire - class	A1

The product has been given the Radiation Hygiene Certificate.

Substrate repairs

Substrate preparation
Concrete substrate should be stable, even and structurally sound, i.e. strong enough and free from layers which would impair mortar adhesion. Clean the repaired surface of any loose or poorly bonded concrete layers and clean it from dust, dirt, lime, oil, grease, wax, remains of emulsion and oil paint. Coat the substrate with contact layer made of ATLAS ADHER and next with leveling layer made of ATLAS FILER mortar according to their technology of use.

Mortar preparation
Pour the mortar from the bag into a clean container with the suitable amount of water (see Technical Data for ratio) and mix using a mixer with a drill until homogenous. The mass can be used after approx. 5 minutes and remixing, and should be used up within approx. 1 hour.

Surface finishing
Apply ATLAS ENDER on the leveling layer made of ATLAS FILER mortar (not earlier than 24 hours since its application) or on freshly applied coat of ATLAS ADHER mortar (with "wet on wet" method). The mortar requires even distribution over the surface (with concurrent strong pressing to the substrate) and smoothing with a steel float afterwards. It is recommended to float the surface with a damp float with sponge.

Surface use
The surface can be used (walked upon) after approx. 24 hours and load can be applied after approx. 14 days. Additional surface finishing with coating materials can commence after approx. 3-7 days, depending on the material type, manufacturer's guidelines as well as ambient temperature and humidity conditions.

Consumption

The average consumption is 20 kg of dry mix for 1 m^2 for each 10 mm of layer thickness.

Important additional information

- During application and directly after (within approx. 3 days), the repaired surface should be protected against excessive drying, direct sunlight, low humidity and draughts. Within this time, in order to provide favourable conditions for mortar setting, its surface can be sprinkled with water or covered with foil, if required. Reduce the heating in room where works are carried out as well. The drying time of the layer depends on its thickness as well as the ambient temperature and humidity.
- Tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with the ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Paper bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2013-11-13

ATLAS ZW 50

general-use leveling mortar

- under tiles, finishing coats, plasters, screeds
- on walls and floors
- high bonding and compressive strength

Use

Substrate repairs prior to application of screeds.
Repairs of floors loaded with foot and vehicle traffic.
Repairs and reshaping of expansion joints in walls and floors (also industrial ones).
Filling joints between prefabricated elements and wide gaps in concrete and masonry substrates.
Filling wiring furrows.
Reconstruction of shapes of concrete elements (reshaping).
Substrates repairs – enables filing gaps and cavities as well as leveling other substrate irregularities.
Start of successive operations – in standard conditions tiling after approx. 12 hours (for layers 5 mm thick).
Reduces the consumption of adhesive mortars, plasters, screeds and floors.
Can be used for thin-coat bricklaying – for minor masonry works with non-structural building elements during finishing works.

Type of repaired substrates – cement and cement-lime plasters, concrete, aerated concrete, cement screeds, rough walls made of bricks and ceramic or silicate hollow blocks.
Type of finishing coats – ceramic cladding, finishing coats, thin-coat plasters/renders, protective, façade, interior paints, etc.

Properties

Enables quick progress of work and limits technological breaks.
Owing to wide range of thickness enables filling gaps of various depth with a single material in a single operation.
High bonding to substrate.
Can be painted with protective, façade and interior paints.
Easy in application – working parameters ensure easy application and filling gaps in the repaired surface.
High mechanical strength – compressive strength min. 25.0 MPa, flexural strength min. 5.0 MPa.
No shrinkage cracks.
Wide range of layer thickness – from 3 up to 50 mm.

Technical data

ATLAS ZW 50 is produced as a dry mix of high quality cement binder, quartz fillers and improvers.

Bulk density (of dry mix)	approx. 1.6 kg/dm^3
Mass bulk density (after mixing)	approx. 1.95 kg/dm^3
Dry density (after setting)	approx. 1.8 kg/dm^3
Mixing ratio (water/dry mix)	0.14 ÷ 0.17 l/1 kg 3.50 ÷ 4.25 l/25 kg
Contact coat	1 kg of dry mix + 0.12 l of water + 0.06 l of ATLAS ELASTIC EMULSION or ATLAS ADHER
Min./max. mortar thickness	3 mm/ 50 mm
Max. aggregate size	3.00 mm
Bonding	min. 0.3 MPa
Compressive strength	min. 25.0 MPa
Flexural strength	min. 5.0 MPa
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Pot life	2 hours
Open time	min. 20 minutes
Fixing the tiles	after 12 hours /5 mm of layer thickness after 24 hours /10 mm of layer thickness after 72 hours /20 mm of layer thickness

The time shown in the table is recommended for the application in the temperature 23°C and humidity 50% (approx.).

Technical requirements

ATLAS ZW 50 conforms to PN-EN 998-1 and PN-EN 13813 standards. EC Declaration of Performance No. 178/CPR.

CE	PN-EN 998-1:2012 (EN 998-1:2010) PN-EN 13813:2003 (EN 13813:2002)
Factory made plastering mortar of specified properties, general-purpose (GP), for manual application	for indoor and outdoor use, on walls, ceilings, posts and partition walls
Cement-based screed CT-C25-F5	for indoor use
Water absorption	W1
Bonding	0.3 N/mm^2 - FP:B
Water vapour permeability coefficient (tabular value μ)	15/35 (EN 1748:2002, table A.12)
Thermal conductivity coefficient (average tabular value P=50%)	0.83 W/mK ($\lambda_{10, dry}$) (EN 1748:2002, table A.12)
Gross dry mortar density	≤ 1800 kg/m^3
Release of corrosive substances	CT
Compressive strength – class	C 25
Flexural strength - class	F 5
Reaction to fire - class	A1 $A1_{fl}$
Resistance to abrasion, water permeability, chemical resistance, water vapour permeability, acoustic insulation, thermal resistance, sound absorption	NPD
Release/content of hazardous substances	See: Safety Data Sheet

Substrate repairs and installation of screeds

Substrate preparation - for substrate repairs

The substrate should be dry and sound, i.e. it should be strong enough and free from layers, which would impair the mortar bonding, in particular dust, dirt, lime, oil, grease, wax, bituminous substances and paints residues. Remove loose pieces and weak substrate elements mechanically, e.g. hack them off. Just before the application of the main mortar layer, the substrate should be moistened with water up to the matt-wet state. If improvement of bonding to the substrate is required, one should apply the contact coat (description below).

Contact coat preparation

The contact coat can be prepared with one of the following methods:
- with ATLAS ZW 50 modified with ATLAS ELASTIC EMULSION in ratio: 1 kg of dry mix + 0.12 l of water + 0.06 l of ATLAS ELASTIC EMULSION,
- with ATLAS ADHER mortar.

The contact coat has liquid consistency and can be applied with a brush. Rub it well into previously moistened substrate, then apply the main mortar layer with "wet on wet" method. When the contact coat dries, apply another one before the application of the main mortar layer.

Mortar preparation

Pour the mortar from the bag into a clean container with the suitable amount of water (see Technical Data for ratio) and mix using a mixer with a drill until homogenous. The mortar is ready to use directly after mixing and should be used up within approx. 2 hours.

Mortar use - repair mass

Apply the mortar onto previously prepared and primed substrate with a trowel or a smooth steel float. The single mortar layer thickness used in a single operation should not exceed 30 mm. After initial setting, the applied mortar layer can be floated with a felt or a polystyrene float or smoothed with a steel float. When preparing the substrate for tiling, float the mortar rough.

Mortar use - screed

The screed should be separated from walls and other elements within the application area with ATLAS EXPANSION JOINT PROFILES. The size of application area should not exceed 36 m^2 with sides length up to 6 m.

The expansions joints should also be executed at room thresholds and around load-bearing posts. The existing structural expansion joints should be transferred onto the screed layer. The single mortar layer thickness used in a single operation should not exceed 30 mm. Layers up to 50 mm thick are acceptable for application areas up to 1 m^2 large. Spread the mortar with a steel float.

Screed drying and maintenance

In order to ensure favourable conditions for mortar setting, depending on needs, sprinkle the freshly applied surface with water or cover it with foil. Proper maintenance leads to increase of strength of product but also extends the time of drying. The time of drying of screed depends on the layer thickness and ambient thermal and humidity conditions. The use of screed (foot traffic) can start after approx. 10-12 hours and full load after approx. 3 days.

Finishing works

Follow the guidelines listed in the Technical Data section when fixing the tiles on the repair layer made of ATLAS ZW 50. Prime the surface with ATLAS UNIGRUNT before tiling.

Consumption

The average consumption is approx. 18 kg of dry mix/ 1 m^2 / 10 mm of layer thickness.

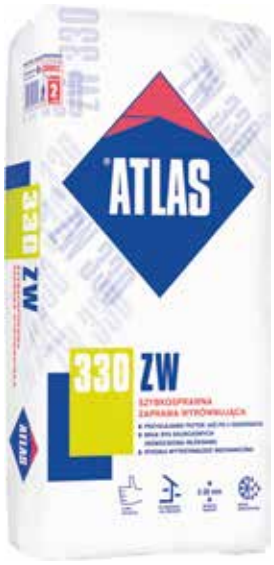
Important additional information

- During application and directly after, the surface should be protected against precipitation and excessive drying (moist with water or cover with foil, if required).
- Tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with the ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Paper bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-06-20



ATLAS ZW 330
fast setting leveling mortar

- high bonding and compressive strength
- reinforced with polypropylene fibres
- plastic consistency
- under tiles, finishing coats, plasters, screeds
- tiling just after a few hours

Use

Substrates repairs indoors and outdoors – enables filing gaps and cavities as well as leveling other substrate irregularities.
Execution of bonded screeds.

Types of repaired surfaces – cement and cement-lime plasters, concrete, aerated concrete, cement jointless floors, rough walls made of bricks and ceramic or silicate hollow blocks.
Type of finishing coats – ceramic cladding, finishing coats, thin-coat plasters/renders, floor panels, etc.

Properties

Enables quick start of successive operations – in standard conditions tiling just after approx. 5 hours (for layers 5 mm thick).
Reduces the consumption of adhesive mortars, plasters, screeds and floors.
Plastic consistency – working parameters ensure easy application and filling gaps in the repaired surface.
High mechanical strength – compressive strength min. 20.0 MPa, flexural strength min. 4.0 MPa.
Reinforced with polypropylene fibres which:
- reduce cracking resulting from shrinkage during the mortar setting,
- enable application of thicker mortar layers on vertical surfaces, with no slip effect,
- ensure uniform water distribution during drying.

No shrinkage cracks.
Wide range of layer thickness – from 3 up to 30 mm in a single operation – one may extend the layer thickness up to 60 mm after mixing the mortar with quartz sand (grain size up to 2 mm) in 1:4 weight ratio (quartz sand : dry mortar) - recommended when filling gaps and leveling horizontal surfaces.

Technical data

ATLAS ZW 330 is produced as a dry mix of high quality cement binder, quartz fillers and improvers.

Bulk density (of dry mix)	approx. 1.6 kg/dm^3
Mass bulk density (after mixing)	approx. 1.95 kg/dm^3
Dry density (after setting)	approx. 1.8 kg/dm^3
Mixing ratio (water/dry mix)	0.17 ÷ 0.22 l/1 kg 4.25 ÷ 5.5 l/25 kg
Contact coat	1 kg of dry mix + 0.12 l of water + 0.06 l of ATLAS ELASTIC EMULSION or ATLAS ADHER
Min./max. mortar thickness	3 mm/ 30 mm For wider gaps (from 31 mm up to 60 mm) quartz sand of grain size up to 2.0 mm can be added in 1:4 ratio (quartz sand : dry mortar)
Max. aggregate size	1.00 mm
Bonding	min. 0.6 MPa
Compressive strength	min. 20.0 MPa
Flexural strength	min. 4.0 MPa
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Pot life	approx. 2 hours
Open time	min. 20 minutes
Fixing the tiles	after 5 hours /5 mm of layer thickness after 10 hours /10 mm of layer thickness after 20 hours /20 mm of layer thickness after 48 hours/layer thickness above 20 mm
Panels installation	after 48 hours

The time shown in the table is recommended for the application in the temperature 23°C and humidity 50% (approx.).

Technical requirements

ATLAS ZW 330 conforms to PN-EN 998-1 and PN-EN 13813 standards. EC Declaration of Performance No. 167/CPR.

CE	PN-EN 998-1:2012 (EN 998-1:2010) PN-EN 13813:2003 (EN 13813:2002)
Factory made plastering mortar of specified properties, general-purpose (GP), for manual application	for indoor and outdoor use, on walls, ceilings, posts and partition walls
Cement-based screed CT-C20-F4	for indoor use
Water absorption	W1
Bonding	0.6 N/mm² - FP:B
Water vapour permeability coefficient (tabular value μ)	15/35 (EN 1748:2002, table A.12)
Thermal conductivity coefficient (average tabular value P=50%)	0.83 W/mK ($\lambda_{10,dry}$) (EN 1748:2002, table A.12)
Durability. Compressive strength decrease after 25 freeze-thaw cycles	≤ 15 %
Durability. Mass decrement after 25 freeze-thaw cycles	≤ 3%
Gross dry mortar density	≤ 1800 kg/m³
Release of corrosive substances	CT
Compressive strength – class	C 20
Flexural strength - class	F 4
Reaction to fire - class	A1 $A1_{fl}$
Resistance to abrasion, water permeability, chemical resistance, water vapour permeability, acoustic insulation, thermal resistance, sound absorption	NPD
Release/content of hazardous substances	See: Safety Data Sheet

The product has been given the ITB Technical Approval No. AT-15- 9437/2015. Domestic Declaration of Conformity No. 167 of 06.03.2015.

Substrate repairs and installation of screeds

Substrate preparation - for substrate repairs

The substrate should be dry and sound, i.e. it should be strong enough and free from layers, which would impair the mortar bonding, in particular dust, dirt, lime, oil, grease, wax, bituminous substances and paints residues. Remove loose pieces and weak substrate elements mechanically, e.g. hack them off. Just before the application of the main mortar layer, the substrate should be moistened with water up to the matt-wet state. If improvement of bonding to the substrate is required, one should apply the contact coat (description below).

Substrate preparation - for bonded screeds

The substrate should be free from layers, which would impair the mortar bonding, in particular dust, dirt, lime, oil, grease, wax, bituminous substances and paints residues, poor or loosening pieces of old screeds. Just before the application of the main mortar layer, the substrate should be moistened with water up to the matt-wet state and the contact coat applied (description below).

Contact coat preparation

The contact coat can be prepared with one of the following methods:
- with ATLAS ZW 330 modified with ATLAS ELASTIC EMULSION in ratio: 1 kg of dry mix + 0.12 l of water + 0.06 l of ATLAS ELASTIC EMULSION,
- with ATLAS ADHER mortar.

The contact coat has liquid consistency and can be applied with a brush. Rub it well into previously moistened substrate, then apply the main mortar layer with "wet on wet" method. When the contact coat dries, apply another one before the application of the main mortar layer.

Mortar preparation

Pour the mortar from the bag into a clean container with the suitable amount of water (see Technical Data for ratio) and mix using a mixer with a drill until homogenous. The mortar is ready to use directly after mixing and should be used up within approx. 2 hours.

Mortar use - repair mass

Apply the mortar onto previously prepared and primed substrate with a trowel or a smooth steel float. The single mortar layer thickness should not exceed 30 mm. The layer thickness can be increased up to 60 mm after mixing the mortar with quartz sand (grain size up to 2 mm) in 1:4 weight ratio (quartz sand : dry mortar). After initial setting, the applied mortar layer can be floated with a felt or a polystyrene float or smoothed with a steel float. When preparing the substrate for tiling, float the mortar rough.

Mortar use - screed

The screed should be separated from walls and other elements within the application area with ATLAS EXPANSION JOINT PROFILES. The size of application area should not exceed 36 m² with sides length up to 6 m.
The expansions joints should also be executed at room thresholds and around load-bearing posts. The existing structural expansion joints should be transferred onto the screed layer. Spread the mortar with a steel float.

Screed drying and maintenance

In order to ensure favourable conditions for mortar setting, depending on needs, sprinkle the freshly applied surface with water or cover it with foil. Proper maintenance leads to increase of strength of product but also extends the time of drying. The time of drying of screed depends on the layer thickness and ambient thermal and humidity conditions. The use of screed (foot traffic) can start after approx. 8-10 hours and full load after approx. 3 days.

Finishing works

Follow the guidelines listed in the Technical Data section when fixing the tiles on the repair layer made of ATLAS ZW 330. Prime the surface with ATLAS UNIGRUNT before tiling.

Consumption

The average consumption is approx. 15 kg of dry mix/ 1 m² / 10 mm of layer thickness.

Important additional information

- The mortar parametres listed in the Technical data and technical requirements sections refer to unmodified mortar. The addition of quartz sand (for use with layers from 31 up to 60 mm thick) reduces the mortar strength and extends the time of setting.
- During application and directly after, the surface should be protected against precipitation and excessive drying (moist with water or cover with foil, if required).
- Tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with the ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Paper bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-04-24

ATLAS TEN-10

fast setting cement mortar

- for repairs of concrete and ferroconcrete substrates
- for execution of floors exposed to high loads
- rapid strength build-up, limited contraction
- foot traffic already after 3 hours
- strong bonding to ceilings

Use

For repairs of concrete and ferroconcrete elements – corrects local irregularities as well as whole surfaces of balconies, terraces, posts, binding joists, stairs, ramps, etc.
For filling cavities and cracks in mineral substrates – plasters, screeds, etc.
Forms floor characterized by high compressive strength and abrasion resistance – can be used on ramps and loading driveways, in storage and production halls.
Foot traffic already after 3 h – enables fast execution of work in passageways, corridors, on driveways, ramps, etc.
Enables forming and exact reconstruction of the original shape and form of the repaired element – e.g. edge of balcony or terrace slab, curbs, stairs and landings.

Types of repaired surfaces – concrete and ferroconcrete, cement-based plasters and screeds.
Types of top finishes – can work as substrate for tiles, parquet, floor panels; can also form the top finish itself.

Properties

Rapid initial strength build-up – already after 24 h, the mortar reaches compressive strength of at least 20 N/mm^2 and flexural strength of at least 3.5 N/mm^2.
Fixing tiles possible already after 24 hours.
During application, perfectly bonds to ceilings and bottom side of balcony slabs – owing to molecular cohesion strength active when the mortar is semi-liquid.
Enables forming a slope - owing to properly selected, dense working consistency, the mortar enables forming slopes on surfaces exposed to water load.

Technical data

ATLAS TEN-10 is manufactured as a dry mix of high quality cement binder, quartz fillers and improvers.

Bulk density (of dry mix)	approx. 1.50 kg/dm^3
Mass bulk density (after mixing)	approx. 2.05 kg/dm^3
Dry density (after setting)	approx. 2.00 kg/dm^3
Mixing ratio (water/dry mix)	0.12 ÷ 0.15 l/1 kg 3.0 ÷ 3.75 l/25 kg
Contact coat ratio	1 kg of dry mix + 0.18 l of water + 0.09 l of ATLAS ELASTIC EMULSION
Min./max. mortar thickness	5 mm / 30 mm
Maximum aggregate grain size	3.0 mm
Bonding to concrete	min. 0.5 MPa
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +30°C
Pot life	approx. 40 minutes
Foot traffic	after approx. 3 hours
Fixing the tiles	after approx. 24 hours

Technical requirements

The product has been given the ITB Technical Approval No. AT-15- 4411/2011. Domestic Declaration of Conformity No. 034 of 25.05.2011. Additionally the product conforms to PN-EN 13813 standard. EC Declaration of Performance 034/CPR.

CE 0767	PN-EN 13813:2003 (EN 13813:2002)
Cement based screed CT-C40-F7-AR6	for indoor use
Reaction to fire – class	$A1_{fl}$
Corrosive substance release	CT
Compressive strength – class	C40 (≥ 40 N/mm^2)
Flexural strength - class	F7 (≥ 7 N/mm^2)
BCA abrasion resistance - class	AR6
Water permeability, vapour permeability, acoustic insulation, noise damping, heat resistance, chemical resistance	NPD
Release/content of hazardous substances	See: Safety Data Sheet

The product has been given the Hygiene Certificate by the National Institute of Hygiene and the Radiation Hygiene Certificate.

Substrate repairs

Substrate preparation
The substrate should be dry and structurally sound, i.e. strong enough and free from layers which would impair mortar adhesion, in particular dust, dirt, lime, oil, grease, wax, bitumen substances and paint residues. Remove loose pieces and weak substrate elements mechanically, e.g. hack them off. The substrate should be rough and porous. Any substrate scratches and defects must be widened mechanically up to min. 5 mm of width. Smooth substrates should be hammered in order to form rough surface. Immediately before the application of the main mortar layer, the substrate should be moistened with water and contact coat made of 10 kg of ATLAS TEN-10, 1.8 l of water and 0.9 l of ATLAS ELASTIC EMULSION, applied. It is sufficient to coat approx. 10 m^2.

Expansion joints
When installing screeds or floors, walls and other elements within the range of application should be separated (with expansion joints) from the compound with, e.g. ATLAS EXPANSION JOINT PROFILES or thin polystyrene strips. Additionally, mark on walls the location of existing substrate expansion joints, in order to transfer them over the screed layer.

Mass preparation
Pour the mortar from the bag into a clean container the suitable amount of water (see Technical Data for ratio) and mix using a mixer with a drill until homogenous. The mortar is ready to use directly after mixing and should be used up within approx. 40 minutes.

Contact coat application
Apply the contact coat upon the prepared and moistened surface. The mix must be prepared according to ratio listed in the Technical Data section. It is liquid and can be applied with a brush. Rub it well into the substrate. When the contact coat dries, apply another one before the application of the main repair layer.

Mass application
While the contact coat is still wet, apply the main repair layer of ATLAS TEN-10 using a steel float and carefully fill (by pressing) the existing scores and cracks. Join successive mortar batches before the material starts to set. Depending on temperature and humidity conditions, the mortar starts setting already after approx. 1 hour. Within this time, the initially set surface can be smoothed or floated, if required. When applying ATLAS TEN-10 as screed or floor, carry out the installation according to flooring technology, keeping in mind the shorter setting time of the mortar and execution of appropriate expansion joints. Floor usage – foot traffic is possible already after approx. 3 hours since the application.

Coverage

The average coverage is: 1 m^2/1 cm/20 kg of dry mix.

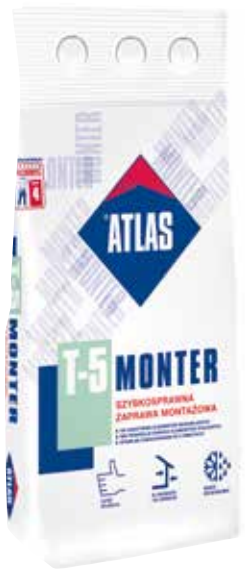
Important additional information

- Adjust the ratio of added water experimentally (keeping the ratio listed in the Technical Data section), following the desired consistency of the mortar, type of substrate and weather conditions. Inappropriate amount of mix water results in deterioration of strength parameters of the mortar.
- During application and directly after, the surface should be protected against precipitation and excessive drying (moist with water or cover with foil, if required).
- Tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with the ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Paper bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-08-27



ATLAS MONTER T-5

fast setting assembly mortar

- for anchoring construction elements
- beginning of setting just after 5 minutes
- high strength
- does not cause corrosion of steel, chloride-free
- blocks local water leakages

Use

Anchoring elements on horizontal surfaces – foundation screws, fencing poles, stairs and balcony railings, etc.
Anchoring elements on vertical surfaces – anchors, hooks, pins, dowels, slings, window hinges, gates and doors; supports of plumbing, gas and central heating systems, wiring elements - electrical boxes, etc.; corner or guide profiles, bars, etc.
Embedding and joining concrete elements – wells, drains, etc.
Quick surface repairs – filling cracks and gaps in ceiling and wall slabs, floors and cement plasters, prefabricated elements.
Installation of building elements – window sills, lintels, beams and stair stringers.
Blocking local water leakages – effectively fills the point of leakage.
Re-profiling concrete elements – restoration of shape of concrete elements, e.g. edges.
Can be used in swimming pools, drinking water reservoirs, as well as facilities and constructions in contact with drinking water.

Type of anchored elements – steel, ferroconcrete and plastic.
Type of surface in which the element is to be anchored – structural masonry elements, concrete and ferroconcrete.

Properties

Fast-setting – characterized by very short setting time and rapid strength build-up.
Gives stable anchoring just after 5 minutes.
Adjustable consistency – from semi-liquid, allowing for accurate filling the space when anchoring elements on horizontal surfaces, to plastic one, preventing the mass outflow during anchorage of elements in walls, etc.
Wide range of use – when mixed with quartz sand (grain size up to 2 mm) in 1:1 ratio, the mortar can be used for filling gaps up to 40 mm wide.
Eliminates the possibility of occurrence of surface cracking of the set mortar.
Does not cause chloride corrosion of metal elements.

Technical data

ATLAS MONTER T-5 is manufactured as a dry mix of high quality cement binder, quartz fillers and modifiers.

Bulk density (of dry mix)	approx. 1.4 kg/dm^3
Mass bulk density (after mixing)	approx. 1.4 kg/dm^3
Dry density (after setting)	approx. 1.8 kg/dm^3
Mixing ratio (water/dry mix)	approx. 0.25 l/1 kg approx. 1.25 l/5 kg approx. 6.25 l/25 kg
Min./max. thickness	1 mm/ 25 mm For wider gaps (up to 40 mm) quartz sand of grain size up to 2.0 mm can be added in 1:1 ratio
Bonding	min. 2.0 MPa
Compressive strength	after 6 hours > 10.0 MPa after 24 hours> 25.0 MPa after 28 days > 60.0 MPa
Flexural strength	after 6 hours > 2.0 MPa after 24 hours > 4.0 MPa after 28 days > 9.0 MPa
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +30°C
Pot life	approx. 5 minutes
Open time	approx. 5 minutes

Technical requirements

The product has been given the ITB Technical Approval No. AT-15-8722/2011. Domestic Declaration of Conformity No. 105 of 21.09.2011, Factory Production Certificate No. ITB-0492/Z.
The product has been given the Radiation Hygiene Certificate and the Hygiene Certificate no. HK/W/0335/01/2013 issued by the National Institute of Hygiene.

Elements anchoring

Substrate preparation
The substrate should be strong enough and free from layers which would impair mortar bonding, in particular dust, dirt, lime, oil, grease, wax. Prepare the element to be anchored in a similar way, i.e. clean of rust and old paint coatings. In order to reduce the absorptivity, wet the substrate surface and the element surface (if made of concrete or ferroconcrete) before the application of the mortar.

Mass preparation
Pour the mortar from the bag into a clean container with the suitable amount of water (see Technical Data for ratio) and mix using a mixer with a drill until homogenous. The mortar should be used up within approx. 5-10 minutes. When anchoring or filling irregularities requiring mortar layer thickness exceeding 25 mm, quartz sand should be added in 1:1 ratio.

Anchoring the element
Size of clearance to be filled with mortar, between the sides of the opening and fixed element, should be 25 mm thick. In justified cases, e.g. grout installation, the area of the mortar application should be boarded. The anchored element should be placed in the prepared opening or groove and properly stabilized in order to prevent displacement during the mortar pouring. The free space around the element should be filled with ATLAS MONTER T-5 mortar.
Note: Do not change the position of the anchored element when the mortar is setting.

Consumption

The average consumption is 1.8 kg of dry mix for 1 dm^3 of filling mass.

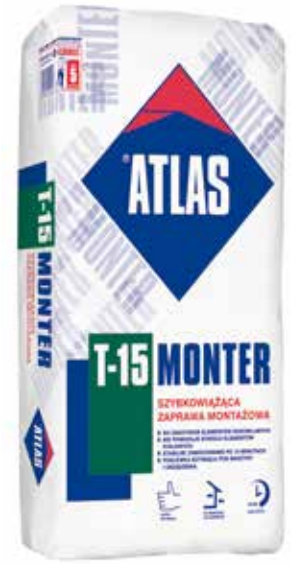
Important additional information

- During application and directly after, the surface should be protected against precipitation and excessive drying (moist with water or cover with foil, if required).
- Water reservoirs designated for drinking water should be washed with water after the product ageing.
- Tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with the ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Foil bags: 5 kg (collective packaging: cardboard box 4 x 5 kg), paper bags: 25 kg
Pallet: 720 kg in 5 kg bags, 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-03-27



ATLAS MONTER T-15

fast setting assembly mortar

- for anchoring construction elements
- does not cause corrosion of steel elements
- strong adhesion to substrate
- grout under machines and equipment
- rapid strength build-up

Use

Recommended for anchoring construction elements – in masonry, concrete and ferroconcrete substrates, on horizontal surfaces.
Provides permanent fixing already after 15 minutes – when assembling steel anchors, anchoring bolts, fencing poles, balcony and stairs railings, etc.
Enables execution of grouts – when efficient and precise positioning of machines, beams, guides or poles in concrete substrate is required.
Recommended for filling spaces between stone and concrete sidewalk tiles – wherever the sufficiently long technological breaks are not possible.

Types of repaired elements – concrete and ferroconcrete construction elements.

Properties

Liquid consistency – therefore fills the space between the anchored element and sides of the opening fully and precisely, ensuring permanent and reliable anchoring.
Eliminates the possibility of occurrence of surface cracking of the set mortar – has very low linear contraction.

Technical data

ATLAS MONTER T-15 is manufactured as a dry mix of the high quality cement binder, quartz fillers and improvers.

Bulk density (of dry mix)	approx. 1.4 kg/dm^3
Mass bulk density (after mixing)	approx. 2.1 kg/dm^3
Dry density (after setting)	approx. 2.2 kg/dm^3
Mixing ratio (water/dry mix)	0.12 ÷ 0.13 l/1 kg 3.00 ÷ 3.25 l/25 kg
Min./max. mortar thickness	20 mm / 50 mm
Bonding	min. 1.2 MPa
Compressive strength	after 24 hours > 25.0 MPa after 28 days > 60.0 MPa
Flexural strength	after 24 hours > 3.5 MPa after 28 days > 9.0 MPa
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +30°C
Pot life	approx. 15 minutes
Open time	approx. 15 minutes

Technical requirements

The product has been given the ITB Technical Approval No. AT-15- 4332/2011. Domestic Declaration of Conformity No. 033 of 01.06.2011. Factory Production Control Certificate No. ITB-0017/Z. The product has been given the Hygiene Certificate No. HK/W/0335/02/2013 by the National Institute of Hygiene and the Radiation Hygiene Certificate.

Elements anchoring

Substrate preparation

The substrate should be strong enough and free from layers which would impair mortar bonding, in particular dust, dirt, lime, oil, grease, wax. Prepare the element to be anchored in a similar way, i.e. clean of rust and old paint coatings. In order to reduce the absorptivity, wet the substrate surface and the element surface (if made of concrete or ferroconcrete) before the application of the mortar.

Mass preparation

Pour the mortar from the bag into a clean container with the suitable amount of water (see Technical Data for ratio) and mix using a mixer with a drill until homogenous. The mortar should be used up within approx. 15 minutes.

Anchoring the element

Size of clearance to be filled with mortar, between the sides of the opening and fixed element, as well as the grout should be 25-50 mm thick. In justified cases, e.g. grout installation, the area of the mortar application should be boarded. The anchored element should be placed in the prepared opening or groove and properly stabilized in order to prevent displacement during the mortar pouring. The free space around the element should be filled with ATLAS MONTER T-15 mortar.

Note: Do not change the position of the anchored element when the mortar is setting.

Consumption

The average consumption is 2 kg of dry mix for 1 dm^3 of filling mass.

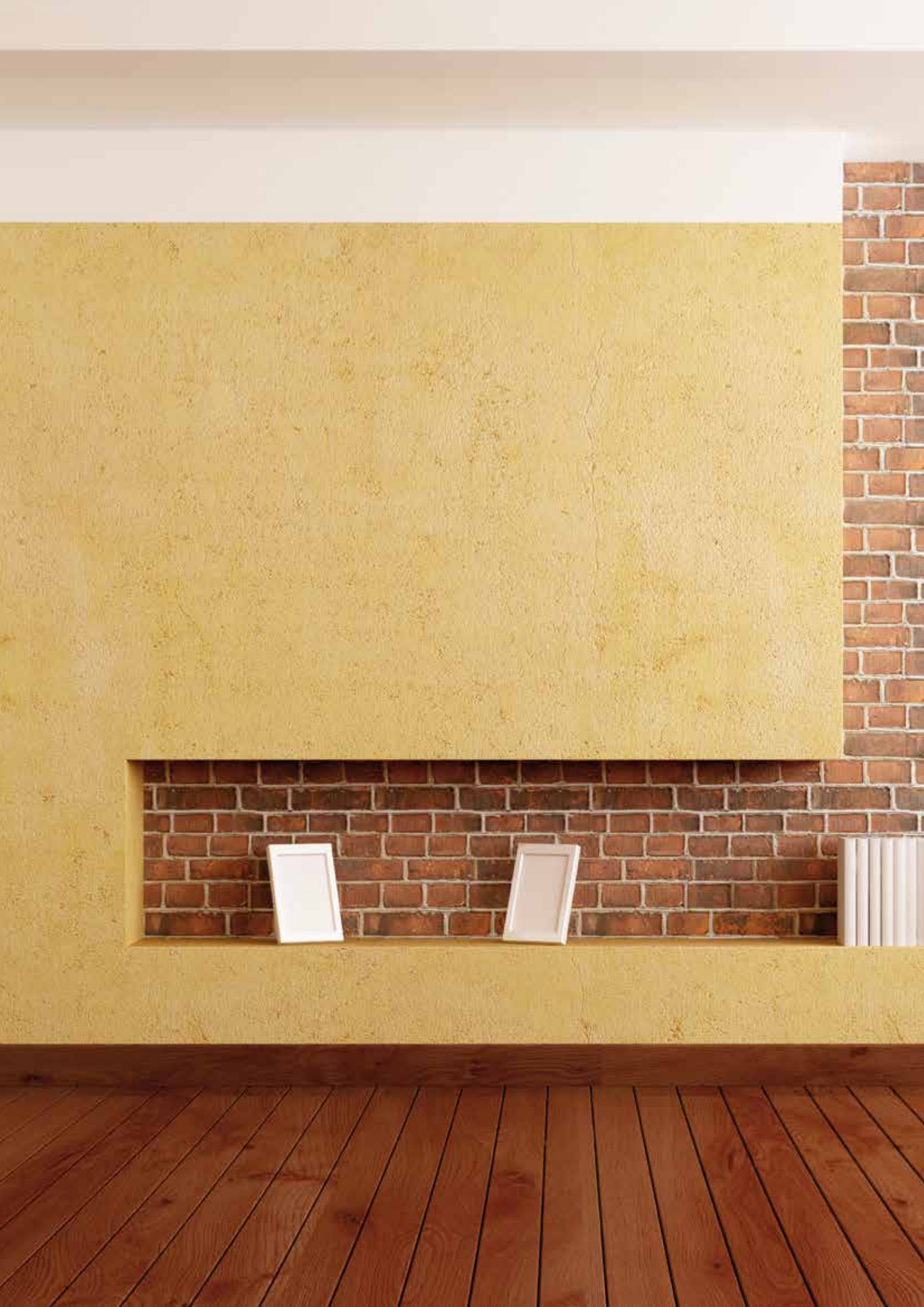
Important additional information

- During application and directly after, the surface should be protected against precipitation and excessive drying (moist with water or cover with foil, if required).
- Water reservoirs designated for drinking water should be washed with water after the product ageing.
- Tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with the ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Paper bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-04-04



CEMENT PLASTERS

CEMENT PLASTERS

Classification of cement plasters

Plasters are classified in accordance to the PN-EN 998-1:2010 standard. *Specification for Mortar for Masonry. Part 1: Plastering mortar.*

• They can be divided in terms of concept of manufacturing:
- mortars of specified properties
- mortars of specified composition

• The most important standard division of mortars classifies them in terms of properties and/or mode of application. So, there are plastering mortars:
- general purpose (GP)
- light (LW)
- coloured (CR)
- one-coat (OC)
- renovation (R)
- thermal insulating (T)

The above division allows for almost unambiguous choice of cement plaster suitable for particular project. Nevertheless, it is advisable to consult the manufacturer of material, which wall was built of.

• Depending on quality of finishing coat, plasters are divided into categories from 0 to III. All plasters offered by ATLAS keep the highest top finish category - III. They are characterized by, required of this plasters category, very smooth and even surface, free of cracking, efflorescence, air bubbles, etc.

Use of cement plasters

Plasters are present on every building. They are manufactured on basis of various raw materials, which results in various parameters in application. The highest requirements are set for façade plasters supposed to meet some important conditions. First of all, they are expected to protect external walls from adverse effects of weather conditions and secondly - to make the façade more aesthetic.

• Traditional plaster as top finish
- Proponents of traditional solutions often leave façades finished with category III cement plaster and limit themselves only to surface painting. This is also done by people whose houses are exposed to intensive soiling - dirt does not depose upon smooth façades as intensively as upon structural ones.

• Traditional plaster as substrate for thin-coat render
- Thin-coat renders require even substrates, which can only be formed with application of traditional cement or cement-lime plasters. Ready-to-use ATLAS cement plasters provide very good technological parameters and allow machine application. Type of mortar must be properly selected in consideration to particular substrate, i.e. wall which we want to plaster.

TABLE 7.1

PRODUCT					
	ATLAS PLASTERING MIX	ATLAS CEMENT BASE COAT	ATLAS LIGHT MACHINE-APPLIED PLASTER	ATLAS REKORD	ATLAS REKORD GREY
	Traditional cement plaster, category III	Base coat for 2- and 3-coat plasterwork	Cement-lime plaster, category III	White cement top finish	Grey cement top finish
Reference document	PN-EN 998-1:2012				
Mortar type*	GP	GP	LW	OC	OC
TECHNICAL DATA					
Mixing ratio water/dry mix	3.25-4.0 l/25 kg	6.5 l/30 kg	6.0-7.8 l/30 kg	7.0-8.0 l/25 kg	7.0-8.0 l/25 kg
Coat thickness [mm]	6-30	4	5-30	1-10	1-10
Pot life [h]	4	2	2	2	2
Consumption [kg/m^2]	20 / 10 mm thickness	8 / 4 mm thickness	14 / 10 mm thickness	15 / 10 mm thickness	15/10 mm thickness
Mortar function	plaster	base coat	plaster	top finish	top finish
Colour	grey	grey	grey	white	grey
FORM OF APPLICATION					
Manual	✓	✓		✓	✓
Machine	✓ **	✓	✓		
PLACE OF USE					
Indoors	✓	✓	✓	✓	✓
Outdoors	✓	✓		✓	✓
SUBSTRATE TYPE					
Ceramic	✓	✓	✓		
Cellular concrete	✓	✓	✓	✓	✓
Silicate	✓	✓	✓	✓	✓
Concrete	✓	✓	✓	✓	✓

* plastering mixes are classified according to PN-EN 998-1:2012 standard
The most important division according to the standard is the classification based on properties and form of application. Therefore we can list the following plastering mixes:
GP – general purpose
LW – light
OC – single coat for indoor use

** machine applied plastering mix is custom made, and the bags are labeled with the letter M

ATLAS PLASTERING MIX

traditional cement plaster, category III

- for manual and machine application
- high plasticity
- high strength CS II
- layer thickness 6-30 mm
- for plastering walls and ceilings

Use

Two coat plaster, category 0-III – plaster consists of two coats: the base coat and the finish coat (which can be additionally coated with top finish made of cement mortar ATLAS REKORD or ATLAS REKORD GREY).
Suitable for manual and machine application – the mix is available in two versions: for manual or machine plastering (packages additionally marked with letter M).

Types of substrates – ceilings and walls made of bricks, blocks, hollow bricks and other similar ceramic or silicate materials; concrete, cellular concrete, cement chipboards, cement and cement-lime plasters.

Properties

High strength: CSII category (1.5 ÷ 5.0 N/m^2).
The mortar can be supplemented with, so-called anti-frost additives allowing to carry out works in low temperature, i.e. below +5°C – the new range of temperature of mortar application, the way of preparation (especially the adjustment of mix water), principles of carrying out works and mortar setting conditions must be set according to the guidelines of the additive manufacturer. The amount of the anti-frost agent depends on the content of cement in the mortar – the ratio cement/fillers in ATLAS PLASTERING MIX is 1:4.
Note. The manufacturer of the mortar does not bear responsibility for the result and the quality of the anti-frost agents used.

Technical data

ATLAS PLASTERING MIX is manufactured as a dry mix of cement binder, quartz fillers and improvers of the highest quality.

Bulk density (of dry mix)	approx. 1.6 kg/dm^3
Mass bulk density (after mixing)	approx. 1.8 kg/dm^3
Dry density (after setting)	approx. 1.8 kg/dm^3
Mixing ratio (water/dry mix)	0.13 ÷ 0.16 l/1 kg 3.25 ÷ 4.0 l/25 kg 3.9 ÷ 4.80 l/30 kg
Min./max. plaster thickness	6 mm / 30 mm
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +30°C
Maturing time	approx. 5 minutes
Pot life	approx. 4 hours

Technical requirements

ATLAS PLASTERING MIX conforms to PN-EN 998-1 standard. EC Declaration of Performance No. 006-1/CPR and 006-2/CPR (version for machine application).

CE	PN-EN 998-1:2012 (EN 998-1:2010)
Factory made plastering mortar of specified properties, general-purpose (GP)	for indoor and outdoor use, on walls, ceilings, posts and partition walls
Reaction to fire - class	A1
Water absorption – category	W1
Bonding	≥ 0.3 N/mm^2 - FP:B
Water vapour permeability coefficient (tabular value μ)	15/35 (EN 1748:2002, table A.12)
Thermal conductivity coefficient (average tabular value P=50%)	0.83 W/mK ($\lambda_{10, dry}$) (EN 1748:2002, table A.12)
Durability. Compressive strength decrease after 25 freeze-thaw cycles	≤ 15%
Durability. Mass decrement after 25 freeze-thaw cycles	≤ 3%
Gross dry mortar density	≤ 1800 kg/m^3
Release/content of hazardous substances	See: Safety Data Sheet

The product has been given the Radiation Hygiene Certificate.

Plastering

Substrate preparation

The substrate should be dry, stable, even and structurally sound, i.e. strong enough, free from layers, which would impair the mortar bonding, in particular dust, dirt, lime, oil, grease, wax, remains of anti-adhesion agents and paints. Hack off poorly bonded elements and remove loose pieces with a steel brush. Edges of joints between cement chipboards should be reinforced with strips of stainless steel mesh. Protect the corners and edges of window and door reveals with galvanized steel profiles. If necessary, use ATLAS UNI-GRUNT priming emulsion to reduce substrate excessive absorption.

Mortar preparation

Pour the mortar from the bag into a clean container with the suitable amount of water (see Technical Data for ratio) and mix using a mixer with a drill (or in cement mixer) until homogenous. Leave the mortar to rest for 5 minutes and remix. The mortar is ready to use directly after mixing and should be used up within approx. 4 hours.

In case of machine application the mortar is prepared in a plastering unit.

Plaster application

Apply the plaster in two coats. In order to obtain even plaster surfaces, it is advisable to use plastering beads. They can be fixed mechanically or embedded in the mortar (mesh beads). The first stage is the application of the base coat. When it sets (but still before hardens), the finish coat has to be applied. In both stages, the plaster is applied evenly with the use of a trowel (or a plastering unit). Collect the excess of the mortar using a polystyrene or wooden float and put back into the container. Fresh plaster surface can be leveled with a feather edge supported on the plastering beads.

Plaster floating

The time of floating has to be determined experimentally in order to avoid excessive plaster drying. Floating is usually carried out after application of an additional thin mortar coat, corresponding to the mortar grain size.

The finishing works must be carried out in accordance to the plastering technology, with tools appropriate for the expected finish effect and the intended use of plaster. If plaster is the substrate for ceramic cladding, it should not be floated at all or coarsely finished then. When plaster is to be coated with gypsum top finish, it should be floated with polystyrene float.

Maintenance

Ensure appropriate room ventilation during drying. Protect plasters applied outdoors from drying too quickly, e.g. by sprinkling them with water.

Painting

Plasters can be painted with any façade paints (e.g. silicate ATLAS ARKOL S, ATLAS SALTA S, silicone ATLAS SALTA, ATLAS FASTEL-NOVA, ATLAS SALTA N, acrylic ATLAS SALTA E, ATLAS ARKOL E). Painting is possible after 2 ÷ 6 weeks since the completion of plaster application (depending on the type and colour of the paint). Painting with ATLAS silicate paints ATLAS ARKOL S and ATLAS SALTA S or ATLAS silicone paints ATLAS SALTA and ATLAS FASTEL NOVA can start just when the plaster dries, not earlier, however, than after 48 hours (silicate paint) or 5 days (FASTEL NOVA and SALTA).

Coverage

From a single 25 kg bag one can apply 1.3 ÷ 1.4 m^2 of 10 mm thick plaster.

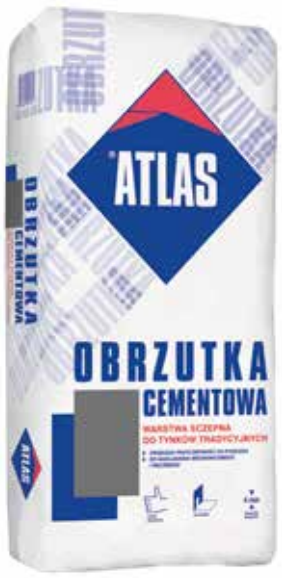
Important additional information

- Adjust the ratio of added water experimentally (keeping the ratio listed in the Technical Data section), following the desired consistency of the mortar, type of substrate and weather conditions. Inappropriate amount of mix water results in deterioration of strength parameters of the plaster.
- Tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with the ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Paper bags: 25 kg, 30 kg (for machine application)
Pallet: 1,050 kg in 25 kg bags, 1,080 kg in 30 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-03-09



ATLAS CEMENT BASE COAT

base coat for 2- and 3-coat plasterwork

- improves plaster bonding to the substrate
- recommended beneath cement and cement-lime plasters
- reduces the material cost of plasterwork
- the highest standard-specified strength category
- for manual and machine application

Use

Forms base coat in two- or three-coat plastering technology – applied directly onto the substrate before the application of finish coat made of cement or cement-lime plaster.
Excellent compatibility with ATLAS plastering mixes:
- PLASTERING MIX,
- LIGHTWEIGHT CEMENT-LIME PLASTER

Reduces the cost of two- or three-coat plasterwork – replaces more expensive plaster types at the base coat stage.
Suitable for manual and machine application – the use of plastering units allows for fast work progress.

Types of substrates – ceilings and walls made of bricks, blocks, hollow blocks and other similar ceramic or silicate materials; concrete, cellular concrete, cement chipboards, cement and cement-lime plasters.

Properties

High strength – the highest standard-specified strength category CS IV (above 6.0 N/mm²) – the base coat is a suitable base for finish coats, even those made of high strength plastering mortars - it is resistant to contraction stress occurring during the setting of mortars of this type.
Excellent bonding to the substrate – particularly recommended for smooth surfaces or substrates of low absorption capacity; bonds strongly to bricks, blocks, etc.
The mortar can be supplemented with, so-called anti-frost additives allowing to carry out works in low temperature, i.e. below +5°C – the new range of temperature of mortar application, the way of preparation (especially the adjustment of mix water), principles of carrying out works and mortar setting conditions must be set according to the guidelines of the additive manufacturer. The amount of the anti-frost agent depends on the content of cement in the mortar – the ratio cement/fillers in ATLAS CEMENT BASE COAT is 1:4.
Note. The manufacturer of the mortar does not bear responsibility for the result and the quality of the anti-frost agents used.

Technical data

ATLAS CEMENT BASE COAT is manufactured as a dry mix of high quality cement binder, quartz fillers and modifiers improving the material plasticity and workability.

Bulk density (of dry mix)	approx. 1.57 kg/dm³
Mass bulk density (after mixing)	approx. 2.06 kg/dm³
Dry density (after setting)	approx. 1.6 kg/dm³
Mixing ratio (water/dry mix)	approx. 0.22 l /1 kg approx. 6.50 l/30 kg
Base coat thickness	approx. 4 mm
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Maturing time	approx. 5 minutes
Pot life	approx. 2 hours

Technical requirements

ATLAS CEMENT BASE COAT conforms to PN-EN 998-1 standard. EC Declaration of Performance No. 111/CPR.

CE	PN-EN 998-1:2012 (EN 998-1:2010)
Factory made plastering mortar of specified properties, general-purpose (GP)	for manual application, for indoor and outdoor use, on masonry walls, ceilings, posts and partition walls
Reaction to fire - class	A1
Water absorption – category	W1
Bonding	≥ 0.3 N/mm^2 - FP:B
Water vapour permeability coefficient (tabular value μ)	15/35 (EN 1745:2002 tab. A.12)
Thermal conductivity coefficient (average tabular value P=50%)	0.83 W/mK ($\lambda_{10, dry}$) (EN 1745:2002 tab. A.12)
Durability. Compressive strength decrease after 25 freeze-thaw cycles	≤ 15%
Durability. Mass decrement after 25 freeze-thaw cycles	≤ 3%
Gross dry mortar density	≤ 1800 kg/m^3
Release/content of hazardous substances	See: Safety Data Sheet

Plastering

Substrate preparation

The substrate should be dry, stable, even and structurally sound, i.e. strong enough, free from layers, which would impair the mortar bonding, in particular dust, dirt, lime, oil, grease, wax, remains of anti-adhesion agents and paints. Hack off poorly bonded elements and remove loose pieces with a steel brush. Edges of joints between cement chipboards should be reinforced with strips of stainless steel mesh. Protect the corners and edges of window and door reveals with galvanized steel profiles. If necessary, use ATLAS UNI-GRUNT priming emulsion to reduce substrate excessive absorption.

Mortar preparation

Pour the mortar from the bag into a clean container with the suitable amount of water (see Technical Data for ratio) and mix using a mixer with a drill (or in cement mixer) until homogenous. In case of machine application the mortar is prepared in a plastering unit. Leave the mortar to rest for 5 minutes and remix. The mortar is ready to use directly after mixing and should be used up within approx. 2 hours.

Base coat application

The mortar is applied onto properly prepared substrate manually or mechanically, with an uniform coat up to 4 mm thick. Do not smooth or float the coat. Leave the mortar to set initially (approx. 12 hours), then apply the main (finish) plaster coat.

Maintenance

Ensure appropriate room ventilation during drying. Protect the base coat applied outdoors from drying too quickly.

Consumption

Material consumption depends on the accuracy of surface coating. If the base coat is applied over the entire surface the material consumption reaches approx. 8 kg of dry mix for 1 m^2.

Important additional information

- Adjust the ratio of added water experimentally (keeping the ratio listed in the Technical Data section), following the desired consistency of the mortar, type of substrate and weather conditions. Inappropriate amount of mix water results in deterioration of strength parameters of the plaster.
- Tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with the ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%..

Packaging

Paper bags: 30 kg
Pallet: 1,080 kg in 30 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-05-24

ATLAS REKORD

white cement top finish

- based on white cement
- for finishing walls and ceilings
- on typical mineral substrates
- contains fine aggregate – up to 0.2 mm
- reinforced microfibers

Use

Smooths the surface of walls – the use of aggregate of diameter up to 0.2 mm enables highly smooth finish forming.
Enables smoothing thin-coat plasters – applied on either traditional plasters or on thermal insulation layers (is not an element of thermal insulation systems).
Improves the quality of damaged cement and cement-lime plasters as well as concrete substrates.
Used as the third, finish coat of freshly applied plasters.

Types of substrates – cement and cement-lime plasters, concrete.

Properties

White colour – based on fine white type of cement, perfectly replaces gypsum top finishes in places, where they can be exposed to damage - on external walls and in wet rooms.
Resistant to micro-cracks – contains special microfibres, which reinforces its structure.
Hydrophobic – the content of hydrophobic agents reduce the absorbability, but does not limit the water vapour permeability.

Technical data

ATLAS REKORD is manufactured as a dry mix of white cement, improvers and quartz fillers of 0.2 mm maximum grain size.

Bulk density (of dry mix)	approx. 1.25 kg/dm^3
Mass bulk density (after mixing)	approx. 1.3 kg/dm^3
Dry density (after setting)	approx. 1.3 kg/dm^3
Mixing ratio (water/dry mix)	0.28 ÷ 0.32 l/1 kg 7.00 ÷ 8.00 l/25 kg
Min./max. plaster thickness	1 mm / 10 mm
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Maturing time	approx. 5 minutes
Pot life	approx. 2 hours
Open time	approx. 25 minutes

Technical requirements

ATLAS REKORD conforms to PN-EN 998-1 standard. EC Declaration of Performance No. 025/CPR.

CE 0767	PN-EN 998-1:2012 (EN 998-1:2010)
Factory made, one coat plastering mortar (OC)	for outdoor use, on masonry walls, ceilings, posts, partition walls
Reaction to fire - class	A1
Water absorption – category	W1
Bonding after required freeze-thaw cycles	≥ 0.3 N/mm^2 - FP:B
Water vapour permeability coefficient (tabular value μ)	15/35 (EN 1745:2002 tab. A.12)
Thermal conductivity coefficient (average tabular value P=50%)	0.83 W/mK ($\lambda_{10, dry}$) (EN 1745:2002 tab. A.12)
Gross dry mortar density	≤ 1800 kg/m^3
Durability. Bonding after required freeze-thaw cycles	≥ 0.3 N/mm^2 - FP:B
Durability - water permeability after required freeze-thaw cycles	≤ 1 ml/cm^2 after 48 h
Release/content of hazardous substances	See: Safety Data Sheet

The product has been given the Radiation Hygiene Certificate.

Plastering

Substrate preparation

The substrate should be dry, stable, even and structurally sound, i.e. strong enough, free from layers, which would impair the mortar bonding, in particular dust, dirt, lime, oil, grease, wax, remains of anti-adhesion agents and paints. Hack off poorly bonded elements and remove loose pieces with a steel brush. Edges of joints between cement chipboards should be reinforced with strips of stainless steel mesh. Prior to application the substrate should be intensively wet and kept matt-wet during application. If necessary, use ATLAS UNI-GRUNT priming emulsion to reduce substrate excessive absorption.

Mortar preparation

Pour the mortar from the bag into a clean container with the suitable amount of water (see Technical Data for ratio) and mix using a mixer with a drill (or in cement mixer) until homogenous. Leave the mortar to rest for 5 minutes and remix. The mortar is ready to use directly after mixing and should be used up within approx. 2 hours.

Plaster application

Apply the mortar evenly with a steel float. Smooth the applied mass as plastering progresses. It is advisable to fill any large substrate defects before the application of the finish coat. The surface can be finished by light floating with a felt float or with sand paper after drying. Open time of the mass (between mortar application and floating) depends on substrate absorptivity, ambient temperature and mortar consistency.

Maintenance

Plaster applied indoors - avoid draughts and ensure appropriate room ventilation and airing. Plaster applied outdoors - protect from drying too quickly and precipitation (during and just after application).

Painting

Plasters can be painted with any façade paints (e.g. silicate ATLAS ARKOL S, ATLAS SALTA S, silicone ATLAS SALTA, ATLAS FASTEL-NOVA, ATLAS SALTA N, acrylic ATLAS SALTA E, ATLAS ARKOL E). Painting is possible after 2 ÷ 6 weeks since the completion of plaster application (depending on the type and colour of the paint). Painting with ATLAS silicate paints ATLAS ARKOL S and ATLAS SALTA S or ATLAS silicone paints ATLAS SALTA and ATLAS FASTEL NOVA can start just when the plaster dries, not earlier, however, than after 48 hours (silicate paint) or 5 days (FASTEL NOVA and SALTA). The application of ATLAS WODER type waterproofing can commence just after 2 days.

Consumption

The average consumption is approx. 1.5 kg of mix/ 1 m^2 / 1 mm of coat thickness.

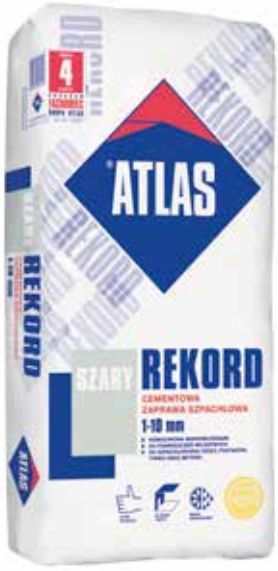
Important additional information

- Adjust the ratio of added water experimentally (keeping the ratio listed in the Technical Data section), following the desired consistency of the mortar, type of substrate and weather conditions. Inappropriate amount of mix water results in deterioration of strength parameters of the plaster.
- Avoid application in strong sunlight.
- Protect the surfaces surrounding the worksite from soiling.
- Tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with the ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Paper bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-06-03



ATLAS REKORD GREY

grey cement top finish

- for finishing ceilings and walls made of brick, hollow blocks, concrete
- for finishing plastered walls
- in damp rooms
- coat thickness from 1 up to 10 mm
- reinforced microfibers

Use

Improves the quality of damaged cement and cement-lime plasters as well as concrete substrates.
For finishing walls, posts and binding joists constructed with ferroconcrete technology.
Used as the third, finish coat of freshly applied plasters.
Enables smoothing thin-coat plasters – applied on either traditional plasters or on thermal insulation layers (is not an element of thermal insulation systems).
Recommended for damp rooms, e.g. kitchens, laundries, bathrooms and pools.
Smooths the surface of walls – the use of aggregate of diameter up to 0.2 mm enables highly smooth finish forming.

Types of substrates – cement and cement-lime plasters, concrete, rough walls made of brick and hollow blocks.

Properties

Resistant to micro-cracks – contains special microfibres, which reinforces its structure.
Contains hydrophobic agents – they reduce the absorbability, but do not limit the water vapour permeability.

Technical data

ATLAS REKORD GREY is manufactured as a dry mix of cement, improvers and quartz fillers of 0.2 mm maximum grain size.

Bulk density (of dry mix)	approx. 1.25 kg/dm^3
Mass bulk density (after mixing)	approx. 1.3 kg/dm^3
Dry density (after setting)	approx. 1.3 kg/dm^3
Mixing ratio (water/dry mix)	0.28 ÷ 0.32 l/1 kg 7.00 ÷ 8.00 l/25 kg
Min./max. plaster thickness	1 mm / 10 mm
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Maturing time	approx. 5 minutes
Pot life	approx. 2 hours
Open time	approx. 25 minutes

Technical requirements

ATLAS REKORD GREY conforms to PN-EN 998-1 standard. EC Declaration of Performance No. 025-1/CPR.

CE 0767	PN-EN 998-1:2012 (EN 998-1:2010)
Factory made, one coat plastering mortar (OC)	for outdoor use, on masonry walls, ceilings, posts, partition walls
Reaction to fire - class	A1
Water absorption – category	W1
Bonding after required freeze-thaw cycles	≥ 0.3 N/mm^2 - FP:B
Water vapour permeability coefficient (tabular value μ)	15/35 (EN 1745:2002 tab. A.12)
Thermal conductivity coefficient (average tabular value P=50%)	0.83 W/mK ($\lambda_{10, dry}$) (EN 1745:2002 tab. A.12)
Gross dry mortar density	≤ 1800 kg/m^3
Durability. Bonding after required freeze-thaw cycles	≥ 0.3 N/mm^2 - FP:B
Durability - water permeability after required freeze-thaw cycles	≤ 1 ml/cm^2 after 48 h
Release/content of hazardous substances	See: Safety Data Sheet

The product has been given the Radiation Hygiene Certificate.

Plastering

Substrate preparation

The substrate should be dry, stable, even and structurally sound, i.e. strong enough, free from layers, which would impair the mortar bonding, in particular dust, dirt, lime, oil, grease, wax, remains of anti-adhesion agents and paints. Hack off poorly bonded elements and remove loose pieces with a steel brush. Edges of joints between cement chipboards should be reinforced with strips of stainless steel mesh. Prior to application the substrate should be intensively wet and kept matt-wet during application. If necessary, use ATLAS UNI-GRUNT priming emulsion to reduce substrate excessive absorption.

Mortar preparation

Pour the mortar from the bag into a clean container with the suitable amount of water (see Technical Data for ratio) and mix using a mixer with a drill (or in cement mixer) until homogenous. Leave the mortar to rest for 5 minutes and remix. The mortar is ready to use directly after mixing and should be used up within approx. 2 hours.

Plaster application

It is advisable to fill any large substrate defects before the application of the finish coat. Apply the mortar evenly and smooth it with a steel float. When the mortar starts to set, one should spray it with water and smooth again with a steel float. The mass open time (between mortar application and floating) depends on substrate absorptivity, ambient temperature and mortar consistency.

Maintenance

Plaster applied indoors - avoid draughts and ensure appropriate room ventilation and airing. Plaster applied outdoors - protect from drying too quickly and precipitation (during and just after application). Surface maintenance advisable – sprinkling with water within 1-3 days depending on conditions.

Painting

Plasters can be painted with any façade paints (e.g. silicate ATLAS ARKOL S, ATLAS SALTA S, silicone ATLAS SALTA, ATLAS FASTEL-NOVA, ATLAS SALTA N, acrylic ATLAS SALTA E, ATLAS ARKOL E). Painting is possible after 2 ÷ 6 weeks since the completion of plaster application (depending on the type and colour of the paint). Painting with ATLAS silicate paints ATLAS ARKOL S and ATLAS SALTA S or ATLAS silicone paints ATLAS SALTA and ATLAS FASTEL NOVA can start just when the plaster dries, not earlier, however, than after 48 hours (silicate paint) or 5 days (FASTEL NOVA and SALTA). The application of ATLAS WODER type waterproofing can commence just after 2 days.

Consumption

The average consumption is approx. 1.5 kg of mix/ 1 m^2 / 1 mm of coat thickness.

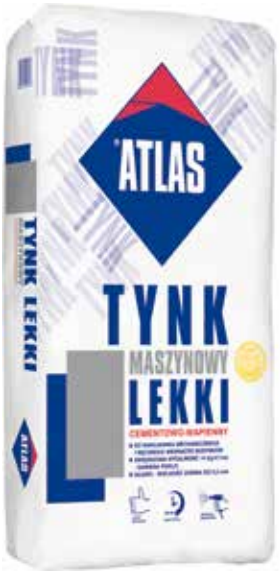
Important additional information

- Adjust the ratio of added water experimentally (keeping the ratio listed in the Technical Data section), following the desired consistency of the mortar, type of substrate and weather conditions. Inappropriate amount of mix water results in deterioration of strength parameters of the plaster.
- Avoid application in strong sunlight.
- Protect the surfaces surrounding the worksite from soiling.
- Tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with the ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Paper bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

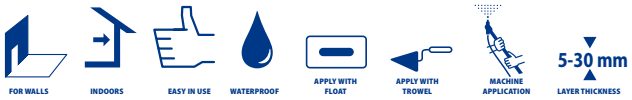
The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-06-03



ATLAS LIGHT MACHINE--APPLIED PLASTER

cement-lime plaster, category III

- for manual and machine application
- light – contains perlite
- high yield – up to 14 kg/m²/cm
- smooth – grain size up to 0.5 mm
- easily workable



Use

Recommended for cellular concrete plastering indoors – in rooms with normal air humidity, also in kitchens and bathrooms.
Plaster of category III – can be used as traditional two coat plaster consisting of the base coat and the finish coat, as well as base coat or finish coat separately.
Suitable for manual and machine plastering – the use of plastering units allows for fast work progress.

Types of substrates – substrates of improved thermal insulation capacity: porous ceramics and cellular concrete; concrete, aerated concrete, cement chipboards, cement and cement-lime plasters.

Properties

Improved yield – owing to specially developed recipe, it offers 50% higher yield in comparison to traditional cement plasters.
Very good bonding to substrate – owing to the content of lime, plaster fills any wall irregularities tightly, seals the wall and strongly bonds to bricks, blocks, etc.
Transfers and distributes strain very well – owing to the content of lime, plaster is resilient, self-protecting against cracking.
Enables extending the distance between vertical expansion joints – in comparison to plasters, where cement is the single binder.
Limits the wall absorbability – the tightness of the cement-lime plaster protects the wall against water ingress into its structure and negative effects resulting, e.g. biological corrosion.
Perfect workability – the content of lime makes preparation and application of the mortar very easy.
Easy to apply and float – low bulk density makes the plaster very convenient to work with, both when plastering ceilings and walls.
High water vapour permeability – the plaster coat does not interfere with vapour permeability of walls made of porous materials, e.g. cellular concrete.

Technical data

ATLAS LIGHT MACHINE-APPLIED PLASTER is manufactured as a dry mix of cement binder, lime, quartz fillers, perlite and improvers of the highest quality.

Bulk density (of dry mix)	approx. 1.2 kg/dm³
Mass bulk density (after mixing)	approx. 1.5 kg/dm³
Dry density (after setting)	approx. 1.25 kg/dm³
Mixing ratio (water/dry mix)	base coat 7.8 ÷ 9.0 l/30 kg finish coat 6.0 ÷ 7.8 l/30 kg
Yield	1000 kg of dry mix = approx. 900 l of mortar
Max. aggregate size	0.5 mm
Min./max. plaster thickness	5 mm / 30 mm
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +30°C
Pot life	approx. 2 hours

Technical requirements

The product conforms to PN-EN 998-1 standard. EC Declaration of Performance No. 101/CPR.

CE	PN-EN 998-1:2012 (EN 998-1:2010)
Factory made plastering mortar of specified properties, light (LW)	for manual and machine application, for indoor use, on masonry walls, ceilings, posts and partition walls
Reaction to fire - class	A1
Bonding	≥ 0.3 N / mm^2 - FP:B
Thermal conductivity coefficient (average tabular value P=50%)	0.47 W/mK ($\lambda_{10, dry}$) (EN 1745:2002 tab. A.12)
Gross dry mortar density	≤ 1300 kg/m^3
Durability. Compressive strength decrease after 25 freeze-thaw cycles	≤ 15 %
Durability. Mass decrement after 25 freeze-thaw cycles	≤ 3%
Release/content of hazardous substances	See: Safety Data Sheet

The product has been given the Radiation Hygiene Certificate.

Plastering

Substrate preparation

The substrate should be dry, stable, even and structurally sound, i.e. strong enough, free from layers, which would impair the mortar bonding, in particular dust, dirt, lime, oil, grease, wax, remains of anti-adhesion agents and paints. Hack off poorly bonded elements and remove loose pieces with a steel brush. Edges of joints between cement chipboards should be reinforced with strips of stainless steel mesh. Protect the corners and edges of window and door reveals with galvanized steel profiles. If necessary, use ATLAS UNI-GRUNT priming emulsion to reduce substrate excessive absorption. Prior to plastering the substrate can be wet with clean water and the base coat applied then.

Plaster application

Apply the plaster with a plastering unit adapted for work with ready-to-use mixes. Apply the material upon walls using a spray gun, in overlapping horizontal strips, from top to bottom. The sprayer nozzle should be guided in smooth motion, at constant distance from the surface. In case of manual application, apply the material with a trowel.

Plaster leveling

Level the mortar using a "H-type" darby and leave for initial setting. Fresh plaster can be smoothed with long feather edge until even surface is formed.

Floating

The time of floating has to be determined experimentally in order to avoid excessive plaster drying. Floating is usually carried out after application of an additional thin mortar coat, corresponding to the mortar grain size.

The finishing works must be carried out in accordance to the plastering technology, with tools appropriate for the expected finish effect and the intended use of plaster. If plaster is the substrate for ceramic cladding, it should not be floated at all or coarsely finished then. When plaster is to be coated with gypsum top finish, it should be floated with a polystyrene float. Ensure appropriate room ventilation during drying.

Painting

Plasters can be painted with any façade paints (e.g. silicate ATLAS ARKOL S, ATLAS SALTA S, silicone ATLAS SALTA, ATLAS FASTEL-NOVA, ATLAS SALTA N, acrylic ATLAS SALTA E, ATLAS ARKOL E). Painting is possible after 2 ÷ 6 weeks since the completion of plaster application (depending on the type and colour of the paint). Painting with ATLAS silicate paints ATLAS ARKOL S and ATLAS SALTA S or ATLAS silicone paints ATLAS SALTA and ATLAS FASTEL NOVA can start just when the plaster dries, not earlier, however, than after 48 hours (silicate paint) or 5 days (FASTEL NOVA and SALTA).

Consumption

The average consumption is approx. 14 kg of mix/ 1 m^2 / 10 mm of coat thickness. 1,000 kg of dry mix allow to prepare 900 l of mortar.

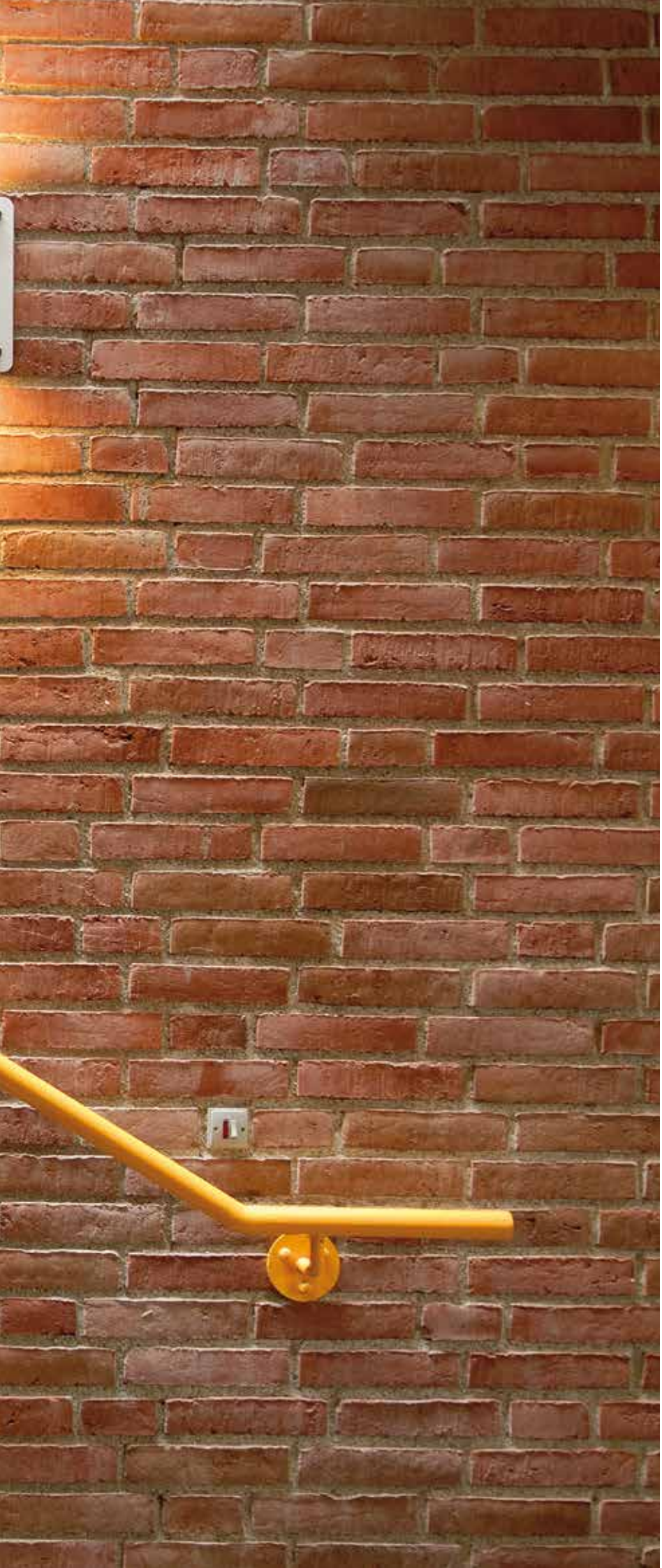
Important additional information

- Adjust the ratio of added water experimentally (keeping the ratio listed in the Technical Data section), following the desired consistency of the mortar, type of substrate and weather conditions. Inappropriate amount of mix water results in deterioration of strength parameters of the plaster.
- Tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with the ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Paper bags: 30 kg
Pallet: 1,080 kg in 30 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-06-03



MASONRY MORTARS

MASONRY MORTARS

Classification of masonry mortars

Masonry mortars are classified in accordance to the PN-EN 998-2:2010 standard. *Specification for Mortar for Masonry. Part 2: Masonry mortar.*

It defines performance of fresh mortars, their pot life, chloride content, air content, adjustability. One can also find there many parametres concerning properties of set mortars: compressive strength, joint strength, water absorption, water vapour permeability, thermal conductivity, reaction to fire, density and durability.

The most important standard division classifies masonry mortars as:
- general purpose (G)
- for thin joints (T)
- light (L)

Mortar selection

- Thick joint brick laying

  If we intend to build walls of ceramic elements (bricks, hollow blocks), lime-sand or concrete blocks, cement mortars for thick joints (from 6 to 40 mm) should be used, i.e. general purpose mortars like ATLAS MASONRY MORTAR. Practically, any type of walls can be constructed with these elements: main walls, partition walls, shielded walls, cellar and foundation walls. Traditional trowel is used for brick laying and technique of mortar application must be adjusted to element and joint type listed by the manufacturer.

- Masonry with clinker

  Thick joint mortars include also special products for clinker masonry works. Their composition contains trass, i.e. mineral of volcanic origin, which limits the risk of efflorescence occurrence on walls made of clinker. Atlas also offers product of this type - ATLAS MASONRY MORTAR FOR CLINKER. When using these mortars, one should pay special attention to application cleanliness, keeping technological regime (especially amount of mix water added to mortars), carrying out installation in favorable weather conditions and appropriate protection of setting mortar against negative effects of weather.

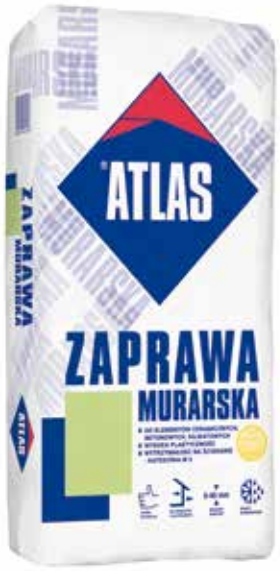
- Thin joint brick laying

  Masonry mortars for thin joints (from 1 mm to 5 mm) are used with elements of repetitive and exact dimensions and in places where, due to possibility of occurrence of thermal bridging phenomenon, joint width should be reduced to minimum. They are used primarily for walls made of cellular concrete blocks – ATLAS KB-15, or silicate elements – ATLAS SILMUR. Due to the content of polymer binders and small width of joint, the technology of use of these mortars differs significantly from traditional brick laying. Special tools – notched trowels - are used for mortar application, which allows to distribute mortar evenly along whole previously constructed layer.

TABLE 8.1

PRODUCT					
	ATLAS MASONRY MORTAR	MASONRY MORTAR ATLAS M10	ATLAS KB-15	ATLAS MASONRY MORTAR FOR CLINKER	ATLAS SILMUR
	Traditional masonry mortar	Traditional masonry mortar	Masonry mortar for cellular concrete	Masonry mortar with trass	Masonry mortars for silicate elements
Reference document	PN-EN 998-2:2012				
TECHNICAL DATA					
Mortar type*	G	G	T	G	T
Mixing ratio water/dry mix	3-3.5	3-3.5	5.25-6.0	bricklaying: 3.25-3.75 grouting: 2.5	5.0-6.0
Joint width [mm]	6-40	6-40	2-10	6-40	2-10
Compressive strength [N/mm^2]	≥ 5.0	≥ 10.0	≥ 5.0	≥ 5.0	from ≥ 5 up to ≥ 15***
Pot life [h]	4	4	4	3	4
Colour	grey	grey	grey	grey, dark grey, dark brown, beige, graphite, brick red, anthracite - black	grey or white
Mortar preparation and application temperature [°C]	5-30	5-30	5-30	5-30	5-30 0-30**
TYPE OF MASONRY ELEMENTS					
Ceramic	✓	✓			
Clinker				✓	
Lime-sand	✓	✓			✓
Concrete	✓	✓			
Cellular concrete	✓	✓	✓		✓ ***
USE					
Thick joint bricklaying	✓	✓		✓	
Thin joint bricklaying			✓		✓
Grouting				✓	

* G – general use, T – for thin joints
** applies to M15 mortars
*** does not apply to M15 mortars



ATLAS MASONRY MORTAR

traditional masonry mortar

- for ceramic, concrete and silicate elements
- for joints 6-40 mm thick
- high plasticity
- compressive strength – category M5
- joins elements into stable, durable wall

Use

Recommended for bricklaying with traditional, thick joints – allows to correct measurement imprecision of wall elements.
For building above ground floors, cellar walls and foundations – reinforced and unreinforced elements subject to construction requirements.
Joins elements into stable and durable wall – forms soft and resilient framework, which rigid elements like bricks, stones and blocks are embedded in.
Protects individual wall elements against damage – bricks, blocks, hollow blocks – forms a buffer limiting the stress resulting from load of consecutive wall layers as well as changes in ambient temperature and humidity.

Types of masonry elements – bricks, hollow blocks and other similar ceramic, lime sand and concrete materials.

Properties

Compressive strength – category M5.
Factory made – guarantees uniform working parameters of the mortar and technological parameters of the joints after setting.
Easy and comfortable in use – characterized by very good workability, plasticity and high bonding.
Extended pot life – approx. 4 hours.
The mortar can be supplemented with, so-called anti-frost additives allowing to carry out works in low temperature, i.e. below +5°C – the new range of temperature of mortar application, the way of preparation (especially the adjustment of mix water), principles of carrying out works and mortar setting conditions must be set according to the guidelines of the additive manufacturer. The amount of the anti-frost agent depends on the content of cement in the mortar – the ratio cement/fillers in ATLAS MASONRY MORTAR is 1:3.
Note. The manufacturer of the mortar does not bear responsibility for the result and the quality of the anti-frost agents used.

Technical data

ATLAS MASONRY MORTAR is manufactured as a dry mix of high quality cement binder, quartz fillers and improvers..

Bulk density (of dry mix)	approx. 1.5 kg/dm^3
Mass bulk density (after mixing)	approx. 2.0 kg/dm^3
Dry density (after setting)	approx. 2.0 kg/dm^3
Mixing ratio (water/dry mix)	0.12 ÷ 0.14 l/1 kg 3.0 ÷ 3.50 l/25 kg
Min./max. mortar thickness	6 mm / 40 mm
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +30°C
Pot life	approx. 4 hours

Technical requirements

The product conforms to PN-EN 998-2 standard. EC Declaration of Performance No. 007/CPR.

CE 1488	PN-EN 998-2:2012 (EN 998-2:2010)
Factory-made masonry mortar, manufactured acc. to design, general purpose (G)	for indoor and outdoor use, in elements subject to structural requirements, designed for reinforced and un-reinforced walls, on masonry walls, posts and partition walls
Compressive strength	≥ 5.0 N/mm^2
Initial shear strength (tabular value)	≥ 0.15 N/mm^2
Chloride content	0.07% Cl
Reaction to fire - class	A1
Water absorption	0.05 kg/m^{2}min^{0,5}
Water vapour permeability coefficient (tabular value μ)	15/35 (EN 1745:2002, table A.12)
Thermal conductivity coefficient (average tabular value P=50%)	0.83 W/mK ($\lambda_{10, dry}$) (EN 1745:2002, table A.12)
Durability. - Compressive strength decrease after 25 freeze-thaw cycles - Mass decrement after 25 freeze-thaw cycles	 ≤ 10% ≤ 3%
Release/content of hazardous substances	See: Safety Data Sheet

The product has been given the ITB Certificate of Conformity No. 1488 CPD-0013/Z and the Radiation Hygiene Certificate.

Bricklaying

Preparation of masonry elements
Bricks, hollow blocks or blocks must be clean, free from dust and dry. Protect against rain and excessive heating when stored.

Weather conditions
Consider weather conditions during bricklaying as well as during mortar setting and drying.

Mortar preparation
Pour the mortar from the bag into a clean container with the suitable amount of water (see Technical Data for ratio) and mix using a mixer with a drill (or in cement mixer) until homogenous. The mortar is ready to use directly after mixing and should be used up within approx. 4 hours.

Bricklaying
The mortar should be used in accordance to the technology of bricklaying with use of cement mortars. Apply mortar with a trowel evenly onto horizontal plane of the previously executed layer. Both horizontal and vertical joints should be precisely filled with mortar (unless another method of laying of particular elements is listed, e.g. tongue and groove joint). Leave an empty joint (5÷10 mm deep) at façade of wall designated for further plastering. Joint thickness should be even over the whole layer and should keep the range from 6 to 40 mm.

Consumption

Wall thickness (full brick)	Consumption - dry mortar, joint thickness approx.. 1 cm	Coverage from a 25 kg bag
1/2 b	approx. 40 kg/m^2	approx. 0.63 m^2
1 b	approx. 100 kg/m^2	approx. 0.25 m^2

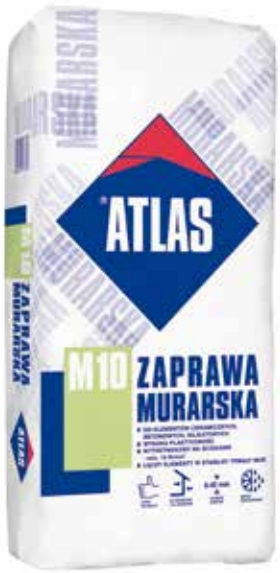
Important additional information

- Adjust the ratio of added water experimentally (keeping the ratio listed in the Technical Data section), following the desired consistency of the mortar, type of substrate and weather conditions. Inappropriate amount of mix water results in deterioration of strength parameters of the mortar.
- Tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with the ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Paper bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-03-31



ATLAS MASONRY MORTAR M10

traditional masonry mortar

- for ceramic, concrete and silicate elements
- for joints 6-40 mm thick
- high plasticity
- compressive strength – ≥ 10.0 N/mm²
- joins elements into stable, durable wall

Use

Recommended for bricklaying with traditional, thick joints – allows to correct measurement imprecision of wall elements.
For building above ground floors, cellar walls and foundations – reinforced and unreinforced elements subject to construction requirements.
Joins elements into stable and durable wall – forms soft and resilient framework, which rigid elements like bricks, stones and blocks are embedded in.
Protects individual wall elements against damage – bricks, blocks, hollow blocks – forms a buffer limiting the stress resulting from load of consecutive wall layers as well as changes in ambient temperature and humidity.

Types of masonry elements – bricks, hollow blocks and other similar ceramic, lime sand and concrete materials.

Properties

Compressive strength – ≥ 10.0 N/mm².
Factory made – guarantees uniform working parameters of the mortar and technological parameters of the joints after setting.
Easy and comfortable in use – characterized by very good workability, plasticity and high bonding.
Extended pot life – approx. 4 hours.
The mortar can be supplemented with, so-called anti-frost additives allowing to carry out works in low temperature, i.e. below +5°C – the new range of temperature of mortar application, the way of preparation (especially the adjustment of mix water), principles of carrying out works and mortar setting conditions must be set according to the guidelines of the additive manufacturer. The amount of the anti-frost agent depends on the content of cement in the mortar – the ratio cement/fillers in ATLAS MASONRY MORTAR M10 is 1:3.
Note. The manufacturer of the mortar does not bear responsibility for the result and the quality of the anti-frost agents used.

Technical data

ATLAS MASONRY MORTAR M10 is manufactured as a dry mix of high quality cement binder, quartz fillers and improvers.

Bulk density (of dry mix)	approx. 1.5 kg/dm³
Mass bulk density (after mixing)	approx. 2.0 kg/dm³
Dry density (after setting)	approx. 1.8 kg/dm³
Mixing ratio (water/dry mix)	0.12 ÷ 0.14 l/1 kg 3.0 ÷ 3.50 l/25 kg
Min./max. mortar layer thickness	6 mm / 40 mm
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +30°C
Pot life	approx. 4 hours

Technical requirements

The product conforms to PN-EN 998-2 standard. EC Declaration of Performance No. 095/CPR.

CE 1488	PN-EN 998-2:2012 (EN 998-2:2010)
Factory-made masonry mortar, manufactured acc. to design, general purpose (G)	for indoor and outdoor use, in elements subject to structural requirements, designed for reinforced and un-reinforced walls, on masonry walls, posts and partition walls
Compressive strength	≥ 10.0 N/mm^2
Initial shear strength (tabular value)	≥ 0.15 N/mm^2
Chloride content	0.1% Cl
Reaction to fire - class	A1
Water absorption	0.1 kg/m^{2}min$^{0.5}$
Water vapour permeability coefficient (tabular value μ)	15/35 (EN 1745:2002, table A.12)
Thermal conductivity coefficient (average tabular value P=50%)	0.83 W/mK ($\lambda_{10,dry}$) (EN 1745:2002, table A.12)
Durability. - Compressive strength decrease after 25 freeze-thaw cycles - Mass decrement after 25 freeze-thaw cycles	≤ 10% ≤ 3%
Ingredients ratio (by weight, %)	Cement:fillers 1:3 Additives below 1%
Release/content of hazardous substances	See: Safety Data Sheet

The product has been given the Radiation Hygiene Certificate.

Bricklaying

Preparation of masonry elements
Bricks, hollow blocks or blocks must be clean, free from dust and dry. Protect against rain and excessive heating when stored.

Weather conditions
Consider weather conditions during bricklaying as well as during mortar setting and drying.

Mortar preparation
Pour the mortar from the bag into a clean container with the suitable amount of water (see Technical Data for ratio) and mix using a mixer with a drill (or in cement mixer) until homogenous. The mortar is ready to use directly after mixing and should be used up within approx. 4 hours.

Bricklaying
The mortar should be used in accordance to the technology of bricklaying with use of cement mortars. Apply mortar with a trowel evenly onto horizontal plane of the previously executed layer. Both horizontal and vertical joints should be precisely filled with mortar (unless another method of laying of particular elements is listed, e.g. tongue and groove joint). Leave an empty joint (5÷10 mm deep) at façade of wall designated for further plastering. Joint thickness should be even over the whole layer and should keep the range from 6 to 40 mm.

Consumption

Wall thickness (full brick)	Consumption - dry mortar, joint thickness approx.. 1 cm	Coverage from a 25 kg bag
1/2 b	approx. 4.0 kg/m^2	approx. 0.63 m^2
1/2 b	approx. 100 kg/m^2	approx. 0.25 m^2

Important additional information

- Adjust the ratio of added water experimentally (keeping the ratio listed in the Technical Data section), following the desired consistency of the mortar, type of substrate and weather conditions. Inappropriate amount of mix water results in deterioration of strength parameters of the mortar.
- Tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with the ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Paper bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-07-15

ATLAS MASONRY MORTAR FOR CLINKER

masonry mortar with trass

- improved resistance to efflorescence
- water vapour permeability
- resistance to UV-radiation
- for bricklaying with thick joints 6-40 mm
- for grouting bricks and tiles

Bricklaying with no efflorescence

Contains trass – mineral of volcanic origin – which limits the possibility of efflorescence occurrence on the mortar surface.
Filtered aggregate – quartz aggregate used for mortar production is subject to the process of sifting and flushing. Therefore, the grains are free from pollution, soluble salts and other minerals causing the salinity.

Use

Laying bricks and clinker fittings with traditional, thick joints - recommended thickness from 6 up to 40 mm.
Construction of structural and decorative elements – external and curtain walls, wells, posts, fence walls, etc.
Grouting walls constructed of clinker bricks as well as clinker tiles cladding.

Types of masonry elements – clinker or similar elements of low absorbability (3÷8%), bricks, hollow blocks, blocks.

Properties

7 colours – matching typical colour range of clinker: anthracite-black, grey, beige, dark grey, graphite, brick red and dark brown.
Resistance to UV radiation – properly selected chemical composition of powder pigments used in the mortar recipe (iron oxide) makes the mortar resistant to UV radiation. Therefore, intensive colours do not fade and the mortar keeps its strength parameters in operation.
Compressive strength – category M5.
High bonding to elements of low absorbability.
Joins elements into stable and durable wall – forms soft and resilient framework, which rigid elements like clinker bricks are embedded in.
Protects individual wall elements against damage – bricks, blocks, hollow blocks – forms a buffer limiting the stress resulting from load of consecutive wall layers as well as changes in ambient temperature and humidity.
Very good working parametres – properly selected aggregate composition (up to 1.2 mm) makes the mortar easily applied and shaped. Enables large scale bricklaying free of the phenomenon of mortar coming out from bottom layers.

Technical data

ATLAS MASONRY MORTAR FOR CLINKER is manufactured as a dry mix of high quality cement binder, quartz fillers and improvers.

Bulk density (of dry mix)	approx. 1.6 kg/dm^3
Mass bulk density (after mixing)	approx. 1.95 kg/dm^3
Dry density (after setting)	approx. 1.8 kg/dm^3
Mixing ratio – bricklaying (water/dry mix)	0.13 ÷ 0.15 l/1 kg 3.25 ÷ 3.75 l/25 kg
Mixing ratio – grouting (advised water volume) (water/dry mix)	approx. 0.1 l/1 kg approx. 2.5 l/25 kg
Min./max. mortar thickness	6 mm / 40 mm
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +30°C
Pot life	approx. 3 hours

Technical requirements

The product conforms to PN-EN 998-2 standard. EC Declaration of Performance No. 086/CPR.

CE 1488	PN-EN 998-2:2012 (EN 998-2:2010)
Factory-made masonry mortar, manufactured acc. to design, general purpose (G)	for indoor and outdoor use, in elements subject to structural requirements, designed for reinforced and un-reinforced walls, on masonry walls, posts and partition walls
Compressive strength	≥ 5.0 N/mm^2
Initial shear strength (tabular value)	≥ 0.15 N/mm^2
Chloride content	0.07% Cl
Reaction to fire - class	A1
Water absorption	0.05 kg/m^{2}min^{0,5}
Water vapour permeability coefficient (tabular value μ)	15/35 (EN 1745:2002, table A.12)
Thermal conductivity coefficient (average tabular value P=50%)	0.83 W/mK ($\lambda_{10,dry}$) (EN 1745:2002, table A.12)
Durability. - Compressive strength decrease after freeze-thaw cycles - Mass decrement after freeze-thaw cycles	≤ 10% ≤ 3%
Release/content of hazardous substances	See: Safety Data Sheet

The product has been given the ITB Certificate of Conformity No. 1488-CPD-0013/Z and the Radiation Hygiene Certificate.

Bricklaying

Preparation of masonry elements
Clinker elements must be clean, free from dust and dry. Protect against rain and excessive heating when stored. Due to the possibility of occurrence of slight differences in colour shade between bricks from various production batches, it is recommended to mix bricks coming from several pallets before the work commencement.

Weather conditions
Consider weather conditions during bricklaying as well as during mortar setting and drying. All works have to be carried out in temperature between +5°C and +30°C. During work and afterwards (within min. 7 days), cover masonry elements with foil or mats protecting from precipitation and excessively quick drying caused by wind and sun action. Do not carry out works in precipitation. It is also advisable not to commence work if weather forecast anticipates rain or temperature drop in the following days. Moreover, the masonry structure and its foundations must be appropriately proofed against uncontrolled damp, e.g. capillary action from the substrate.

Mortar preparation for bricklaying or grouting
Pour the mortar from the bag into a clean container with the suitable amount of water (see Technical Data for ratio – note the difference in ratio for bricklaying and grouting) and mix using a mixer with a drill (or in cement mixer) until homogenous. The mortar is ready to use directly after mixing and should be used up within approx. 3 hours.

One stage bricklaying
Lay bricks with full joints, as it limits the possibility of rainwater penetration into the partition. Joint thickness should be even over the whole layer. Prepare an appropriate tool with rounded section made of plastic or wood for the grout shaping. The time of commencement of joint shaping depends on weather conditions, brick absorptivity and the resultant mortar setting. It should be carried out a dozen or several dozen minutes since the mortar application when, if touched, the fresh mortar does not soil fingers. **Note. The degree of mortar setting during grouting needs to be the same for the whole surface.**

Two stage brickwork
To form even joints and keep the level of successive layers, one can use appropriately prepared wooden beads or other limiters (recommended thickness: 10÷12 mm), arranged on the set bricks layer along its edge. The first stage – **bricklaying** – consists in joining bricks with the masonry mortar and leaving space for grout (masonry mortar fills the space between the beads only). **Grouting** the wall with ATLAS MASONRY MORTAR FOR CLINKER should start not earlier than 7 days since the first stage.

Available colours

colour	number
beige	020
brick red	021
dark brown	024
grey	035
dark grey	036
graphite	037
anthracite - black	038

Consumption

With 25 kg bag one can obtain approx. 14 liters of mass.
In order to build 1 m^2 of 12 cm thick wall made of bricks of traditional dimensions, the average consumption is:
– 34 kg of mortar with joint 1 cm thick,
– 40 kg of mortar with joint 1.2 cm thick.

Important additional information

- Use mortar of the same production batch and always use the same amount of mix water for each individual section.
- Pay special attention to cleanliness of laying successive elements. If mortar contacts the face of a brick, remove it as soon as possible (most preferably with a dry method).
- Noncompliance with recommendations and requirements concerning mortar preparation, application and maintenance may result in salt and lime efflorescence. Efflorescence is a natural phenomenon occurring with cement mortars and is not directly related to the application of ATLAS MASONRY MORTAR FOR CLINKER. Salts causing efflorescence may come from other mortars, substrate or clinker elements themselves.
- Adjust the ratio of added water experimentally (keeping the ratio listed in the Technical Data section), following the desired consistency of the mortar, type of substrate and weather conditions. Inappropriate amount of mix water results in deterioration of strength parameters of the mortar.
- Tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with the ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%

Packaging

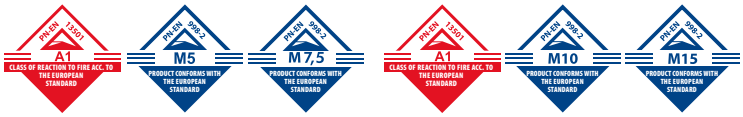
Paper bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-04-14

ATLAS SILMUR

masonry mortars for silicate elements

- for walls made of silicates and cellular concrete
- white or grey
- for surface floating
- 4 classes of compressive strength
- can be used in low temperature (SILMUR M-15 only)



Use

The mortar is available in four versions differing in compressive strength:
ATLAS SILMUR M-5 ≥ 5.0 N/mm^2
ATLAS SILMUR M-7.5 ≥ 7.5 N/mm^2
ATLAS SILMUR M-10 ≥ 10.0 N/mm^2
ATLAS SILMUR M-15 ≥ 15.0 N/mm^2
ATLAS SILMUR M-10 and M-15 are available on customer order only.
Recommended for constructing walls of silicate elements (all versions), cellular and aerated concrete (SILMUR M-10, M-7.5 and M-5).
Used for bricklaying with thin joints – recommended joint thickness from 2 up to 10 mm (optimum thickness: 2-3 mm).
Used for surface floating and leveling - with recommended coat thickness 2-5 mm.
ATLAS SILMUR M-15 can be used in low temperature – not less than 0 °C during application and not less than -10 °C after 8 hours since the application.
Note: work in low temperature reduces the strength parameters of the mortar.

Types of masonry elements – silicate, cellular and aerated concrete, bricks, hollow blocks and other similar ceramic and concrete materials.

Properties

Available in two colour versions – each ATLAS SILMUR version is available in white and grey colour.
Easy and convenient in use – characterised by very good workability, plasticity and excellent bonding.
High yield – the layer thickness can be monitored when applied with a notched trowel or a dispenser. It results in reduced mortar consumption and speeds up the work progress.

Technical data

ATLAS SILMUR is manufactured as a dry mix of high quality cement binder, quartz fillers and improvers.

Bulk density (of dry mix)	approx. 1.50 kg/dm^3
Mass bulk density (after mixing)	approx. 1.75 kg/dm^3
Dry density (after setting)	approx. 1.55 kg/dm^3
Mixing ratio (water/dry mix)	0.20 ÷ 0.24 l/1 kg 5.0 ÷ 6.0 l/25 kg
Min./max. mortar thickness	2 mm / 10 mm
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +30°C from 0°C to +30°C for SILMUR M-15
Pot life	approx. 4 hours

Technical requirements

The product conforms to PN-EN 998-2 standard. EC Declaration of Performance No. 090-1/CPR for SILMUR M-10, No. 090-2/CPR for SILMUR M-15, No. 090-3/CPR for SILMUR M-5 and No. 090-4/CPR for SILMUR M-7.5.

CE 1488	PN-EN 998-2:2012 (EN 998-2:2010)
Factory-made masonry mortar, manufactured acc. to design (SILMUR M-10 and M-15) and acc. to recipe (SILMUR M-5 and M7.5), for thin joints (T)	for indoor and outdoor use, in elements subject to structural requirements, designed for reinforced and un-reinforced walls, on masonry walls, posts and partition walls
Compressive strength SILMUR M5 SILMUR M7.5 SILMUR M-10 SILMUR M-15	 ≥ 5.0 N/mm² ≥ 7.5 N/mm² ≥ 10.0 N/mm² ≥ 15.0 N/mm²
Initial shear strength (tabular value)	≥ 0.3 N/mm²
Chloride content	0.07% Cl (SILMUR M-10 and M-15) ≤ 0.1% Cl (SILMUR M-5 and M-7.5)
Reaction to fire - class	A1
Water absorption	0.05 kg/m²min$^{0.5}$
Water vapour permeability coefficient (tabular value μ)	15/35 (EN 1745:2002, table A.12)
Thermal conductivity coefficient (average tabular value P=50%)	0.83 W/mK ($\lambda_{10, dry}$) (EN 1745:2002, table A.12)
Adjustability	≥ 10 minutes
Aggregate grain size	≤ 1.6 mm
Durability. - Compressive strength decrease after freeze-thaw cycles - Mass decrement after freeze-thaw cycles	 ≤ 10% ≤ 3%
Ingredients ratio for SILMUR M-5 and M-7.5 (by weight)	Cement:fillers 1:3 Additives below 1%
Release/content of hazardous substances	See: Safety Data Sheet

The product has been given the Radiation Hygiene Certificate.

Bricklaying

Preparation of silicate elements

Bricklaying. Clean the surfaces of joined elements of dust and any loose fragments. In order to form thin joint of uniform thickness, it is recommended to sand and dust the surface of previously laid elements.

Surface floating. The surface should be dry, stable, even and sound, i.e. sufficiently strong and cleaned of materials which would impair mortar bonding, especially dust, dirt, lime, oil, fats, wax, residues of oil or emulsion paint. Substrates characterised by excessive absorbability should be primed with ATLAS UNI-GRUNT emulsion.

Weather conditions

Consider weather conditions during bricklaying as well as during mortar setting and drying.

Mortar preparation

Pour the mortar from the bag into a clean container with the suitable amount of water (see Technical Data for ratio) and mix using a mixer with a drill (or in cement mixer) until homogenous. Leave the mortar to rest for 5 minutes and remix. The mortar should be used up within approx. 4 hours.

Bricklaying

Use ATLAS MASONRY MORTAR for the first layer laying and leveling. Apply ATLAS SILMUR layer with a notched trowel evenly onto horizontal plane of the previously executed layer. Apply also the mortar on the vertical contact surfaces of blocks, unless otherwise specified. Press each subsequent element firmly and tap into place using a rubber mallet.

Consumption

Bricklaying

Examples of consumption for blocks 20 cm laid with horizontal joint only

Homogenous wall thickness	Joint thickness approx. 3 mm	Coverage from a 25 kg bag
12 cm	approx. 2.0 kg/m²	approx. 12.5 m²
18 cm	approx. 3.0 kg/m²	approx. 8.3 m²
24 cm	approx. 4.0 kg/m²	approx. 6.25 m²
30 cm	approx. 5.0 kg/m²	approx. 5.0 m²
36 cm	approx. 6.0 kg/m²	approx. 4.16 m²

Floating

The average consumption is approx. 1.6 kg for 1m² for 1 mm layer thickness.

Important additional information

- Do not apply the mortar over a large surface in a single operation, because it retains its bonding properties within approx. 10 ÷ 30 minutes since spreading (depending on substrate properties and ambient conditions). In order to check if joining the blocks is still possible, conduct a test - press the applied mortar with fingers. If the mortar sticks to fingers, then you can fix the next element. If the fingers remain clean, the mortar must be removed and the new layer applied.
- Adjust the ratio of added water experimentally (keeping the ratio listed in the Technical Data section), following the desired consistency of the mortar, type of substrate and weather conditions. Inappropriate amount of mix water results in deterioration of strength parameters of the mortar.
- Tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with the ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Paper bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-05-22

ATLAS KB-15

masonry mortar for cellular concrete

- for walls made of cellular and aerated concrete
- for blocks, bricks, hollow blocks
- for surface floating
- prevents thermal bridging
- compressive strength – category M5

Use

Recommended for constructing walls of cellular and aerated concrete.
Prevents thermal bridging – provides uniform thermal insulation parameters of the whole partition.
Used for bricklaying with thin joints – recommended joint thickness from 2 up to 10 mm (optimum thickness: 2-3 mm).
Used for surface floating and leveling - with recommended coat thickness 2-5 mm.

Types of masonry elements – cellular and aerated concrete, as well as bricks, hollow blocks and other similar ceramic, lime-sand and concrete element**s.**

Properties

Compressive strength – category M5.
Easy and convenient in use – characterised by very good workability, plasticity and excellent bonding.
High yield – the layer thickness can be monitored when applied with a notched trowel or a dispenser. It results in reduced mortar consumption and speeds up the work progress.
The mortar can be supplemented with, so-called anti-frost additives allowing to carry out works in low temperature, i.e. below +5°C – the new range of temperature of mortar application, the way of preparation (especially the adjustment of mix water), principles of carrying out works and mortar setting conditions must be set according to the guidelines of the additive manufacturer. The amount of the anti-frost agent depends on the content of cement in the mortar – the ratio cement/fillers in ATLAS KB-15 is 1:2.
Note. The manufacturer of the mortar does not bear responsibility for the result and the quality of the anti-frost agents used.

Technical data

ATLAS KB-15 is manufactured as a dry mix of high quality cement binder, quartz fillers and improvers.

Bulk density (of dry mix)	approx. 1.40 kg/dm^3
Mass bulk density (after mixing)	approx. 1.65 kg/dm^3
Dry density (after setting)	approx. 1.50 kg/dm^3
Mixing ratio (water/dry mix)	0.21 ÷ 0.24 l/1 kg 5.25 ÷ 6.00 l/25 kg
Min./max. mortar thickness	2 mm / 10 mm
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +30°C
Pot life	approx. 4 hours

Technical requirements

The product conforms to PN-EN 998-2 standard. EC Declaration of Performance No. 008/CPR.

CE 1488	PN-EN 998-2:2012 (EN 998-2:2010)
Factory-made masonry mortar, manufactured acc. to design, for thin joints (T)	for indoor and outdoor use, in elements subject to structural requirements, designed for reinforced and un-reinforced walls, on masonry walls, posts and partition walls
Compressive strength	≥ 5.0 N/mm^2
Initial shear strength (tabular value)	≥ 0.3 N/mm^2
Chloride content	≤ 0.1% Cl
Reaction to fire - class	A1
Water absorption	0.05 kg/m^{2}min^{0,5}
Water vapour permeability coefficient (tabular value μ)	15/35 (EN 1745:2002, table A.12)
Thermal conductivity coefficient (average tabular value P=50%)	0.83 W/mK ($\lambda_{10, dry}$) (EN 1745:2002, table A.12)
Adjustability	≥ 10 minutes
Aggregate grain size	≤ 1.6 mm
Durability. - Compressive strength decrease after 25 freeze-thaw cycles - Mass decrement after 25 freeze-thaw cycles	≤ 10% ≤ 3%
Release/content of hazardous substances	See: Safety Data Sheet

The product has been given the Hygiene Certificate by the National Institute of Hygiene, the ITB Certificate of Conformity No. 1488-CPD-0013/Z and the Radiation Hygiene Certificate.

Bricklaying

Preparation of cellular concrete elements

Bricklaying. Clean the surfaces of joined elements of dust and any loose fragments. In order to form thin joint of uniform thickness, it is recommended to sand and dust the surface of previously laid elements.

Surface floating. The surface should be dry, stable, even and sound, i.e. sufficiently strong and cleaned of materials which would impair mortar bonding, especially dust, dirt, lime, oil, fats, wax, residues of oil or emulsion paint. Substrates characterised by excessive absorbability should be primed with ATLAS UNI-GRUNT emulsion.

Weather conditions

Consider weather conditions during bricklaying as well as during mortar setting and drying.

Mortar preparation

Pour the mortar from the bag into a clean container with the suitable amount of water (see Technical Data for ratio) and mix using a mixer with a drill (or in cement mixer) until homogenous. Leave the mortar to rest for 5 minutes and remix. The mortar should be used up within approx. 4 hours.

Bricklaying

The mortar should be used in accordance to the technology of bricklaying with use of cellular concrete blocks. Use ATLAS MASONRY MORTAR for the first layer laying and leveling. Apply ATLAS KB-15 layer with a notched trowel evenly onto horizontal plane of the previously executed layer. Apply also the mortar on the vertical contact surfaces of blocks, unless otherwise specified. Press each subsequent element firmly and tap into place using a rubber mallet.

Consumption

Bricklaying

Homogenous wall thickness	Joint thickness approx. 3 mm	Coverage from a 25 kg bag
12 cm	approx. 4.0 kg/m^2	approx. 6.2 m^2
18 cm	approx. 6.0 kg/m^2	approx. 4.2 m^2
24 cm	approx. 8.0 kg/m^2	approx. 3.1 m^2
30 cm	approx. 10.0 kg/m^2	approx. 2.5 m^2
36 cm	approx. 12.0 kg/m^2	approx. 2.1 m^2

Floating

The average consumption is approx. 1.6 kg for 1m^2 for 1 mm layer thickness.

Important additional information

- Do not apply the mortar over a large surface in a single operation, because it retains its bonding properties within approx. 10 ÷ 30 minutes since spreading (depending on substrate properties and ambient conditions). In order to check if joining the blocks is still possible, conduct a test - press the applied mortar with fingers. If the mortar sticks to fingers, then you can fix the next element. If the fingers remain clean, the mortar must be removed and the new layer applied.
- Adjust the ratio of added water experimentally (keeping the ratio listed in the Technical Data section), following the desired consistency of the mortar, type of substrate and weather conditions. Inappropriate amount of mix water results in deterioration of strength parameters of the mortar.
- Tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with the ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Paper bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-06-04

EXTERNAL THERMAL INSULATION COMPOSITE SYSTEMS

EXTERNAL THERMAL INSULATION COMPOSITE SYSTEMS

Proper thermal insulation of buildings belongs to the most important issues during façade works. It influences not only economics of use, but also building aesthetics. Thermal insulation is also ecologically significant, as it reduces emission of CO_2 because of reduction of energy use. The main tasks of all ATLAS thermal insulation systems are:

- **achievement of thermal insulation by building partitions** – as required by current regulations
- **reduction of operation costs** – owing to reduction of heating costs, therefore reduction of emission of harmful compounds
- **improvement of external walls durability** – owing to protection against direct influence of adverse atmospheric factors
- **giving aesthetic appearance** – by using various rendering coats and cladding

ATLAS long time experience in production of external thermal insulation systems allows us to offer products of the highest quality. Our materials enable application of façade finishing coats meeting any likes and expectations of customers. Choice of proper building thermal insulation may depend on a few factors:

- material the building is made of
- building age (old, newly constructed)
- building location and designed use
- building size and height
- designed finishing coat

Comprehensive portfolio of ATLAS thermal insulation systems offers technical solutions based both on polystyrene and mineral wool insulation. They can be finished with various render types and ceramic cladding. We offer both jointless façade and garage systems. Proper choice of thermal insulation, except of improvement of wall thermal insulation, can also improve acoustic insulation, resistance to fire and mechanical damage. Multiplicity of technical solutions given by ATLAS adhesives and renders allows designers to use almost any commonly available and proven thermal insulation material, i.e.:

- **traditional polystyrene**
- **elastified polystyrene**
- **extruded polystyrene (XPS)**
- **mineral wool**

ATLAS external thermal insulation systems have been given European Technical Assessments (ETA) and domestic Technical Approvals (AT), which unequivocally list system components and properties. Moreover, ATLAS belongs to a few manufacturers of thermal insulation systems offering solutions positively assessed by National Standard Authority of Ireland (NSAI) and British Board of Agrément (BBA).

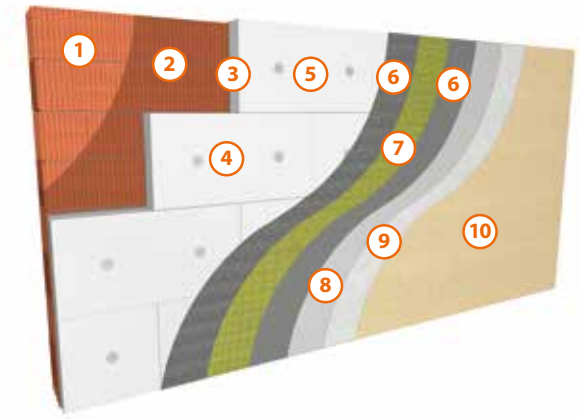
TABLE 9.1

NAME	ATLAS/ AVAL	ATLAS ETICS	ATLAS XPS	ATLAS RENOTER	ATLAS CERAMIK	ATLAS ROKER/ AVAL ROKER	ATLAS ROKER G		
							TYPE I	TYPE II	TYPE III
Reference document	ETA-06/0081 ETA-06/0187	AT-15-9090/2014	ETA-07/0316	AT-15-8477/2010	AT-15-8592/2011	ETA-06/0173 ETA-06/0281	AT-15-7314/2011		
INSULATION LAYER									
EPS	✓	✓		✓	✓				
XPS			✓		✓				
Mineral wool						✓	✓	✓	
Lamella mineral wool						✓	✓	✓	
Beveled lamella mineral wool									✓
(●) MORTAR FOR INSUALTION FIXING (●●) MORTAR FOR INSULATION FIXING AND BASE COAT EXECUTION									
STOPTER K-10	●	●	●						
STOPTER K-20/ AVAL KT 85	●●	●●	●●	●●	●●				
STOPTER K-50		●●				●●			
HOTER S/ AVAL KT 53	●	●	●						
HOTER U/ AVAL KT 55	●●	●●	●●	●●	●●				
ROKER W-10						●			●
ROKER W-20/ AVAL KT 190						●●	●●	●●	●
BASE COAT – MESH									
Single	✓	✓	✓	✓		✓	✓	✓	
Double	✓ *				✓				
Without mesh									✓
FINISHING COAT – THIN-COAT RENDER, FAÇADE PAINT, CERAMIC TILE									
Mineral render	✓	✓	✓	✓		✓		✓	✓
Acrylic render	✓	✓	✓	✓					
Silicate render	✓	✓	✓	✓		✓		✓	
Silicone render	✓	✓	✓	✓		✓		✓	
Acrylic-silicone render		✓							
Silicone-silicate render		✓				✓			
Façade paint							✓		
Ceramic tiles					✓				
LIMITATION OF USE DUE TO BUILDING HEIGHT									
Height up to:	Check local regulations					No limits	Not applicable		
Use	Insulation of all types of buildings	Insulation of all types of buildings	All types of buildings and places vulnerable to mechanical damage	Renovation of existing insulations	Façades of particular utility requirements	Buildings of special fire and acoustic requirements	Underground garages, passages under buildings		

* Possible if required by local regulations, e.g. in order to reach higher resistance to impact category.

Up to five
European Technical Approvals
for ATLAS insulation systems

EXTERNAL THERMAL INSULATION COMPOSITE SYSTEM ATLAS



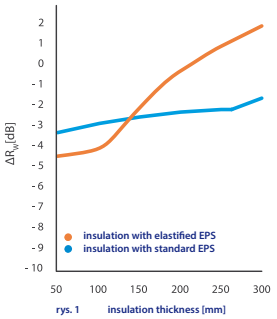
1. Ceramic hollow blocks
2. Substrate priming (optional)
3. Adhesive for boards fixing
4. EPS thermal insulation boards
5. Additional fixing – mechanical fixings for polystyrene and XPS
6. Adhesive for base coat application
7. Reinforcing fiberglass mesh
8. Priming mass
9. Thin-coat render
10. Paint

Use

Installation of external wall insulation – can be used both on rendered/plastered façades and rough walls made of bricks and blocks (ceramic, cement-lime, stone, aerated concrete and concrete - monolithic or precast).
Thermal insulation with the use of standard or elastified polystyrene (EPS) - thermal insulation thickness even up to 250 mm.
Installation of external thermal insulation upon buildings up to 25 m high.
Can be installed upon surfaces of horizontal or inclined building elements – provided that they are not directly exposed to weather conditions.
Recommended for insulation of standard, passive and energy efficient buildings.

Properties

System meets European technical requirements - listed for thermal insulation systems supplied in the European Union.
Complete set of materials for installation of thermal insulation - offers full and proved compatibility of components, which is particularly important for long term system use.
General - purpose – offers the widest range of adhesives, renders and paints in one technological system.
Enables achievement of thermal insulation parametres required for external walls by building regulations - reduces heat loss and heating costs, offers effective method of thermal bridging elimination.
Improves acoustic insulation of walls – owing to the use of elastified polystyrene, the weighted acoustic insulation rate (ΔR_w) can be improved by more than three decibels.
Low water absorptiveness – below 0.5 kg/m^2, therefore system is more resistant to freeze-thaw cycles.
High system impact resistance - provides durability and resistance to damage during system use.
Improves durability of external walls - protects them from direct exposure to weather conditions.
Fire retardant system - relates to thermal insulation system with polystyrene boards (EPS) up to 250 mm thick.



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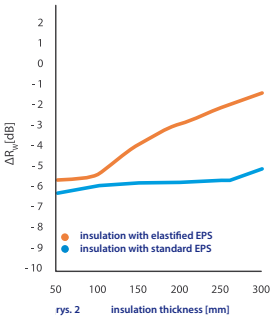

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General system characteristics

ATLAS system is an external thermal insulation composite system (ETICS). Thermal insulation technology consists in application of polystyrene (EPS) boards upon the outer side of wall, installation of base coat with reinforcing fiberglass mesh and further application of finishing coat made of thin-coat render.

System components

According to current regulations thermal insulation system is considered in its entirety as one construction product, therefore it must be applied with layers arrangement and with materials listed in the technical approval. It is unacceptable to use, so-called compilations or to use products from other systems or manufacturers, which are not accepted by the technical approval.
According to the European Technical Assessment, products listed in the table below can be used.

Adhesives for thermal insulation fixing – basic fixing ATLAS STOPTER K-10 adhesive mortar ATLAS STOPTER K-20 adhesive mortar ATLAS HOTER S adhesive mortar ATLAS HOTER U adhesive mortar
Insulation material Polystyrene boards (EPS) described by designation code constituted by combination of the following symbols: T2 (thickness); L1 or L2 (length); W2 (width); S1 or S2 (rectangularity); DS(N)2; DS(70,-)1 or DS(70,-)2, BS(75), TR80 (elastified polystyrene) or TR100 (standard polystyrene).
Mechanical fixings – additional fixing Authorized mechanical fixings, holding the European Technical Assessment (ETA) issued in accordance with ETAG 014. Mechanical fixing is not obligatory for buildings up to 12 m and polystyrene thickness up to 15 cm, nevertheless always follow local technical regulations in this regard.
Base coat ATLAS STOPTER K-20 or ATLAS HOTER U adhesive mortar with fiberglass mesh: SSA-1363-SM 05, ATLAS 150 or ATLAS 165.

Finishing coat
ATLAS CERMIT mineral render + ATLAS CERPLAST priming mass
ATLAS ACRYLIC RENDER + ATLAS CERPLAST priming mass
ATLAS ACRYLIC-SILICONE RENDER + ATLAS CERPLAST priming mass
ATLAS SILICONE RENDER + ATLAS SILKON ANX priming mass
ATLAS SILICONE-SILICATE RENDER + ATLAS SILKON ANX priming mass
ATLAS CERMIT acrylic render + ATLAS CERPLAST priming mass
ATLAS SILKAT thin-coat render + ATLAS SILKAT ASX priming mass
ATLAS SILKON thin-coat render + ATLAS SILKON ANX priming mass
ATLAS SALTA E acrylic façade paint
ATLAS SALTA S silicate façade paint + ARKOL SX primer
ATLAS SALTA N silicone façade paint + ARKOL NX primer
ATLAS SALTA façade paint
ATLAS ARKOL E façade paint
ATLAS ARKOL S façade paint + ARKOL SX primer
ATLAS FASTEL NOVA façade paint

Technical requirements

ATLAS System has been given:
- the European Technical Assessment No. ETA-06/0081. Declaration of Performance No. 001/CPR. EC Certificate of Conformity No. 1488-CPD-0021.
- NSAI Certificate No. 10/0347 (for Ireland).
- BBA Certificate No. 13/5018 (for the UK)..

Requirements on thermal insulation installation

Conditions during installation

Carry out installation in dry weather, at substrate and ambient temperature not lower than +5°C and not higher than +30°C. The only exception is ATLAS STOPTER K-20 adhesive mortar, which can also be used at 0°C, assuming that, after 8 hours since application completion, temperature does not drop below -5°C. On time of thermal insulation installation, façade should be protected and secured against precipitation, strong wind and direct sunlight - it is recommended to use fine mesh scaffolding covers. Insulation installation should be carried out in dry conditions (no precipitation, relative humidity below 80%).

Substrate preparation

General provisions

Before work commencement, evaluate the substrate technical condition and, on that basis, decide on scope and method of surface preparation. For the time of installation, remove any elements hindering tight bonding of thermal insulation boards and finishing coat application. An additional layer of insulation will increase the wall thickness, therefore the reach of flashings, downspouts anchors, etc. will have to be extended. Protect windows and doors against soiling with a plastic film.

Requirements on the substrate

The substrate should be sound, stable, even, clean and dry. Absorptive substrates should be primed with ATLAS UNI-GRUNT, smooth and non-absorptive (concrete) with ATLAS CERPLAST priming mass. Substrate should be even to the extent enabling easy execution of a plane formed by insulation boards installed upon walls. Clean the surface from any layers which would impair mortar bonding, dirt, loose and dusty elements. **Note!** Particular attention should be paid to proper assessment and preparation of substrate with problematic bearing capacity, e.g. finished with glass-mosaics, glazed brick, covered with paint coatings, etc. If in doubt, conduct bonding test (ultimate tensile strength should be above 0.08 MPa) or apply 8-10 polystyrene cubes (10x10 cm large) at various façade points and check the bond after 3 days. The use of thermal insulation system on buildings with reinforced concrete sandwich walls should always be preceded by thorough assessment of their technical condition. This applies to technical condition of metal fittings (hooks, pins, rods) as well as their connection and interaction with wall elements.

Starter tracks installation

Application of thermal insulation should commence with installation of starter tracks. They support the first row of thermal insulation boards, help to keep uniform level of successive layers, strengthen bottom edge of system and bottom edge drip prevents water bleeding. Tracks should be installed horizontally upon the building plinth, not lower than 30 cm above the ground level, which would protect against rising damp action and soiling - mud particles brought by raindrops reflected from the ground. Instead of starter tracks, it is permitted to use two layers of fiberglass mesh or strips of armour mesh.

Installation of thermal insulation

Boarding

In case of even substrates, adhesive mortar can be applied with a notched trowel (notch size 12 mm) – directly upon boards surface, not upon the substrate. In case of more irregular surfaces adhesive should be spread upon board surface with the "strip - point method". It consists in application of continuous circumferential bead (min. 3 cm wide) along the board edges and 6-8 patches (of diameter 8-12 cm) evenly distributed upon the board surface. The mortar bead is placed at a distance from the board edge, so when board is pressed to the wall, mortar is not squeezed out the board contour and side edges. Adhesive mortar applied upon board should coat min. 40% of its surface (60% after pressing the board to substrate). Thermal insulation application should commence from the building corners. The first row of boards is fixed on starter tracks, the subsequent rows so positioned, that board vertical edges are staggered and overlapped at the building corners. Boards edges must not be placed in line with reveals edges. Place the boards with applied adhesive upon substrate, move tight to already fixed boards and press towards. Check the surface level. If adhesive is squeezed out the board contour, it should be removed. Any gaps between adjoining boards should be filled with cut stripes of polystyrene or low expansion polyurethane foam.

Insulation boards sanding

Surface of insulating boards applied upon substrate should be even, so when the mortar sets (after approx. 24 h), the boards can be sanded with sanding boards or floats covered with coarse sanding paper. This action eliminates any slips of board edges. In case of polystyrene boards installed approx. 3 months earlier or more, sanding and removal of any surface tarnish is mandatory.

Additional elements installation

In order to improve the system resistance against mechanical damage, to allow free drainage of water and execution of expansion joints - finishing profiles should be installed upon fixed thermal insulation layer. Profiles are installed at every specific location of the façade (i.e. corners, reveals, sills, etc.). They can also be installed simultaneously to the base coat mesh embedding.

Strengthening the reveal corners

At any corners of window and door reveals, additional reinforcing mesh strips (rectangles 20 x 30 cm) embedded in the adhesive mortar ATLAS STOPTER K-20 or ATLAS HOTER U should be installed. Strips should be applied diagonally, at a 45° angle in relation to the line set by reveal edges.

Mechanical fixing

Additional fixing with anchors with plastic or steel pins can commence after approx. 24 hours since boards application Detailed information on the number of fixings, their distribution, length and depth of anchoring should be specified in the thermal insulation technical design. Follow the guidelines of fixings manufacturers.

Base coat (reinforced layer) application

Base coat can be applied when adhesive mortar used for boards fixing sets appropriately (after 3 days on average). Apply mortar upon fixed insulation, spread with a notched trowel (notch size 10 - 12 mm). Adhesive should be spread with vertical strips of width slightly greater than the fiberglass mesh width. Then, starting from the top, subsequent strips of mesh are embedded in the adhesive coat. Consecutive strips should be applied with min. 10 cm wide vertical and horizontal overlaps (15 cm wide at the building corners). The mesh overlaps should not correspond with the joints between insulation boards. The mesh should be thoroughly embedded in the adhesive. In order to embed the mesh evenly, the adhesive should be squeezed with slightly inclined trowel led from the top, in direction from the center to the mesh strip side. Correctly embedded mesh should be completely coated with adhesive and should not contact polystyrene boards directly.

Finishing coat application

The outer system layer can be made of thin-coat render or a thin-coat render coated with façade paint. The execution of finishing coat can commence after approx. 3 days since the base coat installation. One can use thin - coat renders: ATLAS CERMIT mineral, ATLAS ACRYLIC RENDER, ATLAS ACRYLIC-SILICONE RENDER, ATLAS SILICONE RENDER, ATLAS SILICONE-SILICATE RENDER, ATLAS CERMIT acrylic, ATLAS SILKAT or ATLAS SILKON. Rendering coats can be additionally painted with façade paints ATLAS SALTA E, ATLAS SALTA S, ATLAS SALTA N, ATLAS SALTA or ATLAS ARKOL E, ATLAS ARKOL S and ATLAS FASTEL NOVA. Perform application in accordance to the technology described in technical data sheets of these individual products.

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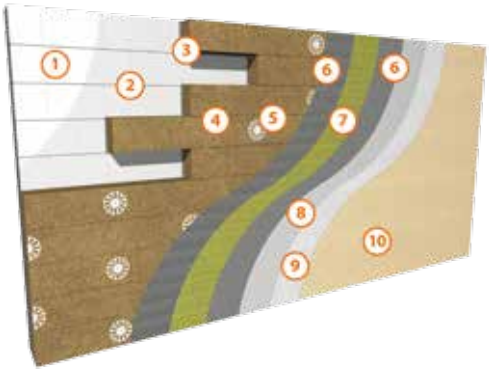
Up to five European Technical Approvals for ATLAS insulation systems

EXTERNAL THERMAL INSULATION SYSTEM ATLAS ROKER



1. Silicate blocks
2. Substrate priming (optional)
3. Adhesive for boards fixing
4. Mineral wool thermal insulation boards (lamella or façade)
5. Additional fixing – mechanical fixings for mineral wool
6. Adhesive for base coat application
7. Reinforcing fiberglass mesh
8. Priming mass
9. Thin-coat render
10. Paint

Use

Installation of external wall insulation – can be used both on rendered/plastered façades and rough walls made of bricks and blocks (ceramic, cement-lime, stone, aerated concrete and concrete - monolithic or precast).
Thermal insulation with the use of mineral wool – both façade boards (thickness 50-250 mm) and lamella boards (thickness 20-250 mm).
Installation of external thermal insulation regardless the building height – particularly advised for high buildings (above 25 m).
Recommended for insulation of standard, passive and energy efficient buildings – due to non-flammability, it is recommended for public access buildings, schools, hospitals, etc.

Properties

System meets European technical requirements - listed for thermal insulation systems supplied in the European Union.
Improves building fire safety – protects construction elements against fire and improves safety of users. System is non-flammable (with mineral renders) and fire retardant.
Very high water vapour permeability - does not restrict water vapour transfer through the insulated partition, allows free drying of wall technological moisture (diffusion resistance coefficient $S_d = 0.12$ m for system with mineral render finishing coat).
Enables achievement of thermal insulation parametres required for external walls by building regulations - reduces heat loss and heating costs, offers effective method of thermal bridging elimination.
Impact resistance – classified in category I and category II depending on rendering coat type.
Safety of use - system has been tested against wind load resistance, which is particularly important in case of high buildings or those located in the mountains or by the sea.
Allows for installation of thermal insulation on surfaces of irregular shapes - with the use of lamella boards.
Complete set of materials for installation of thermal insulation - offers full and proved compatibility of components, which is particularly important for long term system use.
Improves durability of external walls - protects them from direct exposure to weather condition.

General system characteristics

ATLAS ROKER system is an external thermal insulation composite system (ETICS). Thermal insulation technology consists in application of mineral wool boards upon the outer side of wall, installation of base coat with reinforcing fiberglass mesh and further application of finishing coat made of thin-coat render.

System components

According to current regulations thermal insulation system is considered in its entirety as one construction product, therefore it must be applied with layers arrangement and with materials listed in the technical approval. It is unacceptable to use, so-called compilations or to use products from other systems or manufacturers, which are not accepted by the technical approval.
According to the European Technical Assessment, the following products can be used:

Adhesives for thermal insulation fixing – basic fixing
ATLAS ROKER W-20 adhesive mortar
Insulation material
Mineral wool panels (MW) with designation codes: Standard wool: T4 or T5 (thickness), DS(TH), WS, WL(P), TR10 or TR15, CS(10)40 or CS(10,Y)50 Lamella wool: T5 (thickness), DS(TH), WS, WL(P), TR80 or TR100, CS(10)30 or CS(10)40
Mechanical fixings – additional fixing
Authorized mechanical fixings, holding the European Technical Assessment (ETA) issued in accordance with ETAG 014. Examples: WKRĘT-MET: ŁMX 8, ŁTX 8, ŁMX 10, ŁTX 10; EJOT: ejotherm STR U, SDK-U, NT U, NK U, SDM-T plus U; Fischer: TERMOZ 8N, 8NZ, PN8; KOELNER: TFIX-8M, TFIX-8S, TFIX-8ST, KI-10N; MKaM-Łi3A 10, MKaM-Łi3A 10 Mt; BRAVOLL PTH-S 60/8-La, BRAVOLL PTH-SL 60/8-La; Hilti SD-FV
Base coat
ATLAS ROKER W-20 adhesive mortar with fiberglass mesh: SSA-1363-SM 05, ATLAS 150 or ATLAS 165.
Finishing coat
ATLAS CERMIT mineral render + ATLAS CERPLAST priming mass ATLAS SILICONE RENDER + ATLAS SILKON ANX priming mass ATLAS SILICONE-SILICATE RENDER + ATLAS SILKON ANX priming mass ATLAS SILKAT thin-coat render + ATLAS SILKAT ASX priming mass ATLAS SILKON thin-coat render + ATLAS SILKON ANX priming mass ATLAS SALTA S silicate façade paint + ARKOL SX primer ATLAS SALTA N silicone façade paint + ARKOL NX primer ATLAS SALTA façade paint ATLAS ARKOL S façade paint + ARKOL SX primer ATLAS FASTEL NOVA façade paint

Technical requirements

ATLAS ROKER System has been given:
- the European Technical Assessment No. ETA-06/0173. Declaration of Performance No. E002/CPR. EC Certificate of Conformity No. 1488-CPD-0036.
- NSAI Certificate No. 10/0347 (for Ireland).
- BBA Certificate No. 13/5018 (for the UK).

Requirements on thermal insulation installation

Conditions during installation

Carry out installation in dry weather, at substrate and ambient temperature not lower than +5°C and not higher than +30°C. On time of thermal insulation installation, façade should be protected and secured against precipitation, strong wind and direct sunlight - it is recommended to use fine mesh scaffolding covers. Insulation installation should be carried out in dry conditions (no precipitation, relative humidity below 80%).

Substrate preparation

General provisions

Before work commencement, evaluate the substrate technical condition and, on that basis, decide on scope and method of surface preparation. For the time of installation, remove any elements hindering tight bonding of thermal insulation boards and finishing coat application. An additional layer of insulation will increase the wall thickness, therefore the reach of flashings, downspouts anchors, etc. will have to be extended. Protect windows and doors against soiling with a plastic film.

Requirements on the substrate

The substrate should be sound, stable, even, clean and dry. Absorptive substrates should be primed with ATLAS UNI-GRUNT, smooth and non-absorptive (concrete) with ATLAS CERPLAST priming mass. Substrate should be even to the extent enabling easy execution of a plane formed by insulation boards installed upon walls. Clean the surface from any layers which would impair mortar bonding, dirt, loose and dusty elements. **Note!** Particular attention should be paid to proper assessment and preparation of substrate with problematic bearing capacity, e.g. finished with glass-mosaics, glazed brick, covered with paint coatings, etc. If in doubt, conduct bonding test (ultimate tensile strength should be above 0.08 MPa) or apply 8-10 mineral wool cubes (10x10 cm large) at various façade points and check the bond after 3 days. The use of thermal insulation system on buildings with reinforced concrete sandwich walls should always be preceded by thorough assessment of their technical condition. This applies to technical condition of metal fittings (hooks, pins, rods) as well as their connection and interaction with wall elements.

Starter tracks installation

Application of thermal insulation should commence with installation of starter tracks. They support the first row of thermal insulation boards, help to keep uniform level of successive layers, strengthen bottom edge of system and bottom edge drip prevents water bleeding. Tracks should be installed horizontally upon the building plinth, not lower than 30 cm above the ground level, which would protect against rising damp action and soiling - mud particles brought by raindrops reflected from the ground. Tracks are supplied with various width adjusted to insulation thickness, can be made of aluminum or PVC. Instead of starter tracks, it is permitted to use two layers of fiberglass mesh or strips of armour mesh.

Installation of thermal insulation

Boarding

Adhesive mortar can be applied upon boards with two methods: partial coating with the "strip - point method" or full coating (lamella panels or façade wool panels, but only on respectively even substrates). In both cases, the board surface should be floated with thin coat of adhesive mortar, pressed well into the wool structure by stripping with steel trowel edge. This action pre-moistens wool fibers and improves bonding. Then, in case of partial coating, apply main coat of adhesive in the form of continuous circumferential bead (min. 3 cm wide) along the board edges and 6-8 patches (of diameter 8-12 cm) evenly distributed upon the board surface. Adhesive mortar applied upon board should coat min. 40% of its surface. In case of full coating, the adhesive is applied upon whole board surface with a smooth float and profiled with notched trowel then (notch size 8 - 12 mm). When adhesive is applied upon façade or lamella boards backside, they should be placed upon substrate, lightly moved and pressed. The first row of boards is fixed on starter tracks, the subsequent rows so positioned, that boards vertical edges are staggered and overlapped. Do not leave gaps between adjacent boards or adhesive residues in joints. Check the surface level on regular basis. Press and correct position of boards with wooden floats with rounded edges only.

Additional elements installation

In order to improve the system resistance against mechanical damage, to allow free drainage of water and execution of expansion joints - finishing profiles should be installed upon fixed thermal insulation layer. Profiles are installed at every specific locations of the façade (i.e. corners, reveals, sills, etc.). They can also be installed simultaneously to the base coat mesh embedding.

Strengthening the reveal corners

At any corners of window and door reveals, additional reinforcing mesh strips (rectangles 20 x 35 cm) embedded in the adhesive mortar ATLAS ROKER W-20 should be installed. Strips should be applied diagonally, at a 45° angle in relation to the line set by reveal edges.

Mechanical fixing

Additional fixing with anchors can commence after approx. 24 hours since boards application. Use plastic fixings with steel pin. Detailed information on the number of fixings, their distribution, length and depth of anchoring should be specified in the thermal insulation technical design. Follow the guidelines of fixings and mineral wool manufacturers. It is recommended to use 4-6 fixings per 1 m^2 (buildings up to 20 m high) and 6-10 (buildings higher than 20 m). The number of fixings should be higher at wall corners and wall edge zones 1.5 m wide.

Base coat (reinforced layer) application

Base coat can be applied after min. 3 days since boards application. Apply mortar upon fixed insulation, spread with a notched trowel (notch size 10 - 12 mm). Adhesive should be spread with vertical strips of width slightly greater than the fiberglass mesh width. Then, starting from the top, subsequent strips of mesh are embedded in the adhesive coat. Consecutive strips should be applied with min. 10 cm wide vertical and horizontal overlaps (15 cm wide at building corners). The mesh overlaps should not correspond with the joints between insulation boards. The mesh should be thoroughly embedded in the adhesive. In order to embed the mesh evenly, the adhesive should be squeezed with slightly inclined trowel led from the top, in direction from the center to the mesh strip side. Correctly embedded mesh should be completely coated with adhesive and should not contact mineral wool boards directly.

Finishing coat application

The outer system layer can be made of thin-coat render or a thin-coat render coated with façade paint. The execution of finishing coat can commence after approx. 3 days since the base coat installation. One can use thin - coat renders: ATLAS CERMIT mineral, ATLAS SILICONE RENDER, ATLAS SILICONE-SILICATE RENDER, ATLAS SILKAT or ATLAS SILKON. Rendering coats can be additionally painted with façade paints ATLAS SALTA S, ATLAS SALTA N, ATLAS SALTA or ATLAS ARKOL S and ATLAS FASTEL NOVA. Perform application in accordance to the technology described in technical data sheets of these individual products.

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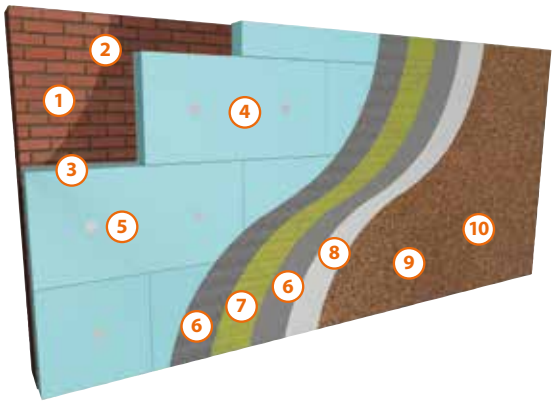
Up to five
European Technical Approvals
for ATLAS insulation systems



EXTERNAL THERMAL INSULATION SYSTEM ATLAS XPS

1. Ceramic bricks
2. Substrate priming (optional)
3. Adhesive for boards fixing
4. XPS thermal insulation boards
5. Mechanical fixing - fixings for polystyrene and XPS
6. Adhesive for base coat application
7. Reinforcing fiberglass mesh
8. Priming mass
9. Thin-coat render
10. Paint

Use

Installation of external wall insulation – can be used both on rendered/plastered façades and rough walls made of bricks and blocks (ceramic, cement-lime, stone, aerated concrete and concrete - monolithic or precast).
Thermal insulation with the use of extruded polystyrene (XPS) - thermal insulation thickness from 20 up to 200 mm.
Recommended upon plinths, foundation and cellar walls - due to nature and type of insulation material, the system can also be used on gable walls, attics, at building entrances.
Can be installed upon surfaces of horizontal or inclined building elements – provided that they are not directly exposed to weather conditions.
Recommended for insulation of standard, passive and energy efficient buildings.

Properties

System meets European technical requirements - listed for thermal insulation systems supplied in the European Union.
Complete set of materials for installation of thermal insulation - offers full and proved compatibility of components, which is particularly important for long term system use.
Compatible with EPS-based external thermal insulation system ATLAS - for thermal insulation of zones exposed to moisture and mechanical damage the XPS insulation is used, upon other wall zones - EPS boards.
High system durability - due to low water absorptiveness of the finishing coat (max. 0.5 kg/m^2 after 24 hours), combined with high resistance to water action of XPS boards.
Impact resistance - system classified as Category III.
Enables achievement of thermal insulation parametres required for external walls by building regulations - reduces heat loss and heating costs, offers effective method of thermal bridging elimination.
Improves durability of external walls - protects them from direct exposure to weather conditions.
Fire retardant system - relates to thermal insulation system with extruded polystyrene boards (XPS) up to 200 mm thick.

General system characteristics

ATLAS XPS system is an external thermal insulation composite system (ETICS). Thermal insulation technology consists in application of extruded polystyrene (XPS) boards upon the outer side of wall, installation of base coat with reinforcing fiberglass mesh and further application of finishing coat made of thin-coat render.

System components

According to current regulations thermal insulation system is considered in its entirety as one construction product, therefore it must be applied with layers arrangement and with materials listed in the technical approval. It is unacceptable to use, so-called compilations or to use products from other systems or manufacturers, which are not accepted by the technical approval.
According to the European Technical Approval, products listed in the table below can be used.

Technical requirements

ATLAS XPS System has been given:
- the European Technical Approval No. ETA-07/0316. Declaration of Performance No. 003/CPR. EC Certificate of Conformity No. 1488-CPD-0075.
- NSAI Certificate No. 10/0347 (for Ireland).

Adhesives for thermal insulation fixing – basic fixing ATLAS STOPTER K-10 adhesive mortar ATLAS STOPTER K-20 adhesive mortar ATLAS HOTER S adhesive mortar ATLAS HOTER U adhesive mortar
Insulation material XPS boards with designation codes: T2-CS(10/Y)200-DS(TH)-TR100-WL(T)1,5 T1-CS(10/Y)250-DS(TH)-TR100-WL(T)1,5
Mechanical fixings – additional fixing Authorized mechanical fixings, holding the European Technical Assessment (ETA) issued in accordance with ETAG 014. Examples: WKRĘT-MET: ŁIT, ŁIM, ŁFM8, ŁFN8, ŁFM10, ŁFN10; EJOT: ejotherm ST U, STR U, SDM-T plus U, NT U; Fischer: TERMOZ 8N, 8U; KOELNER: KI8M; Hilti: SD-FV, SX-FV.
Base coat ATLAS STOPTER K-20 or ATLAS HOTER U adhesive mortar with fiberglass mesh SSA-1363-SM 05.
Finishing coat ATLAS CERMIT mineral render + ATLAS CERPLAST priming mass ATLAS CERMIT acrylic render + ATLAS CERPLAST priming mass ATLAS SILKAT thin-coat render + ATLAS SILKAT ASX priming mass ATLAS SILKON thin-coat render + ATLAS SILKON ANX priming mass ATLAS ARKOL E façade paint ATLAS ARKOL S façade paint + ARKOL SX primer ATLAS FASTEL NOVA façade paint

Requirements on thermal insulation installation

Carry out installation in dry weather, at substrate and ambient temperature not lower than +5°C and not higher than +25°C. On time of thermal insulation installation, façade should be protected and secured against precipitation, strong wind and direct sunlight - it is recommended to use fine mesh scaffolding covers. Insulation installation should be carried out in dry conditions (no precipitation, relative humidity below 80%).

Substrate preparation

General provisions

Before work commencement, evaluate the substrate technical condition and, on that basis, decide on scope and method of surface preparation. For the time of installation, remove any elements hindering tight bonding of thermal insulation boards and finishing coat application. An additional layer of insulation will increase the wall thickness, therefore the reach of flashings, downspouts anchors, etc. will have to be extended. Protect windows and doors against soiling with a plastic film.

Requirements on the substrate

The substrate should be sound, stable, even, clean and dry. Absorptive substrates should be primed with ATLAS UNI-GRUNT, smooth and non-absorptive (concrete) with ATLAS CERPLAST priming mass. Substrate should be even to the extent enabling easy execution of a plane formed by insulation boards installed upon walls. Clean the surface from any layers which would impair mortar bonding, dirt, loose and dusty elements. **Note!** Particular attention should be paid to proper assessment and preparation of substrate with problematic bearing capacity, e.g. finished with glass-mosaics, glazed brick, covered with paint coatings, etc. If in doubt, conduct bonding test (ultimate tensile strength should be above 0.08 MPa) or apply 8-10 polystyrene cubes (10x10 cm large) at various façade points and check the bond after 3 days. The use of thermal insulation system on buildings with reinforced concrete sandwich walls should always be preceded by thorough assessment of their technical condition. This applies to technical condition of metal fittings (hooks, pins, rods) as well as their connection and interaction with wall elements.

Starter tracks installation

Application of thermal insulation should commence with installation of starter tracks. They support the first row of thermal insulation boards, help to keep uniform level of successive layers, strengthen bottom edge of system and bottom edge drip prevents water bleeding. Tracks should be installed horizontally upon the building plinth, not lower than 30 cm above the ground level, which would protect against rising damp action and soiling - mud particles brought by raindrops reflected from the ground. Instead of starter tracks, it is permitted to use two layers of fiberglass mesh or strips of armour mesh.

Installation of thermal insulation

Boarding

In case of even substrates, adhesive mortar can be applied with a notched trowel (notch size 12 mm) – directly upon boards surface, not upon the substrate. In case of more irregular surfaces adhesive should be spread upon board surface with the "strip - point method". It consists in application of continuous circumferential bead (min. 3 cm wide) along the board edges and 6-8 patches (of diameter 8-12 cm) evenly distributed upon the board surface. The mortar bead is placed at a distance from the board edge, so when board is pressed to the wall, mortar is not squeezed out the board contour and side edges. Adhesive mortar applied upon board should coat min. 40% of its surface (60% after pressing the board to substrate). Thermal insulation application should commence from the building corners. The first row of boards is fixed on starter tracks, the subsequent rows so positioned, that vertical board edges are staggered and overlapped at the building corners. Boards edges must not be placed in line with reveals edges. Place the boards with applied adhesive upon substrate, move tight to already fixed boards and press towards. Check the surface level. If adhesive is squeezed out the board contour, it should be removed. Any gaps between adjoining boards should be filled with cut stripes of polystyrene or low expansion polyurethane foam.

Insulation boards sanding

Surface of insulating boards applied upon substrate should be even, so when the mortar sets (after approx. 24 h), the boards can be sanded with sanding boards or floats covered with coarse sanding paper. This action eliminates any slips of board edges.

Additional elements installation

In order to improve the system resistance against mechanical damage, to allow free drainage of water and execution of expansion joints - finishing profiles should be installed upon fixed thermal insulation layer. Profiles are installed at every specific location of the façade (i.e. corners, reveals, sills, etc.). They can also be installed simultaneously to the base coat mesh embedding.

Strengthening the reveal corners

At any corners of window and door reveals, additional reinforcing mesh strips (rectangles 20 x 30 cm) embedded in the adhesive mortar ATLAS STOPTER K-20 or ATLAS HOTER U should be installed. Strips should be applied diagonally, at a 45° angle in relation to the line set by reveal edges.

Mechanical fixing

Additional fixing with anchors with plastic or steel pins can commence after approx. 24 hours since boards application Detailed information on the number of fixings, their distribution, length and depth of anchoring should be specified in the thermal insulation technical design. Follow the guidelines of fixings manufacturers.

Base coat (reinforced layer) application

Base coat can be applied when adhesive mortar used for boards fixing sets appropriately (after 3 days on average). Apply mortar upon fixed insulation, spread with a notched trowel (notch size 10 - 12 mm). Adhesive should be spread with vertical strips of width slightly greater than the fiberglass mesh width. Then, starting from the top, subsequent strips of mesh are embedded in the adhesive coat. Consecutive strips should be applied with min. 10 cm wide vertical and horizontal overlaps (15 cm wide at the building corners). The mesh overlaps should not correspond with the joints between insulation boards. The mesh should be thoroughly embedded in the adhesive. In order to embed the mesh evenly, the adhesive should be squeezed with slightly inclined trowel led from the top, in direction from the center to the mesh strip side. Correctly embedded mesh should be completely coated with adhesive and should not contact polystyrene boards directly.

Finishing coat application

The outer system layer can be made of thin-coat render or a thin-coat render coated with façade paint. The execution of finishing coat can commence after approx. 3 days since the base coat installation. One can use thin - coat renders: mineral ATLAS CERMIT, acrylic (e.g. ATLAS CERMIT), silicate (e.g. ATLAS SILKAT) or silicone (e.g. ATLAS SILKON). Rendering coats can be additionally painted with façade paints: acrylic (e.g. ATLAS ARKOL E), silicate (e.g. ATLAS ARKOL S) and silicone (e.g. ATLAS FASTEL NOVA). Perform application in accordance to the technology described in technical data sheets of these individual products.

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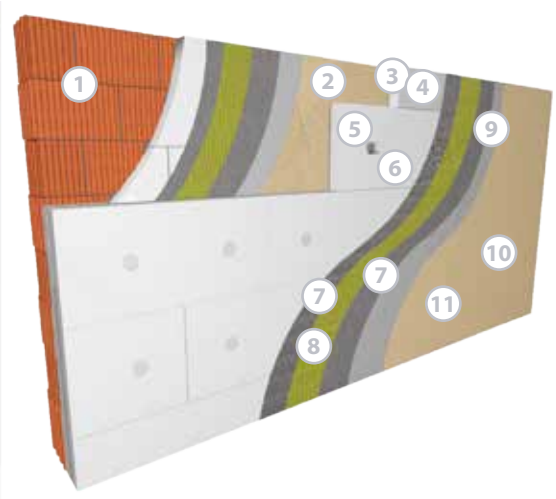
Date of update: 2013-07-01

EXTERNAL THERMAL INSULATION SYSTEM ATLAS RENOTER



1. Wall — substrate for mechanical fixings
2. Substrate for fixing with adhesive mortar
3. Adhesive for polystyrene boards fixing
4. New polystyrene thermal insulation board
5. Main mechanical fixing — anchor for polystyrene fixing
6. Plug
7. Adhesive for base coat application
8. Reinforcing mesh
9. Priming mass for thin-coat render
10. Thin-coat render
11. Paint

Use

Installation of external wall insulation upon existing thermal insulation – when existing external wall insulation is in bad condition and/or does not meet current requirements on thermal resistance.
Thermal insulation with the use of polystyrene - enables renovation of thermal insulation with additional layer of thermal insulation applied (in case of existing thermal insulation systems with polystyrene).
Recommended for insulation of standard, passive and energy efficient buildings.

Properties

Complete set of materials for installation of thermal insulation - for repairs of main building insulation, offers full and proved compatibility of components, which is particularly important for long term system use.
Enables improvement and achievement of thermal insulation required by building regulations – by adding additional thermal insulation layer, system reduces heat loss and heating costs.
Enables effective repairs of thermal insulation systems - damaged because of design and/or installation errors, or as a result of natural weathering and atmospheric factors action.
Enables installation of thermal insulation of thickness up to 30 cm - applies to total thickness of old and new thermal insulation.

General system characteristics

ATLAS RENOTER thermal insulation technology consists in installation of additional outer thermal insulation layer upon the existing external wall insulation. System consists of polystyrene thermal insulation, base coat made of adhesive and reinforcing mesh, rendering coat and decorative paint coat (optional). Polystyrene boards are fixed with adhesive mortar and mechanical fixings. The use of mechanical fixings is obligatory regardless the building height. ATLAS RENOTER system is fixed mechanically, i.e. loads are fully transmitted by mechanical anchors and adhesive mortar provides flat bonding of system to substrate (works as an assembly mortar). The construction material layer of the building outer wall, not the existing layer of thermal insulation, should always be treated as the system substrate. Therefore, fixings should go through all layers of the existing insulation. This fact should be taken into account during designing and selection of mechanical fixings.

System components

According to current regulations thermal insulation system is considered in its entirety as one construction product, therefore it must be applied with layers arrangement and with materials listed in the technical approval. It is unacceptable to use, so-called compilations or to use products from other systems or manufacturers, which are not accepted by the technical approval.

Adhesives for thermal insulation fixing
ATLAS STOPTER K-10 adhesive mortar
ATLAS STOPTER K-20 adhesive mortar
ATLAS STOPTER K-50 adhesive mortar
ATLAS HOTER S adhesive mortar
ATLAS HOTER U adhesive mortar
Insulation material
Polystyrene boards (EPS) of properties listed by the designation code:
EPS–EN 13163–T1–L2–W2–S5–P5–BS75–DS(N)2–DS(70,-)2–TR100
Note. Boards of tensile strength TR80 can be used as long as they are covered by the ITB Technical and Quality Recommendation or volitional Certificate issued by notified assessment body.
Mechanical fixings
Mechanical fixings authorized for use in construction works, obligatorily with steel pin protected against corrosion or made of stainless steel.
Base coat
ATLAS STOPTER K-20, ATLAS STOPTER K-50 or ATLAS HOTER U adhesive mortar with fiberglass mesh SSA-1363-SM 05.
Finishing coat
ATLAS CERMIT mineral render + ATLAS CERPLAST priming mass
ATLAS CERMIT acrylic render + ATLAS CERPLAST priming mass
ATLAS SILKAT thin-coat render + ATLAS SILKAT ASX priming mass
ATLAS SILKON thin-coat render + ATLAS SILKON ANX priming mass
ATLAS ARKOL E façade paint
ATLAS ARKOL S façade paint + ARKOL SX primer
ATLAS FASTEL NOVA façade paint

Technical requirements

ATLAS RENOTER System has been given the ITB Technical Approval No. AT-15-8477/2010. Domestic Declaration of Conformity No. 113 of 01.01.2011. Factory Production Control Certificate No. ITB-0456/Z.

Requirements on thermal insulation installation

Conditions during installation

Carry out installation in dry weather, at substrate and ambient temperature not lower than +5°C and not higher than +30°C. The only exception is ATLAS STOPTER K-20 adhesive mortar, which can also be used at 0°C, assuming that, after 8 hours since application completion, temperature does not drop below -5°C. On time of thermal insulation installation, façade should be protected and secured against precipitation, strong wind and direct sunlight - it is recommended to use fine mesh scaffolding covers. Insulation installation should be carried out in dry conditions (no precipitation, relative humidity below 80%).

Substrate preparation

General provisions

Before work commencement it is necessary to carry out on-site inspection, cataloguing and full evaluation of technical condition of existing insulation. Cataloguing should consist in completing any available documentation (design, construction log, etc.), determining type of wall partition and construction material, type and thickness of existing insulation, verification of mechanical fixings, type of finishing coat and determination whether it was painted. It is recommended to carry out excavations in number depending on building size, preferably on each building wall. Assessment of technical condition of old thermal insulation should determine current condition of individual system layers, their bonding to substrate and interlayer bonding and should allow to establish and identify type and range of damage. Basing on the information gathered, appropriately for actual situation, technology of thermal insulation installation and method of preparation of the existing thermal insulation should be selected. **Caution!** For buildings with reinforced concrete sandwich walls, installation of additional layer of insulation should be preceded by service inspection in accordance with recommendations in this regard, including the ITB Instruction No. 360/99, 371/02, 374/02 and 447/2009. For the time of installation, remove any elements hindering tight bonding of thermal insulation boards and finishing coat application. An additional layer of insulation will increase the wall thickness, therefore the reach of flashings, downspouts anchors, etc. will have to be extended. Protect windows and doors against soiling with a plastic film.

Installation of thermal insulation

Boarding

Adhesive mortar can be applied upon boards with two methods: full coating (even substrates) or partial coating with the "strip - point method" (uneven substrates). The second method consists in application of continuous circumferential bead (min. 3 cm wide) along the board edges and 6-8 patches (of diameter 8-12 cm) evenly distributed upon the board surface. The mortar bead is placed at a distance from the board edge, so when board is pressed to the wall, mortar is not squeezed out the board contour and side edges. Adhesive mortar applied upon board should coat min. 40% of its surface (60% after pressing the board to substrate). In case of full coating, the adhesive is applied upon whole board surface with a smooth float and profiled with a notched trowel then (notch size 8 - 12 mm). Thermal insulation application should commence from the building corners. The first row of boards is fixed on starter tracks, the subsequent rows so positioned, that the vertical board joints are staggered and overlapped at the building corners. Boards edges must not be placed in line with reveals edges. Place the boards with applied adhesive upon substrate, move tight to already fixed boards and press towards. Check the surface level. If adhesive is squeezed out the board contour, it should be removed. Any gaps between adjoining boards should be filled with cut stripes of polystyrene or low expansion polyurethane foam.

Insulation boards sanding

Surface of insulating boards applied upon substrate should be even, so when the mortar sets (after approx. 24 h), the boards can be sanded with sanding boards or floats covered with coarse sanding paper. This action eliminates any slips of board edges. In case of polystyrene boards installed approx. 3 months earlier or more, sanding and removal of any surface tarnish is mandatory.

Mechanical fixing

Additional fixing with anchors (with steel pin protected against corrosion or made of stainless steel) can commence after approx. 24 hours since boards application. Screwed-in fixings recommended, min. 4-6 pcs/ 1 m^2. When selecting fixings length one should consider total thickness of old thermal insulation and new thermal insulation material. The depth of anchoring in mineral substrate should be clearly defined in technical design of thermal insulation. **Note!** The layer of wall construction material should be considered as the load bearing layer. Detailed information on the number of fixings, their distribution, length and depth of anchoring should be specified in the thermal insulation technical design. Follow the guidelines of fixings manufacturers.

Additional elements installation

In order to improve the system resistance against mechanical damage, to allow free drainage of water and execution of expansion joints - finishing profiles should be installed upon fixed thermal insulation layer. Profiles are installed at every specific locations of the façade (i.e. corners, reveals, sills, etc.). They can also be installed simultaneously to the base coat mesh embedding. Use adhesive mortars ATLAS STOPTER K-20, ATLAS STOPTER K-50 or ATLAS HOTER U for profiles fixing. Keep the expansion joints of existing thermal insulation – use special expansion joint profiles with mesh.

Strengthening the reveal corners

At any corners of window and door reveals, additional reinforcing mesh strips (rectangles 20 x 30 cm) embedded in the adhesive mortar ATLAS STOPTER K-20, ATLAS STOPTER K-50 or ATLAS HOTER U should be installed. Strips should be applied diagonally, at a 45° angle in relation to the line set by reveal edges.

Base coat (reinforced layer) application

Base coat can be applied after min. 3 days since boards application. Apply mortar upon fixed insulation, spread with a notched trowel (notch size 10 - 12 mm). Adhesive should be spread with vertical strips of width slightly greater than the fiberglass mesh width. Then, starting from the top, subsequent strips of mesh are embedded in the adhesive coat. Consecutive strips should be applied with min. 10 cm wide vertical and horizontal overlaps (15 cm wide at the building corners). The mesh overlaps should not correspond with the joints between insulation boards. The mesh should be thoroughly embedded in the adhesive. In order to embed the mesh evenly, the adhesive should be squeezed with slightly inclined trowel led from the top, in direction from the center to the mesh strip side. Correctly embedded mesh should be completely coated with adhesive and should not contact polystyrene boards directly.

Finishing coat application

The outer system layer can be made of thin-coat render or a thin-coat render coated with façade paint. The execution of finishing coat can commence after approx. 3 days since the base coat installation. One can use thin - coat renders: mineral ATLAS CERMIT, acrylic (e.g. ATLAS CERMIT), silicate (e.g. ATLAS SILKAT) or silicone (e.g. ATLAS SILKON). Rendering coats can be additionally painted with façade paints: acrylic (e.g. ATLAS ARKOL E), silicate (e.g. ATLAS ARKOL S) and silicone (e.g. ATLAS FASTEL NOVA). Perform application in accordance to the technology described in technical data sheets of these individual products.

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2013-11-12

EXTERNAL THERMAL INSULATION SYSTEM ATLAS CERAMIK

1. Ceramic hollow blocks
2. Substrate priming (optional)
3. Adhesive for boards fixing
4. EPS thermal insulation boards - standard or graphite-enhanced
5. Adhesive for base coat application
6. Reinforcing mesh – 1st layer
7. Mechanical fixing – fixings for polystyrene and XPS
8. Reinforcing mesh – 2nd layer
9. Adhesive for base coat application
10. Adhesive for tiles
11. Façade tiles
12. Grout

Use

Installation of external wall insulation - can be used on newly constructed buildings or those under thermal modernization, both on rendered/plastered façades and rough walls made of bricks and blocks (ceramic, cement-lime, stone, aerated concrete and concrete - monolithic or precast).
Recommended for façades exposed to high operation load and soiling - on plinths, foundations, public access, commercial buildings, etc.

Properties

Complete set of materials for installation of thermal insulation - offers full and proved compatibility of components, which is particularly important for long term system use.
Enables achievement of external wall thermal insulation required by building regulations - reduces heat loss and heating costs.
Improves durability of external walls – protects them against direct weathering.
Very durable material solution – wear of ceramic cladding is slower than in case of insulation with rendering coat, it also provides high system resistance to damages.
Resistance to biological corrosion – cladding is easy to keep clean and is less exposed to possible development of fungi, algae and lichen.
General - purpose – enables installation of both expanded polystyrene (EPS) and extruded polystyrene (XPS) boards upon an individual façade.
Fire retardant system - it relates to thermal insulation systems with EPS and XPS boards of thickness up to 250 mm.

General system characteristics

ATLAS CERAMIK system is an external thermal insulation composite system (ETICS). Thermal insulation technology consists in application of EPS or XPS boards upon the outer side of wall, installation of base coat with reinforcing fiberglass mesh and further application of finishing layer made of ceramic tiles fixed to base coat with adhesive mortar and finished with grout. Due to the type of finishing layer, insulation boards must be mechanically fixed through the first layer of mesh.

System components

According to current regulations thermal insulation system is considered in its entirety as one construction product, therefore it must be applied with layers arrangement and with materials listed in the technical approval. It is unacceptable to use, so-called compilations or to use products from other systems or manufacturers, which are not accepted by the technical approval.
Products used with ATLAS CERAMIK system, according to the ITB Technical Approval No. AT-15-8592/2011, are listed in the table below.

Technical requirements

ATLAS CERAMIK System has been given the ITB Technical Approval No. AT-15-8592/2011. Domestic Declaration of Conformity No. 114 of 25.03.2011. Factory Production Control Certificate No. ITB-0472/Z.

Adhesives for thermal insulation fixing ATLAS STOPTER K-20, ATLAS HOTER U
Thermal insulation material - polystyrene boards (EPS) of minimum properties meeting the designation code EPS–EN 13163–T1–L2–W2–S5–P5–BS75–DS(N)2–DS(70,-)2–TR100 Caution. Boards of tensile strength TR80 can be used if they are given the ITB Technical and Quality Recommendation or volitional Certificate issued by notified assessment body **Materials for thermal insulation – extruded polystyrene (XPS) boards of minimum properties meeting the designation code** XPS-EN 13164-XPS-EN13164-T1-DS(TH)-TR100
Mechanical fixings Mechanical fixings authorized for use in construction works.
Base coat ATLAS STOPTER K-20 or ATLAS HOTER U adhesive mortar with fiberglass mesh SSA-1363-SM 05.
Finishing layer ATLAS CERPLAST acrylic priming mass for renders Adhesive for ceramic cladding fixing ATLAS PLUS, ATLAS PLUS WHITE, ATLAS PLUS EXPRESS **Ceramic cladding** Façade ceramic tiles, frost-resistant, pressed or extruded, belonging to groups BIa, BIb or AI acc. to PN-EN 14411:2009 standard, max. thickness 15 mm and surface mass max. 40 kg/m^2. **Grouting** ATLAS ARTIS GROUT **Complementary elements** Drip profile, corner profile, window profile, expansion joint profile (straight, angle), sill profile.

Requirements on thermal insulation installation

Conditions during installation
Carry out installation in dry weather, at substrate and ambient temperature not lower than +5°C and not higher than +30°C. The only exception is ATLAS STOPTER K-20 adhesive mortar, which can also be used at 0°C, assuming that, after 8 hours since application completion, temperature does not drop below -5°C. Façade should be on time of thermal insulation installation protected and secured against precipitation, strong wind and direct sunlight - it is recommended to use fine mesh scaffolding covers. Insulation installation should be carried out in dry conditions (no precipitation, relative humidity below 80%).

Substrate preparation

General provisions
Before work commencement, evaluate the substrate technical condition and, on that basis, decide on scope and method of surface preparation. For the time of installation, remove any elements hindering tight bonding of thermal insulation boards and finishing coat application. An additional layer of insulation will increase the wall thickness, therefore the reach of flashings, downspouts anchors, etc. will have to be extended. Protect windows and doors against soiling with a plastic film.

Requirements on the substrate
The substrate should be sound, stable, even, clean and dry. Absorptive substrates should be primed with ATLAS UNI-GRUNT, smooth and non-absorptive (concrete) with ATLAS CERPLAST priming mass. Substrate should be even to the extent enabling easy execution of a plane formed by insulation boards installed upon walls. Clean the surface from any layers which would impair mortar bonding, dirt, loose and dusty elements. Note! Particular attention should be paid to proper assessment and preparation of substrate with problematic bearing capacity, e.g. finished with glass-mosaics, glazed brick, covered with paint coatings, etc. If in doubt, conduct bonding test (ultimate tensile strength should be above 0.08 MPa) or apply 8-10 polystyrene cubes (10x10 cm large) at various façade points and check the bond after 3 days. The use of thermal insulation system on buildings with reinforced concrete sandwich walls should always be preceded by thorough assessment of their technical condition. This applies to technical condition of metal fittings (hooks, pins, rods) as well as their connection and interaction with wall elements.

Skirting boards installation
Application of thermal insulation should commence with installation of starter tracks. They support the first row of thermal insulation boards, help to keep uniform level of successive layers, strengthen bottom edge of system and bottom edge drip prevents water bleeding. Boards should be installed horizontally upon the building plinth, not lower than 30 cm above the ground level, which would protect against rising damp action and soiling - mud particles brought by raindrops reflected from the ground. Instead of starter tracks, it is permitted to use two layers of fiberglass mesh or strips of armour mesh.

Installation of thermal insulation

Boarding
In case of even substrates, adhesive mortar can be applied with a notched trowel (notch size 12 mm) – directly upon boards surface, not upon the substrate. In case of more irregular surfaces adhesive should be spread upon board surface with the "strip - point method". It consists in application of continuous circumferential bead (min. 3 cm wide) along the board edges and 6-8 patches (of diameter 8-12 cm) evenly distributed upon the board surface. The mortar bead is placed at a distance from the board edge, so when board is pressed to the wall, mortar is not squeezed out the board contour and side edges. Adhesive mortar applied upon board should coat min. 40% of its surface (60% after pressing the board to substrate). Thermal insulation application should commence from the building corners. The first row of boards is fixed on starter tracks, the subsequent rows so positioned, that board vertical edges are staggered and overlapped at the building corners. If adhesive is squeezed out the board contour, it should be removed. Any gaps between adjoining boards should be filled with cut stripes of polystyrene or low expansion polyurethane foam.

Insulation boards sanding
Surface of insulating boards applied upon substrate should be even, so when the mortar sets (after approx. 24 h), the boards can be sanded with sanding boards or floats covered with coarse sanding paper. This action eliminates any slips of board edges. In case of polystyrene boards installed approx. 3 months earlier or more, sanding and removal of any surface tarnish is mandatory.

Additional elements installation

In order to improve the system resistance against mechanical damage, to allow free drainage of water and execution of expansion joints - finishing profiles should be installed upon fixed thermal insulation layer. Profiles are installed at every specific locations of the façade (i.e. corners, reveals, sills, etc.). They can also be installed simultaneously to the base coat mesh embedding. Use adhesive mortars ATLAS STOPTER K-20 or ATLAS HOTER U for profiles embedding.

Strengthening the reveal corners

At any corners of window and door reveals, additional reinforcing mesh strips (rectangles 20 x 30 cm) embedded in the adhesive mortar ATLAS STOPTER K-20 or ATLAS HOTER U should be installed. Strips should be applied diagonally, at a 45° angle in relation to the line set by reveal edges.

Base coat application

As the finishing coat of ATLAS CERAMIK system consists of ceramic tile cladding, it is required to apply base coat (reinforced layer) and to install mechanical fixings in the same work action. Two layers of fiberglass mesh embedded in ATLAS STOPTER K-20 or ATLAS HOTER U adhesives are used for application of base coat. Mechanical fixings are installed through the first mesh layer. Base coat can be installed after min. 3 days since boards fixing. Apply adhesive mortar upon the surface of installed insulation boards and spread it with a notched trowel (notch size 10 - 12 mm). Adhesive should be spread with vertical strips of width slightly greater than the fiberglass mesh width. Then, starting from the top, subsequent strips of mesh are embedded in the adhesive coat. Consecutive strips should be applied with min. 10 cm wide vertical and horizontal overlaps (15 cm wide at the building corners). The mesh overlaps should not correspond with the joints between insulation boards. The mesh should be thoroughly embedded in the adhesive. In order to embed the mesh evenly, the adhesive should be squeezed with slightly inclined trowel led from the top, in direction from the center to the mesh strip side. Correctly embedded mesh should be completely coated with adhesive and should not contact polystyrene boards directly. The next step is the installation of mechanical fixings through the first layer of mesh. Use fixings with galvanized steel pin, min. 8 pcs per 1 m^2. Detailed information on the number of fixings, their distribution, length and depth of anchoring should be specified in the thermal insulation technical design. When fixings are properly installed, their plates should be slightly pressed into adhesive coat. Then the entire surface should be covered with the next fiberglass mesh embedded thoroughly in the mortar and smoothed with a float.

Finishing coat application

Contact coat application
Contact coat made of ATLAS CERPLAST priming mass can be applied after approx. 3 days since base coat application.

Ceramic cladding application
Deformable cement adhesives, C2TE S1 type according to the PN-EN 12004:2008 standard, are recommended, e.g. ATLAS PLUS, ATLAS PLUS WHITE or ATLAS PLUS EXPRESS. When fixing the tiles, in order to eliminate possible gaps beneath cladding (e.g. notched trowel marks), one should pay special attention to ensure proper adhesive bonding. Taking these factors into account, it is recommended to use 'double spreading' method, consisting in distribution of adhesive both upon substrate - with a notched trowel, and upon back side of tile - with smooth side of a trowel. Press the tile to the substrate and slightly move then. Follow the adhesive coat thickness advised in technical data sheets. Do not coat too large area with adhesive at the same time, as spread adhesive retains its bonding properties within 10 - 30 minutes (depending on substrate and ambient properties). Tile position can be adjusted delicately within 10 minutes since it is pressed. Remove excessive adhesive present in joints after tile pressing immediately.

Grouting
Grouting should commence when the adhesive fully sets, i.e. after approx. 24 h since tiles installation. It is recommended to use ATLAS ARTIS GROUT. Due to cladding operation conditions, the joints should be from 6 mm up to 20 mm wide (width should be adequate to tiles size) and percentage of joints upon entire surface should not be less than 6%. In order to avoid differences in colour shades, it is recommended to use grout of the same manufacturing date and the same batch number (shown on the packaging). Grout an individual surface with no break, continue grouting on adjoining scaffolding levels. Keep the same water/dry mix ratio. Cladding should be protected against precipitation (mesh covers on scaffoldings) within min. 3 days since application (in temperature +20 °C and relative humidity 60%; in less positive conditions slower setting of materials should be considered).

Expansion joints of the ceramic cladding
Construction expansion joints and expansion joints of insulation plane as well as the angle ones should be repeated on the ceramic cladding surface, which should be divided into smaller sections, max. 9 m^2 large. In case of installation of ATLAS CERAMIK thermal insulation system upon large and high façades, it is recommended to apply additional horizontal consoles or stabilizing brackets.

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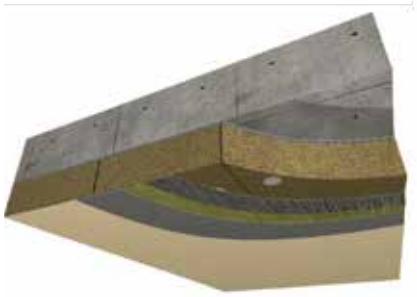
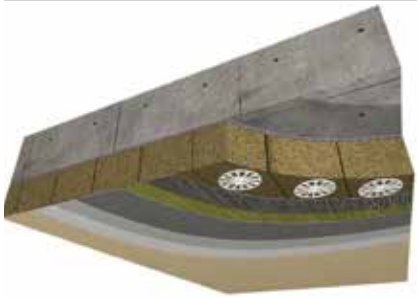
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2013-11-12

EXTERNAL THERMAL INSULATION SYSTEM ATLAS ROKER G



Type I



Type II

Type III

Use

Installation of thermal insulation upon ceilings (from the bottom ceiling side) and walls - if not directly exposed to weathering or mechanical damage, in residential, commercial, public access, industrial buildings, both existing and newly constructed ones.
Indoors - types I, II and III - upon ceilings and walls in non-heated rooms (e.g. garages, cellars, multi-level car parks), open and closed, where heated rooms are located above or in close neighbourhood.
Outdoors - type II and III – from bottom ceiling side, e.g. over driveways, walkways, car parks, above which heated rooms are located.

Propereties

Complete set of materials for installation of thermal insulation - offers full and proved compatibility of components, which is particularly important for long term system use.
Available in three material and technological options - allows execution of thermal insulation with one of three types (marked with Roman symbols I, II or III), depending on needs and design requirements.
Type I and II - with installation method similar to installation of standard external wall thermal insulation, base coat improves resistance to mechanical damage and factors related to the use of rooms.
Option III - allows for limited range of work, faster progress of installation and reduction of labor costs due to lack of base coat and spray application of finishing coats directly upon outer layer of thermal insulation boards.
Enables achievement of thermal insulation parametres required for ceilings by building regulations - reduces heat loss and heating costs.
System components are non-flammable - ATLAS ROKER G system improves protection of building structural elements against fire action and high temperature.
Classified as fire retardant - in accordance to applicable regulations (applies to all three material-technological system types).
Characterized by high reaction to fire class - type II (with mineral and silicate render) and type III are classified as fully non-flammable (reaction to fire class A2 s2 , d0).

General system characteristics

Technology of ATLAS ROKER G system consists in application of mineral wool insulation boards upon surfaces of walls or ceilings indoors, followed by application of finishing coats according to one of three material/ technological options. In type I, base coat with fiberglass mesh is installed manually upon mineral wool boards and the resulting surface is coated with façade paint. In type II, base coat with fiberglass mesh is applied manually upon mineral wool boards and the resulting surface is coated with thin - coat render (with optional further painting). In type III, finishing coat made of of thin-coat render is spray - applied upon mineral wool boards (one-side impregnated). Option III allows to reduce cost of both material and labor, shorten the time of system installation with keeping full system technical and operational functionality.

System components

According to current regulations thermal insulation system is considered in its entirety as one construction product, therefore it must be applied with layers arrangement and with materials listed in the technical approval. It is unacceptable to use, so-called compilations or to use products from other systems or manufacturers, which are not accepted by the technical approval.
Products used with ATLAS ROKER G system, according to the ITB Technical Approval No. AT-15-7314/2011, are listed in the tables.

Technical requirements

ATLAS ROKER G System has been given the ITB Technical Approval No. AT-15-7314/2011. Domestic Declaration of Conformity No. 115 of 16.07.2012. Factory Production Control Certificate No. ITB-0222/Z.

Requirements on thermal insulation installation

Conditions during installation

Carry out installation at substrate and ambient temperature not lower than +5°C and not higher than +30°C.

Substrate preparation

General provisions

Installation of insulation should be conducted in accordance to technical design prepared individually for an object. The design should list (at least): substrate preparation method, thickness of insulation material and its installation method, type of finishing coat and its technology of application, number and distribution of mechanical fixings (if required), finishing of special areas. The design should also list the range of thermal insulation work, i.e. whether except of ceiling insulation, also other elements (columns, joists or wall fragments) are to be insulated. For the time of installation, remove any elements hindering tight bonding of thermal insulation boards and finishing coat application. Permanent building equipment (installations, ducts, etc.) must be protected against contamination and/or damage. In case of spray application of renders protect floors as well.

Requirements on the substrate

The substrate should be sound, stable, even, clean and dry. Absorptive substrates should be primed with ATLAS UNI-GRUNT, smooth and non-absorptive (concrete) with ATLAS CERPLAST priming mass. Substrate should be even to the extent enabling easy execution of a plane formed by insulation boards installed upon walls. Clean the surface from any layers which would impair mortar bonding, dirt, loose and dusty elements. If in doubt, conduct bonding test (ultimate tensile strength should be above 0.08 MPa) or apply 8-10 mineral wool cubes (10x10 cm large) at various substrate points and check the bond after 3 days.

Installation of thermal insulation

Installation of standard (façade) wool boards

It is recommended to use adhesive mortar and, obligatorily, mechanical fixings (4-6 pcs/1m^2). Adhesive mortar can be applied upon boards with two methods: partial coating with the "strip - point method" or full coating (lamella panels or façade wool panels, but only on respectively even substrates). In both cases, the board surface should be floated with thin coat of adhesive mortar, pressed well into the wool structure by stripping with steel trowel edge. This action pre-moistens wool fibers and improves bonding. Then, in case of partial coating, apply main coat of adhesive in the form of continuous circumferential bead (min. 3-5 cm wide) along the board edges and 6-8 patches (of diameter 8-12 cm) evenly distributed upon the board surface. Adhesive mortar applied upon board should coat min. 40% of its surface. In case of full coating, the adhesive is applied upon whole board surface with a smooth float and profiled with a notched trowel then (notch size 8 - 12 mm).

Installation of lamella wool boards

In case of lamella wool, boards can be applied upon substrate with adhesive mortar solely (without mechanical fixings) in the following cases: when substrate is rough (not rendered), its ultimate tensile strength is higher than 0.08 MPa and when thermal insulation is installed up to 20 m high. Then, adhesive mortar coat should be spread upon whole mineral wool board surface. In other situations lamella boards should be fixed with adhesive mortar and mechanical fixings.

When adhesive is applied upon boards backside, they should placed upon substrate, lightly moved and pressed. The boards should be so positioned, that boards vertical edges are staggered and overlapped. Do not leave gaps between adjacent boards or adhesive residues in joints. Check the surface level on regular basis. Press and correct position of boards with wooden floats with rounded edges only. Fixing with anchors can commence after approx. 24 hours since boards application. Detailed information on the number of fixings, their distribution, length and depth of anchoring should be specified in the thermal insulation technical design. Follow the guidelines of fixings and mineral wool manufacturers.

Finishing coat application

The technology of finishing coat application depends on ATLAS ROKER G system type, i.e. I, II or III.

Type I

In system type I, fixed thermal insulation is coated with base coat, which can be painted with façade paint. Base coat can be applied after min. 3 days since boards application. Apply ATLAS ROKER W-20 mortar upon insulation boards surface and embed subsequent mesh strips. Correctly embedded mesh should be completely coated with adhesive and should not contact mineral wool boards directly. Consecutive strips should be applied with min. 10 cm wide overlaps. The mesh overlaps should not correspond with the joints between insulation boards. Smooth the base coat with a steel float. Approx. 3 days since base coat application, its surface can be primed with primer appropriate for particular paint and coated with façade paint then. The following paints can be used for base coat painting: silicate (e.g. ATLAS ARKOL S), silicone (e.g. ATLAS FASTEL NOVA). Perform application in accordance to technology described in technical data sheets of individual products.

Note! In case of installation of thermal insulation in open garages, over crossings, etc., where insulation moistening by jamming rain or snow is possible, it is obligatory to apply thin-coat render both upon walls and ceilings, and at the edge zones of insulation. The edge zones should be understood as insulation within a distance of min. 3 m from edge exposed to rain, with exception of entries where this distance should be 10 m.

Type II

In system type II, fixed thermal insulation is coated with base coat installed with the same method as in option I. Then, thin - coat render is applied and optionally painted. Approx. 3 days since base coat application, its surface can be primed with priming mass appropriate for particular render, left to dry and coated with thin-coat render then. The use of priming mass improves render bonding to substrate and protects rendering coat against any contamination from the adhesive mortar coat. One can use the following renders: mineral (e.g. ATLAS CERMIT), silicate (e.g. ATLAS SILKAT) or silicone (e.g. ATLAS SILKON). Render surface can be painted optionally with silicate (e.g. ATLAS ARKOL S), silicone (e.g. ATLAS FASTEL NOVA) paints. Perform application in accordance to technology described in technical data sheets of individual products.

Type III

In system type III, the base coat is not installed and thin-coat render is spray-applied directly upon lamella wool boards. In case of factory-impregnated mineral wool boards the use of additional priming mass is not required. If mineral wool surface is not pre-impregnated, use ATLAS CERPLAST priming mass, which is spray - applied upon fixed boards surface. It is possible to use mineral render, stirred with water before use. Perform application in accordance to technology described in technical data sheets of individual products.

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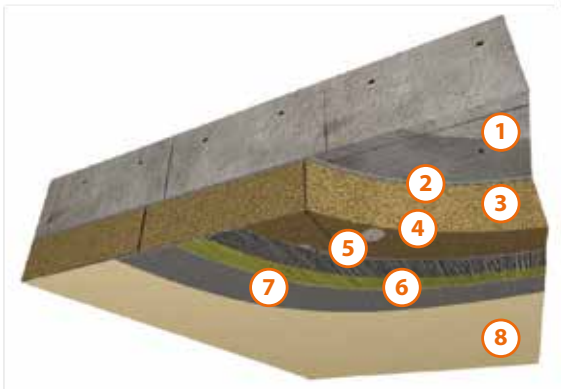
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2013-07-01

TYPE I
Insulation fixing – Basic
ATLAS ROKER W-20 adhesive mortar
Insulation material *)
Standard wool
FASROCK (MW-EN13162-T5-DS(T+)-DS(TH)-CS(10)40-TR15-WS-WL(P)-MU1)
FASROCK MAX (MW-EN13162-T4-DS(TH)-CS(10)10-TR7,5-WS- MU1)
PAROC FAS 3 (MW-EN13162-T5-DS(TH)-CS(10)30-TR10-WS-WL(P)-MU1)
PAROC FAS 4 (MW-EN13162-T5-DS(TH)-CS(10)40-TR15-WS-WL(P)-MU1)
PAROC FAS B (MW-EN13162-T5-DS(TH)-CS(10/20)-TR10-WS-WL(P)-MU1)
FRONTROCK MAX E (MW-EN13162-T5-DS(T+)-DS(TH)-CS(10)20-TR10-PL(5)250-WS-WL(P)-MU1)
FASOTERM PF (MW-EN13162-T5-DS(TH)-CS(10/40)-TR15-MU1-AFr5)
Lamella wool
FASROCK L (MW-EN13162-T5-DS(T+)-DS(TH)-CS(10\Y)40-TR100-WS-WL(P)-MU1)
PAROC FAL 1 (MW-EN13162-T5-DS(TH)-CS(Y)50-TR80-WS-WL(P)-MU1)
FASOTERM NF (MW-EN13162-T5-CS(10/30)-TR80-MU1-AFr5
Mechanical fixings – additional fixing
Standard wool
Mechanical fixings with steel pin
Lamella wool
Fixings are not required in the following cases: - substrate is rough (not rendered) - substrate tensile strength > 0.08 MPa - thermal insulation installed up to 20 m high
Base coat
ATLAS ROKER W-20 adhesive mortar with fiberglass mesh SSA-1363-SM 05.
Finishing coat
ATLAS ARKOL S façade paint + ARKOL SX primer ATLAS FASTEL NOVA façade paint

TYPE II
Insulation fixing – Basic
ATLAS ROKER W-20 adhesive mortar
Insulation material *)
Standard wool
FASROCK (MW-EN13162-T5-DS(T+)-DS(TH)-CS(10)40-TR15-WS-WL(P)-MU1)
FASROCK MAX (MW-EN13162-T4-DS(TH)-CS(10)10-TR7,5-WS- MU1)
PAROC FAS 3 (MW-EN13162-T5-DS(TH)-CS(10)30-TR10-WS-WL(P)-MU1)
PAROC FAS 4 (MW-EN13162-T5-DS(TH)-CS(10)40-TR15-WS-WL(P)-MU1)
PAROC FAS B (MW-EN13162-T5-DS(TH)-CS(10/20)-TR10-WS-WL(P)-MU1)
FRONTROCK MAX E (MW-EN13162-T5-DS(T+)-DS(TH)-CS(10)20-TR10-PL(5)250-WS-WL(P)-MU1)
FASOTERM PF (MW-EN13162-T5-DS(TH)-CS(10/40)-TR15-MU1-AFr5)
Lamella wool
FASROCK L (MW-EN13162-T5-DS(T+)-DS(TH)-CS(10\Y)40-TR100-WS-WL(P)-MU1)
PAROC FAL 1 (MW-EN13162-T5-DS(TH)-CS(Y)50-TR80-WS-WL(P)-MU1)
FASOTERM NF (MW-EN13162-T5-CS(10/30)-TR80-MU1-AFr5
Mechanical fixings – additional fixing
Standard wool
Mechanical fixings with steel pin
Lamella wool
Fixings are not required in the following cases: - substrate is rough (not rendered) - substrate tensile strength > 0.08 MPa - thermal insulation installed up to 20 m high
Base coat
ATLAS ROKER W-20 adhesive mortar with fiberglass mesh SSA-1363-SM 05.
Finishing coat
ATLAS CERMIT mineral render + ATLAS CERPLAST priming mass ATLAS SILKAT thin-coat render + ATLAS SILKAT ASX priming mass ATLAS SILKON thin-coat render + ATLAS SILKON ANX priming mass ATLAS ARKOL S façade paint + ARKOL SX primer ATLAS FASTEL NOVA façade paint

TYPE III
Insulation fixing – Basic
ATLAS ROKER W-20 adhesive mortar
ATLAS ROKER W-10 adhesive mortar
Insulation material *)
Lamella wool
PAROC CGL20 CY (MW-EN13162-T5-DS(TH)-CS(Y)20-TR20-WS-WL(P)-MU1)
FASROCK L (MW-EN 13162-T5-DS(TH+)-DS(TH)-CS(10\Y)40-TR100-WSWL(P)-MU1)
ISOVER NF333 (MW-EN 13162-T5-DS(TH)-CS(10)40-TR15-WS-WL(P)-MU1)
ISOROC ISOFAS LM (MW-EN 13162-T5-DS(TH)-CS(10)50-TR90-WS-WL(P)-MU1)
Mechanical fixings – additional fixing
Lamella wool
Fixings are not required in the following cases: - substrate is rough (not rendered) - substrate tensile strength > 0.08 MPa - thermal insulation installed up to 20 m high
Outer (finishing) layer
ATLAS CERMIT mineral render (spotted 1.5 and 2.0 mm)

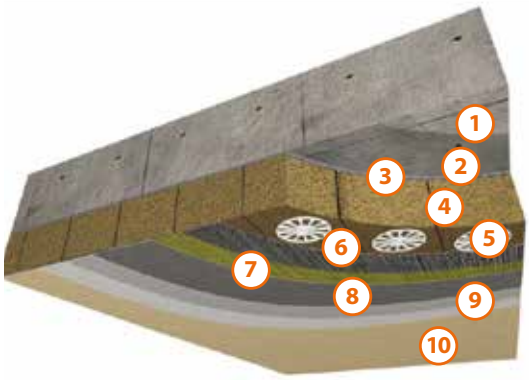
*) It is acceptable to use other mineral wool boards, provided that the test results of thermal insulation systems with these boards meet the requirements of the technical approval (this note applies to all options).



THERMAL INSULATION SYSTEM ATLAS ROKER G

Type I

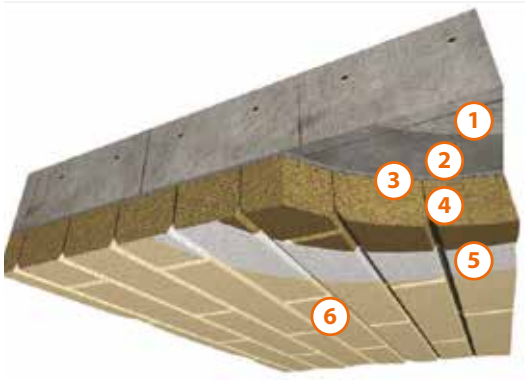
1. Concrete ceiling
2. Priming (optional)
3. Adhesive for boards fixing
4. Mineral wool
5. Mechanical fixings with steel pin
6. Adhesive for base coat application
7. Reinforcing mesh
8. Paint coat



THERMAL INSULATION SYSTEM ATLAS ROKER G

Type II

1. Concrete ceiling
2. Priming (optional)
3. Adhesive for boards fixing
4. Lamella mineral wool
5. Mechanical fixings with steel pin
6. Adhesive for base coat application
7. Reinforcing mesh
8. Priming mass
9. Thin-coat render
10. Paint coat (optional)



THERMAL INSULATION SYSTEM ATLAS ROKER G

Type III

1. Concrete ceiling
2. Priming (optional)
3. Adhesive for boards fixing
4. Lamella mineral wool
5. Thin-coat mineral render (spray-applied)
6. Paint coat (optional)

Use

Additional thermal insulation fixing – protects thermal insulation system against forces related to wind loads (suction).

Properties

Fixings with plastic pin – recommended for fixing polystyrene boards.
Fixings with metal pin – recommended for fixing both polystyrene and mineral wool boards.
They don't cause thermal bridging in the point of penetration through the thermal insulation.

Important additional information

- From technological point of view, application of fixings is not required for walls up to 12 m high with appropriately reliable and strong substrate (concerns systems with polystyrene). Check local regulations on the requirements on mechanical fixing.
- If in doubt concerning the bearing capacity of substrate, it is recommended to carry out pull - off test.
- The number of fixings should not be lower than 4 pieces for each 1 m^2. Increase the number of fixings in the building corner zones.
- Detailed data concerning number, type and length of pins as well as their arrangement should be included in the technical design of external thermal insulation.
- The depth of fixings anchoring in the wall structural layer depends on substrate type and should be selected in concordance with requirements of the fixings manufacturer.
- Types of substrates: type A – concrete, type B – clay brick, sand–lime clay brick, type C – sand-lime and clay hollow brick, type D – lightweight concrete blocks, lightweight concrete aggregate bricks, type E - aerated concrete.

MECHANICAL FIXINGS

Thermal insulation mechanical fixing

Installation of mechanical fixings can start not earlier than after approx. 24 hours since the insulation material application. Drill a hole of depth recommended for the given fixing length. Then, remove dust from hole and insert the fixing. Next, hammer in (in case of hammered in fixings) or screw in (in case of screwed in fixings) the pin. The structure of thermal insulation material must not be damaged by mechanical fixings. Fixing head should keep the plane of thermal insulation material.

Technical requirements

For fixings TERMO: AT-15-7920-2009
For fixings TFIX-8M: ETA-07/0336
For fixings TFIX-8S: ETA-11/0144
For fixings TFIX-8ST: ETA-11/0144
For fixings KI-10N: ETA-07/0221

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-07-31

	Symbol/index	Available length [mm]	Depth of anchoring [mm] A B	Insulation thickness [mm] A B	Depth of anchoring [mm] C D E	Insulation thickness [mm] C D E	Collective packaging
Fixing A-TERMO for polystyrene, with plastic pin, hammered in, diameter 10 mm, substrate type B, C, D, E.	A-TERMO-90	90	25	50	50	30	250
	A-TERMO-120	120	25	80	50	60	250
	A-TERMO-140	140	25	100	50	80	250
	A-TERMO-160	160	25	120	50	100	250
	A-TERMO-180	180	25	140	50	120	250
	A-TERMO-200	200	25	160	50	140	250

	Symbol/index	Available length [mm]	Depth of anchoring [mm]	Insulation thickness [mm]	Collective packaging
Fixing TFIX 8M for polystyrene and mineral wool, with metal pin, hammered in, diameter 8 mm, substrate type A, B, C.	TFIX-8M-095	95	25	60	200
	TFIX-8M-115	115	25	80	200
	TFIX-8M-135	135	25	100	200
	TFIX-8M-155	155	25	120	200
	TFIX-8M-175	175	25	140	200
	TFIX-8M-195	195	25	160	200
	TFIX-8M-215	215	25	180	100
	TFIX-8M-235	235	25	200	100
	TFIX-8M-255	255	25	220	100
	TFIX-8M-275	275	25	240	100
	TFIX-8M-295	295	25	260	100

	Symbol/index	Available length [mm]	Depth of anchoring [mm]	Insulation thickness [mm]	Collective packaging
Fixing KI-10N for polystyrene and mineral wool, with metal pin and long expansion zone, hammered in, diameter 10 mm, substrate type B, C, D, E.	A-KI-120-N	120	60	50	250
	A-KI-140-N	140	60	70	250
	A-KI-160-N	160	60	90	250
	A-KI-180-N	180	60	110	250
	A-KI-200-N	200	60	130	250
	A-KI-220-N	220	60	150	250
	A-KI-260-N	260	60	190	250
	A-KI-300-N	300	60	230	250

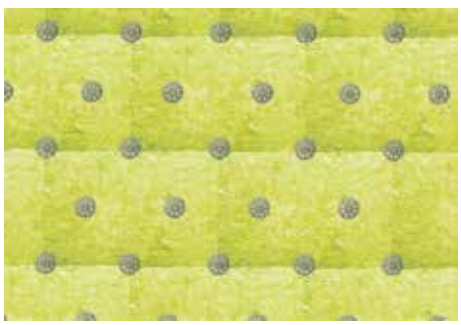
Additional accessories		
Symbol/index	Product type	Collective packaging
KWL-140	Pressing collar for lamella wool, diameter 140 mm, to be used with KI-10N fixings	200
KFS (cutter)	Thermal insulation hole cutter	1
KES (plug)	Polystyrene plug	250

	Symbol/index	Available length [mm]	Depth of anchoring [mm] ABCD/E	Inuslation thickness [mm] ABCD/E	Collective packaging
Fixing TFIX 8S for polystyrene and mineral wool, with metal pin, screwed in, diameter 8 mm, substrate type A, B, C, D, E.	TFIX-8S-115	115	25/65	80/40	200
	TFIX-8S-135	135	25/65	100/60	200
	TFIX-8S-155	155	25/65	120/80	200
	TFIX-8S-175	175	25/65	140/100	200
	TFIX-8S-195	195	25/65	160/120	200
	TFIX-8S-215	215	25/65	180/140	100
	TFIX-8S-235	235	25/65	200/160	100
	TFIX-8S-255	255	25/65	220/180	100
	TFIX-8S-275	275	25/65	240/200	100
	TFIX-8S-295	295	25/65	260/220	100
	TFIX-8S-335	335	25/65	300/260	100
	TFIX-8S-355	355	25/65	320/280	100
	TFIX-8S-375	375	25/65	340/300	50
	TFIX-8S-395	395	25/65	360/320	50
	TFIX-8S-415	415	25/65	380/340	50

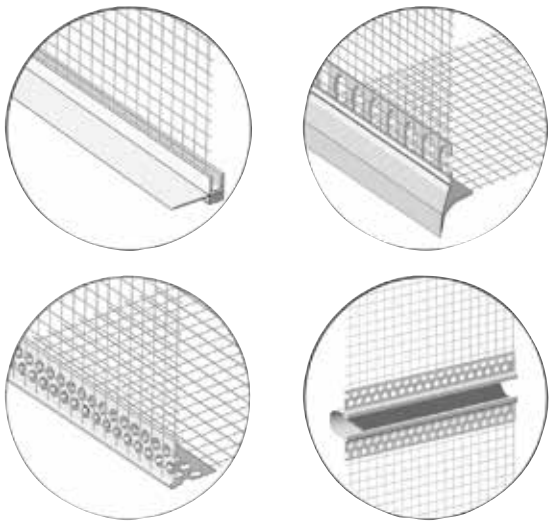
	Symbol/index	Available length [mm]	Depth of anchoring [mm] ABCD/E	Insulation thickness [mm] ABCD/E	Collective packaging
Fixing TFIX 8ST for polystyrene and mineral wool, with metal pin and polyurethane foam insulating cap, screwed in, diameter 8 mm, substrate type A, B, C, D, E.	TFIX-8ST-115	115	25/65	80/40	200
	TFIX-8ST-135	135	25/65	100/60	200
	TFIX-8ST-155	155	25/65	120/80	200
	TFIX-8ST-175	175	25/65	140/100	200
	TFIX-8ST-195	195	25/65	160/120	200
	TFIX-8ST-215	215	25/65	180/140	100
	TFIX-8ST-235	235	25/65	200/160	100
	TFIX-8ST-255	255	25/65	220/180	100
	TFIX-8ST-275	275	25/65	240/200	100
	TFIX-8ST-295	295	25/65	260/220	100
	TFIX-8ST-335	335	25/65	300/260	100
	TFIX-8ST-355	355	25/65	320/280	100
	TFIX-8ST-375	375	25/65	340/300	50
	TFIX-8ST-395	395	25/65	360/320	50
	TFIX-8ST-415	415	25/65	380/340	50

Symbol/index	Diameter [mm]	Product type	Collective packaging
TFIX-8S-DEVICE	Ø 63	Thermal insulation hole cutter for TFIX-8S	100
TFIX-8S-EPS	Ø 62 x 10	Polystyrene cap	250
TFIX-8S-MW	Ø 62 x 10	Mineral wool cap	250
TFIX-8S-TOOL	Ø 80	Installation tool TFIX-8S for a screwer	1
TFIX-8ST-TOOL	Ø 80	Installation tool TFIX-8ST for a screwer	1

POLYSTYRENE – FIXINGS ARE PLACED IN THE CENTRE OF THE BOARD



MINERAL WOOL – FIXINGS ARE PLACED CENTRALLY AND IN CORNERS OF NEIGHBOURING BOARDS



FAÇADE PROFILES FOR EXTERNAL WALL INSULATION

- protection of façade corners
- installation of expansion joints of external thermal insulation
- resistant to weather conditions
- resistant to mechanical damage
- easy and quick in use

Use

Protection and installation of expansion joints at specific points of insulated façades – profiles used with all ATLAS external thermal insulation systems. Profiles reinforce corners of façades and any edges of concrete and ferroconcrete elements, e.g. repaired with ATLAS BETONER system.
Effective drainage of rainwater – from façade surface and other vertical construction elements.
Installation of expansion joints – separate façade elements, which may differ in type of load or properties, e.g. thermal expansion.
Enable transfer of building expansion joints upon the layers of thermal insulation system.
Even edges and give them aesthetic appearance.

Properties

Long term durability – resistant to weather conditions, aggressive action of polluted environment and other construction materials, weathering and UV radiation.
Resistant to mechanical damage during transport, storage and in operation – owing to the use of hard and highly flexible PVC.
Similar thermal expansion of profiles and thermal insulation materials – which eliminates the risk of damage to the render.
Easy and quick installation – allow to save about 15% of time at reveals treatment.
Equipped with reinforcing mesh – 10 cm wide, made of fiberglass, additionally reinforcing the area along edges; owing to acrylic bathing, the mesh is protected against influence of alkaline environment.
Joints between profile and mesh are executed with high frequency welding technology – which makes them much more durable and resistant than joints formed by older technologies, e.g. gluing.
Manufactured in white colour (RAL 9010), profile elements made in co-extrusion technology are grey.
Profiles can be painted with acrylic or silicone façade paints – e.g. ATLAS SALTA E or ATLAS SALTA.

Technical data

Finishing profiles are made of high quality PVC granulate (with no cadmium).

Technical requirements

Finishing profiles are supplementary elements of thermal insulation systems:

System name	Technical Approval No.	Certificate No.
ATLAS	ETA 06/0081	1488-CPD-0021
ATLAS XPS	ETA 07/0316	1488-CPD-0075
ATLAS ROKER	ETA 06/0173	1488-CPD-0036
ATLAS ETICS	AT-15-9090/2014	FPC No. ITB-0562/Z
ATLAS ROKER	AT-15-7314/2011	FPC No. ITB-0222/Z
ATLAS ROKER G	AT-15-2930/2012	FPC No. ITB-0436/Z
ATLAS CERAMIK	AT-15-8592/2011	FPC No. ITB-0472/Z
ATLAS RENOTER	AT-15-8477/2010	FPC No. ITB-0456/Z

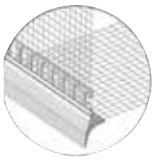
General guidelines on profiles installation

Finishing profiles are installed after thermal insulation layer fixing, before or during installation of the system base coat. Apply adhesive used for mesh embedding, e.g. ATLAS STOPTER K-20, ATLAS STOPTER K-50, ATLAS HOTER U or ATLAS ROKER W-20, along the edge upon which the profile is to be installed. Put the profile against the edge, embed its reinforcing mesh in the freshly applied mortar coat so the mesh is not visible. When the adhesive dries, apply the system base coat upon whole façade surface. The system reinforcing mesh should fully cover the finishing profile mesh.

Cut the finishing profiles to expected size with shears for PVC beads. Join perpendicular sections by cutting the ends at angle less than 45° and fill the joint with silicone filler.

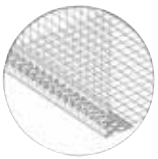
PROTECTIVE PROFILES

Drip profile



Drip profiles are installed on horizontal edges of window and door reveals and other façade recesses. They are also applied on bottom edges of balcony slabs: the mesh is embedded in the finishing coat, e.g. ATLAS ENDER in ATLAS BETONER repair system. They can also be used on bottom edge of thermal insulation when starter tracks cannot be used, e.g. thermal insulation boards are thicker than the largest available track size. The profiles ensure appropriate drainage of water flowing down the vertical façade surface, therefore eliminate the risk of stains and render damage. The profiles protect also the edge from mechanical damage.

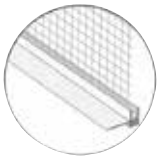
Corner profile



Corner profiles are fixed on various edges exposed to mechanical damage during façade use, e.g. door and window reveals, corners, etc. The material flexibility prevents mechanical damage from causing permanent corner destruction.

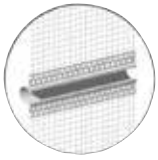
EXPANSION JOIN PROFILES

Window profile



Window profiles are fixed between window or door frames and finishing coats of the thermal insulation system. They are available in two widths: 6 and 9 mm. Window profile has polyurethane tape which eliminates render cracks and damages resulting from differences in thermal expansion of frames and rendering coats. Moreover, profile facilitates application of render and keeping its proper thickness, protects frames from soiling during work – enables quick and easy fixing of protective foil to the profile "flap" and, after installation completion, quick removal by breaking off the flap with used foil. Window profile protects space between frames and render against moisture, dirt, microorganisms and insects and improves thermal, sound and damp insulation there. It can be used with any type of frames (wooden, PVC, aluminum). Select the type of profile (6 mm or 9 mm) appropriately to the assumed thickness of base coat and render. Mark the planned contact line with rendering coat on frames, then remove white protective strip from polyurethane tape and stick the profile to the frame, so its edge corresponds with line marked on the frame. Profile is always fixed with the "flap" inwards the reveal. Remove yellow protective strip and attach appropriately cut foil in order to protect the frames. Fill fully the profile inside part with base coat and thin-coat render. Break off the flap with foil after work completion.

Expansion joint profile



Expansion joint profile is fixed between thermal insulation boards in points where construction expansion joints run or where thermal insulation layer needs to be divided. Profile is available in two versions: straight – expansion joint keeps the façade plane, and angle - expansion joint in the internal corner. Profile can be used in expansion gaps 10 up to 30 mm wide. It consists of two parts: hard (PVC-U) – contacting thermal insulation boards and soft (PVC-P) – filling the space between them. Soft part is made in the co-extrusion process and therefore it joins the hard part strong and durably. The use of expansion joint profile ensures permanent tightness (in regard to moisture, dirt, microorganisms and insects) and appropriate cooperation of adjacent building sections and thermal insulation layers. The precondition of whole expansion joint tightness is correct vertical arrangement of two adjacent profiles: the upper one and the lower one. They are joined with special assembly section attached to each profile. It is made of soft PVC-P and has bonding layer (covered with a protective tape). The assembly section should be fixed to lower end of the upper profile (on bottom side of its soft part) and to upper end of the lower profile (on top side of the soft part). It is also possible to join profiles with overlaps – the upper profile needs to overlap the lower one. To do that, cut off 10 mm sections from the hard profile part, so an overlap is made of soft parts only. To form perfectly straight run of combined profiles, use attached plugs, which should be pressed from bottom side into "tips" – protruding parts of upper and lower profile.

Note. Before application of expansion joint profile, fill the joint with thermo-insulating material, e.g. polyethylene or polyurethane backer rod. After profile installation, protect the joint against soiling during application of base coat and rendering coat. For that purpose, put polystyrene strips into the joint and remove them after rendering.

Sill profile

Profile is fixed under a sill, which ensures appropriate expansion joints between sill and thermal insulation system layers. The use of sill profile provides permanent tightness (to moisture, dirt, microorganisms and insects) and stiffens the sill (owing to appropriately shaped profile upper side). Sill profile has polyurethane tape which eliminates render cracks and damages resulting from differences in thermal expansion of materials. Moreover, profile facilitates application of render and keeping its proper thickness. When fixing the profile, make sure the thermal insulation boards are cut exactly to reveal size and that the profile is fixed horizontally. Directly before profile fixing, remove protective tape from polyethylene foam strip.

Important additional information

- Do not clean the profiles with agents containing chloride.
- Fix profiles in temperature above +5°C. In temperature from 5°C up to 15°C, one can expect lower profiles flexibility.
- Protect profiles against deformation during transport and storage – keep in horizontal position in dry, heated room (temperature above +5°C). Shelf life in conditions as specified is 18 months from the production date shown on the packaging.

Packaging

Profile	length [m]	Quantity in one packaging [rm / pcs]
drip profile	2.5	62.5 / 25
corner profile	2.5	125.0 / 50
window profile 6 mm	2.4	48.0 / 20
window profile 9 mm	2.4	48.0 / 20
expansion joint profile - straight	2.0	50.0 / 25
expansion joint profile - angle	2.0	50.0 / 25
sill profile	2.0	50.0 / 25

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-05-21

ATLAS FASADA

polystyrene boards for ATLAS external thermal insulation systems

- standard and graphite
- perfect thermal conductivity coefficient λ_D – required partition thermal insulation can be achieved with thinner boards

Use

Atlas Fasada – white polystyrene boards manufactured by polystyrene foaming and intended for thermal insulation of walls, including thermal insulation of façades. Boards are manufactured in standard dimensions: 1,000 mm long, 500 mm wide, 20 mm thick and then every 10 mm.
Atlas Fasada Grafit – grey polystyrene boards made of expanded polystyrene with refined graphite composition added in production process. The addition of graphite improves insulation properties, therefore better thermal resistance can be achieved with thinner boards. Boards are manufactured in standard dimensions: 1,000 mm long, 500 mm wide, 20 mm thick and then every 10 mm.
Range of use of Atlas Fasada boards:

- with ATLAS external thermal insulation systems, according to domestic or European technical approvals/assessments,
- external thermal insulation of walls installed with ETICS method (light-wet method, BSO) – if boards meet minimum requirements listed in technical specifications,
- external thermal insulation of walls installed with light-dry method,
- thermal insulation on the surface of stud wall,
- filling expansion joints,
- thermal insulation of enclosed slot of cavity walls,
- thermal insulation of ventilated slot of cavity walls,
- thermal insulation of loggias, balconies
- thermal insulation of jambs, lintels.

Atlas Fundament – insulation boards made of special polystyrene of lower hydrophobic properties. Perfect solution for thermal insulation of partitions exposed to long term damp action. Can be used for thermal insulation of foundation walls below ground level (up to 2 m below ground level), floors in damp rooms, damp rooms (wash rooms, cellars), plinths and cellar walls.

Types of substrates – concrete cement and cement-lime plasters, rough walls made of bricks, blocks, hollow blocks and other ceramic or silicate materials, cellular concrete.
Adhesive mortars – cement and polyurethane.

Technical data and requirements

Product conforms to PN-EN 13163 + A1:2015-03.

FASADA GRAFIT λ 031		FASADA λ 039		FASADA λ 040		FASADA λ 042	
CE 1488, 1434		CE 1488, 1482		CE 1488, 1434		CE 1488, 1434	
EPS-EN 13163-T1-L2-W2-S5-P5-BS100-DS(N)2-DS(70,-)2-TR100		EPS-EN 13163-T1-L2-W2-S5-P5-BS115-DS(N)2-DS(70,-)2-TR100		EPS-EN 13163-T1-L2-W2-S5-P5-BS115-DS(N)2-DS(70,-)2-TR100		EPS-EN 13163-T1-L2-W2-S5-P5- BS75-DS(N)2-DS(70,-)2-TR80	
Reaction to fire	E	Reaction to fire	E	Reaction to fire	E	Reaction to fire	E
Thermal conductivity coefficient λ_D	≤ 0.031 W/mK	Thermal conductivity coefficient λ_D	≤ 0.039 W/mK	Thermal conductivity coefficient λ_D	≤ 0.040 W/mK	Thermal conductivity coefficient λ_D	≤ 0.042 W/mK
Thickness	T1 (±1 mm)	Thickness	T1 (±1 mm)	Thickness	T1 (±1 mm)	Thickness	T1 (±1 mm)
Length and width	L2, W2 (±2 mm)	Length and width	L2, W2 (±2 mm)	Length and width	L2, W2 (±2 mm)	Length and width	L2, W2 (±2 mm)
Rectangularity	S5 (±5 mm/1000 mm)	Rectangularity	S5 (±5 mm/1000 mm)	Rectangularity	S5 (±5 mm/1000 mm)	Rectangularity	S5 (±5 mm/1000 mm)
Flatness	P5 (5 mm)	Flatness	P5 (5 mm)	Flatness	P5 (5 mm)	Flatness	P5 (5 mm)
Bending strength	BS100 (≥ 100 kPa)	Bending strength	BS115 (≥ 115 kPa)	Bending strength	BS100 (≥ 100 kPa)	Bending strength	BS75 (≥ 75 kPa)
Dimensional stability in constant normal laboratory conditions	DS(N)2 (≤ 0.2%)	Dimensional stability in constant normal laboratory conditions	DS(N)2 (≤ 0.2%)	Dimensional stability in constant normal laboratory conditions	DS(N)2 (≤ 0.2%)	Dimensional stability in constant normal laboratory conditions	DS(N)2 (≤ 0.2%)
Dimensional stability in specified temperature and humidity conditions	DS(70,-)2 (≤ 2%)	Dimensional stability in specified temperature and humidity conditions	DS(70,-)2 (≤ 2%)	Dimensional stability in specified temperature and humidity conditions	DS(70,-)2 (≤ 2%)	Dimensional stability in specified temperature and humidity conditions	DS(70,-)2 (≤ 2%)
Tensile resistance to force perpendicular to front surfaces	TR 100 (≥ 100 kPa)	Tensile resistance to force perpendicular to front surfaces	TR 100 (≥ 100 kPa)	Tensile resistance to force perpendicular to front surfaces	TR 100 (≥ 100 kPa)	Tensile resistance to force perpendicular to front surfaces	TR 80 (≥ 80 kPa)

FASADA λ 045		FUNDAMENT STANDARD λ 038		FUNDAMENT PLUS λ 036	
CE 1488, 1434					
EPS-EN 13163-T1-L2-W2-S5-P5- BS75-DS(N)2-DS(70,-)2-TR80		EPS-EN 13163-T2-L3-W3-S5-P10- BS150-CS(10)100-DS(N)2-DS(70,-)2-WL(T)3		EPS-EN 13163-T2-L3-W3-S5-P10- BS200-CS(10)150-DS(N)5-DS(70,-)2-WL(T)3	
Reaction to fire	E	Reaction to fire	E	Reaction to fire	E
Thermal conductivity coefficient λ_D	≤ 0.045 W/mK	Thermal conductivity coefficient λ_D	≤ 0.038 W/mK	Thermal conductivity coefficient λ_D	≤ 0.036 W/mK
Thickness	T1 (±1 mm)	Thickness	T2 (±2 mm)	Thickness	T2 (±2 mm)
Length and width	L2, W2 (±2 mm)	Length and width	L3, W3 (±3 mm)	Length and width	L3, W3 (±3 mm)
Rectangularity	S5 (±5 mm/1000 mm)	Rectangularity	S5 (±5 mm/1000 mm)	Rectangularity	S5 (±5 mm/1000 mm)
Flatness	P5 (5 mm)	Flatness	P10 (10 mm)	Flatness	P10 (10 mm)
Bending strength	BS75 (≥ 75 kPa)	Bending strength	BS150 (≥ 150 kPa)	Bending strength	BS200 (≥ 200 kPa)
Dimensional stability in constant normal laboratory conditions	DS(N)2 (≤ 0.2%)	Dimensional stability in constant normal laboratory conditions	DS(N)2 (≤ 0.2%)	Dimensional stability in constant normal laboratory conditions	DS(N)5 (≤ 0.5%)
Dimensional stability in specified temperature and humidity conditions	DS(70,-)2 (≤ 2%)	Dimensional stability in specified temperature and humidity conditions	DS(70,-)2 (≤ 2%)	Dimensional stability in specified temperature and humidity conditions	DS(70,-)2 (≤ 2%)
Tensile resistance to force perpendicular to front surfaces	TR 80 (≥ 80 kPa)	Water absorption at long term total immersion	WL(T)3 (≤ 3%)	Water absorption at long term total immersion	WL(T)3 (≤ 3%)

Boards installation

Substrate preparation for boarding

The substrate should be frost-free, stable, even and structurally sound, i.e. strong enough, free from layers which would impair the mortar bonding, in particular dust, dirt, lime, oil, grease, wax, remains of emulsion and oil paints. Prior to repair works substrate should be cleaned and, if excessively absorptive, primed with ATLAS UNI-GRUNT emulsion. Prime also weak cement, cement-lime plasters and rough walls made of cellular concrete or hollow cinder blocks. Mayor irregularities or cavities should be filled with ATLAS ZW 330 or ATLAS PLASTERING MIX.

Boarding

Apply the mortar on the back side of a board with the "strip-point method", i.e. apply continuous circumferential bead (min. 3 cm wide) along the board edges and 6-8 patches (of diameter 8-12 cm) evenly distributed upon the board surface. In total, mass should coat min. 40% of the board surface (60% after pressing the board to substrate) and provide appropriate bonding between the board and the wall. Just after mortar application the board should be placed upon substrate and pressed onto expected place, so the mortar thickness beneath the board does not exceed 10 mm. In case of even and smooth substrates, it is acceptable to spread the mortar evenly with a notched trowel upon the whole board surface, so it forms layer 2-5 mm thick after fixing.

Boards preparation for base coat

The boards surface should be frost-free, even, clean, stable and dusted, if boards have been grinded since fixing. It is advisable to grind and dust graphite boards prior to base coat application.

Important additional information

- Do not fix heated graphite polystyrene. Protect graphite polystyrene against heating up during installation and initial adhesive setting. Heating graphite polystyrene during any of these phases can result in the adhesive loosening.
- When fixing the boards onto poor substrates of hard to determine bearing capacity (e.g. unstable, dusty, hard to clean), it is advisable to conduct a test of bonding. It consists in fixing 8-10 polystyrene cubes (10x10 cm large) at various façade points and checking the bond after 3 days. The substrate strength can be assumed as acceptable when polystyrene cube breaks within when teared off. If the cube tears off with mortar or substrate layer, then the substrate bearing capacity is insufficient. In such case further procedure, e.g. technology of weak layer removal, should be described in the external insulation design.
- In case of prolonged exposition of fixed polystyrene to atmospheric factors, particularly UV radiation, yellowish tarnish can occur on boards surface. Remove the tarnish before base coat application.
- Use scaffolding covers during work. Do not carry out the installation during snowfall, rain and in strong wind.
- Do not use boards in direct contact with substances of destructive effect on polystyrene, e.g. organic solvents (acetone, nitro, benzene, etc.).
- The boards should be transported and stored in original packaging. Protect against mechanical damage and atmospheric factors. Do not keep graphite polystyrene in place exposed to direct sunlight, as it can lead to boards deformation.

Packaging

Thickness [mm]	Boards per packaging [pcs]	Packaging volume [m^3]	Coverage [m^2]
20	30	0.30	15.00
30	20	0.30	10.00
40	15	0.30	7.50
50	12	0.30	6.00
60	10	0.30	5.00
70	8	0.28	4.00
80	7	0.28	3.50
90	6	0.27	3.00
100	5	0.30	3.00
110	5	0.275	2.50
120	5	0.30	2.50
130	4	0.26	2.00
140	4	0.28	2.00
150	4	0.30	2.00
160	3	0.24	1.50
170	3	0.255	1.50
180	3	0.27	1.50
190	3	0.285	1.50
200	3	0.300	1.50

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-10-09

REINFORCING MESH

- resistant to alkali
- durable
- elastic

Use

For base coat (reinforced layer) installation – to be embedded in the adhesive coat during installation of thermal insulation systems, both with polystyrene and mineral wool.
Component of thermal insulation systems – element of composite thermal insulation systems, which have been given both European (ETA) and domestic (AT) technical approvals.

Properties

- **Durable** – consists of interlacing weft and warp yarns creating strong gauze weave, providing the mesh with high mechanical resistance and preventing the yarns from slipping out of position.
- **Flexible** – ensures compensation of thermal and mechanical deformations, which thermal insulation system is subject to during operation, prevents cracking of the façade layers and enables formation of stable substrate for the rendering coat.
- **Resistant to alkali** – yarns are protected by immersion in acrylic bath, therefore resistant against aggressive alkali present in the adhesive mortars.

Technical data

The mesh is made of fiber glass, protected by immersion in acrylic bath against aggressive alkali present in the adhesive mortars.

Base coat application

Base coat can be applied when adhesive mortar used for boards fixing sets appropriately and after additional mechanical fixing (after 3 days on average). Spread mortar upon fixed thermal insulation and embed consecutive fiberglass mesh strips. The mesh strips should be placed vertically – from top to bottom. It is advisable to press the mesh into adhesive coat in a few points and embed the whole strip with a notched trowel then. Properly installed mesh should be embedded in the adhesive coat not deeper than half the coat thickness, therefore it's completely coated with adhesive and has no contact with the boards surface. The base coat should be approx. 3 mm thick and should be kept continuous, i.e. consecutive strips should be applied with min. 10 cm wide vertical and horizontal overlaps (15 cm wide at the building corners). The mesh overlaps should not correspond with the joints between insulation boards. After embedding the mesh, thoroughly float the adhesive coat with a smooth steel float.

	ATLAS 150	SSA-1363 SM 0.5	ATLAS 165
Colour	yellow with ATLAS overprint	yellow with ATLAS overprint	yellow with ATLAS overprint
Density [g/m^2]	150 (-3/+10%)	155 ± 5%	160 (-3/+10%)
Weave type	gauze	gauze	gauze
Width [m]	1.0	1.0	1.0
Mesh size [mm]	4.5 x 5.0	3.5 x 3.5	3.7 x 3.9
Packaging	roll 50 rm	roll 50 rm	roll 50 rm
Technical requirements	AT-15-9090/2014	AT-15-8489/2010	AT-15-9090/2014

Fiberglass mesh is listed the following European Technical Assessments/Approvals for thermal insulation systems:

System name	Technical Approval No.	EC Conformity Certificate
ATLAS	ETA 06/0081	1488-CPD-0021
ATLAS XPS	ETA 07/0316	1488-CPD-0075
ATLAS ROKER	ETA 06/0173	1488-CPD-0036

Fiberglass mesh is listed the following domestic technical approvals for thermal insulation systems:

System name	Technical Approval No.	Certificate No.
ATLAS ETICS	AT-15-9090/2014	FPC No. ITB-0562/Z
ATLAS ROKER	AT-15-7314/2011	FPC No. ITB-0222/Z
ATLAS ROKER G	AT-15-2930/2012	FPC No. ITB-0436/Z
ATLAS CERAMIK	AT-15-8592/2011	FPC No. ITB-0472/Z
ATLAS RENOTER	AT-15-8477/2011	FPC No. ITB-0456/Z

Fiberglass mesh SSA-1363 SM 0.5 is listed in the National Standard Authority of Ireland (NSAI) Certificate no. 10/0347 and in the British Board of Agrément (BBA) Certificate no. 13/5018.

Important technical information

- The mesh parametres are used to its full advantage only when applied in combination with other system components and according to the technology of system installation.
- Fiberglass mesh has to be stored in vertical position, in dry, airy rooms, away from heating devices.

Note: Mesh must not be exposed to direct sunshine and atmospheric factors.

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-05-21

EXTERNAL WALL INSULATION SYSTEM

with polysteryne (EPS):
ETA-06/0081
ETA-06/0187

with mineral wool
ETA-06/0173
ETA-06/0281

ETA EUROPEAN TECHNICAL ASSESSMENT

400 COLOURS SAH

BBA APPROVAL INSPECTION TESTING CERTIFICATION
CERTIFICATE 13/5018

NSAI Agrément
Atlas/Aval External Thermal Insulation Composite Systems
Cert No. 10/0347

www.atlas.com/en

ADHESIVES FOR THERMAL INSULATION

ADHESIVES FOR THERMAL INSULATION

Proper installation of insulation layer depends on appropriate adhesive mortar selection. The main tasks of adhesives for thermal insulation are:

- **formation of durable bond between substrate and thermal insulation material**
- **protection of thermal insulation against mechanical damage**
- **formation of properly strong and even substrate for thin-coat rendering coat.**

Adhesives offered by ATLAS are characterised by high quality and wide range of options. We offer adhesives for thermal insulation fixing and base coat (reinforcing layer) application, both for polystyrene and mineral wool.

ATLAS adhesives for thermal insulation can be divided into various groups.

ADHESIVE TYPE
- adhesive for thermal insulation fixing
- general-use adhesive for thermal insulation fixing and base coat application

TYPES OF THERMAL INSULATION MATERIAL

(insulation characteristic resulting in adhesives parametres are mainly: absorptiveness, bonding, board mechanical deformability).
- elastified polystyrene EPS
- extruded polystyrene XPS
- façade mineral wool
- lamella wool

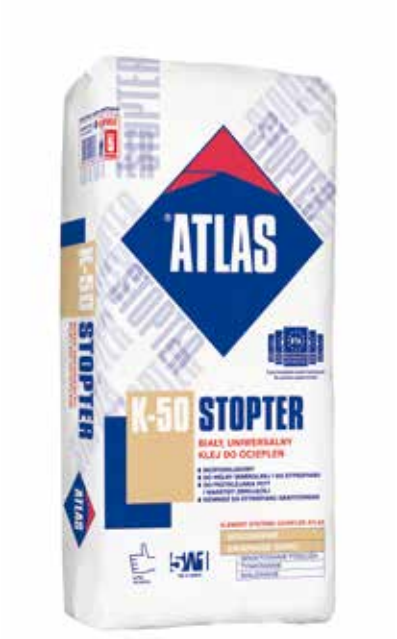
In order to choose an adhesive meeting particular needs, one should answer some questions:

- What type of insulation material is to be used?
- Will adhesive be used for insulation fixing or also for base coat application?
- Will insulation material be fixed upon walls or ceilings?
- What atmospheric conditions will there be during installation?
- What is the type of substrate beneath insulation?
- What is the designed height of insulation?

TABLE 10.1

PRODUCT							
	ATLAS STOPTER K-50	ATLAS STOPTER K-20/ AVAL KT 85	ATLAS STOPTER K-10	ATLAS HOTER U/ AVAL KT 55	ATLAS HOTER S/ AVAL KT 53	ATLAS ROKER W-20/ AVAL KT 190	ATLAS ROKER W-10
Reference document	AT-15-8512/2010	AT-15-3092/2013	AT-15-1857/2013	AT-15-6347/2014 AT-15-9090/2014	AT-15-6348/2014	AT-15-2927/2014	AT-15-7314/2011
TECHNICAL DATA							
Mixing ratio water/dry mix [l/kg]	5.0-5.5	5.0-5.5	5.0-5.50	5.0-5.50	5.0-5.50	5.5-6.25	5.5-6.25
Pot life [h]	4	4	3	4	3	2	4
Open time [min]	25	25	25	25	25	30	25
Bonding to polystyrene* [MPa]	≥ 0.1	≥ 0.08	≥ 0.08	≥ 0.08	≥ 0.08		
Bonding to mineral wool* [MPa]	≥ 0.08					≥ 0.08	≥ 0.08
Bonding to concrete* [MPa]	≥ 0.25	≥ 0.25	≥ 0.25	≥ 0.25	≥ 0.25	≥ 0.25	≥ 0.3
Consumption [kg/m²] – boarding	polystyrene 4.0-5.0 mineral wool 4.5-5.5	4.0-5.0	4.0-5.0	4.0-5.0	4.0-5.0	4.5-5.5	4.5-5.5
Consumption [kg/m²] – base coat	polystyrene 3.0-3.5 mineral wool 5.5-6.5	3.0-3.5		3.0-3.5		5.5-6.5	
Temperature of application [°C]	5-30	0-25	5-25	5-25	5-25	5-25	5-25
Colour of base coat	white	grey	grey	grey white	grey	grey	grey
ADHESIVE USE IN THE INSULATION SYSTEM							
Boarding	✓	✓	✓	✓	✓	✓	✓
Boarding and base coat	✓	✓		✓		✓	
TYPE OF INSULATION							
EPS	✓	✓	✓	✓	✓		
XPS		✓	✓	✓	✓		
Mineral wool	✓					✓	✓

* in air-dry state



ATLAS STOPTER K-50

white general use adhesive for external wall insulation

- white
- no priming mass required
- for mineral wool and polystyrene
- for boards and base coat installation
- also for graphite polystyrene

Five unique uses

Installation of various types of thermal insulation boards as well as base coat application – can be used with polystyrene (white, graphite, graphite-enhanced) and with mineral wool (façade and lamella). Perfect solution for projects requiring the use of various thermal insulation materials.
Improved resistance to cracking – reinforced with fiberglass, additionally white cement forms base coat stronger than the one offered by grey cement-based mortars.
Does not require the use of priming masses beneath renders – unique structure of set adhesive forms coating which thin-coat renders strongly bond to; white cement limits the risk of surface discolouration of renders, which can result from grey cement influence.
Limited absorptiveness – together with renders perfectly protects thermal insulation against water action.

Use

Component of ATLAS ETICS and ATLAS RENOTER thermal insulation systems. For installation of thermal insulation boards and application of base coat of thermal insulation systems.
Recommended for insulation of standard, passive and energy efficient buildings – helps to reach the partition tightness required in passive housing, fixes insulation boards even 25 cm thick.

Types of substrates – concrete of any class, aerated concrete, cement and cement-lime plasters, sandstone, rough walls made of bricks, blocks, hollow blocks and other ceramic or silicate materials.

Properties

Highly flexible – perfectly compensates stress resulting from thermal and operation loads.
Very good bonding – strongly bonds to difficult substrates, e.g. surfaces coated with strongly bonded paints.
Water vapour permeable – does not limit free transfer of water vapour through the insulated partition.
Very good application parametres – during mixing, application upon boards, mesh embedding, etc.

Technical data

ATLAS STOPTER K-50 is manufactured as a dry mix of high quality cement binder, aggregates and modifiers, reinforced with fiberglass.

Bulk density (of dry mix)	approx. 1.40 kg/dm^3
Mass bulk density (after mixing)	approx. 1.55 kg/dm^3
Dry density (after setting)	approx. 1.40 kg/dm^3
Mixing ratio (water/dry mix)	0.20 ÷ 0.22 l/1 kg 5.00 ÷ 5.50 l/25 kg
Min./max base coat thickness • on polystyrene • on mineral wool	 2 mm/ 5 mm 4 mm/ 6 mm
Bonding to concrete	min.0.25 MPa
Bonding to mineral wool	min.0.08 MPa
Bonding to polystyrene	min. 0.10 MPa
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +30°C
Maturing time	approx. 5 minutes
Pot life	approx. 4 hours
Open time	min. 25 minutes

Technical requirements

ATLAS STOPTER K-50 is listed in the following technical approvals for thermal insulation systems:

System name	Technical Approval No.	Certificate No.
ATLAS ETICS	AT-15-9090/2014	FPC No. ITB-0562/Z
ATLAS RENOTER	AT-15-8477/2010	FPC No. ITB-0456/Z

Boards and base coat installation

Substrate preparation for boarding

The substrate should be frost-free, stable, even and structurally sound, i.e. strong enough, free from layers which would impair the mortar bonding, in particular dust, dirt, lime, oil, grease, wax, remains of emulsion and oil paints. Prior to repair works substrate should be cleaned and, if excessively absorptive, primed with ATLAS UNI-GRUNT emulsion. Prime also weak cement, cement-lime plasters and rough walls made of cellular concrete or hollow cinder blocks. Mayor irregularities or cavities should be filled with ATLAS ZW 330 or ATLAS PLASTERING MIX.

Boards preparation for base coat

The boards surface should be frost-free, even, clean, stable and dusted, if boards have been grinded since fixing. It is advisable to grind and dust graphite boards prior to base coat application.

Mortar preparation

Pour the mortar from the bag into a clean container with the suitable amount of water (see Technical Data for ratio) and mix using a mixer with a drill until homogenous. Leave the mortar to rest for 5 minutes and remix. The mortar should be used up within approx. 4 hours.

Boarding

Apply the mortar on the back side of a board with the "strip-point method", i.e. apply continuous circumferential bead (min. 3 cm wide) along the board edges and 6-8 patches (of diameter 8-12 cm) evenly distributed upon the board surface. In total, mass should coat min. 40% of the board surface (60% after pressing the board to substrate) and provide appropriate bonding between the board and the wall. Just after mortar application the board should be placed upon substrate and pressed onto expected place, so the mortar thickness beneath the board does not exceed 10 mm. In case of even and smooth substrates, it is acceptable to spread the mortar evenly with a notched trowel upon the whole board surface, so it forms layer 2-5 mm thick after fixing.

In case of mineral wool, form a contact coat by floating the board surface with a thin mortar coat, leave for initial setting and apply the mortar with the "strip-point method" then.

Fixing the boards with mechanical anchors can commence min. 1 day since the boards installation. Mechanical fixing of polystyrene boards, unless locally oppositely required, is optional and depends on building height and type. Fixing of mineral wool boards is obligatory, use fixings with galvanized pins, min. 8 pcs/m^2.

Base coat application on polystyrene boards

Base coat can be applied when adhesive mortar used for boards fixing sets appropriately and after additional mechanical fixing (after 3 days on average). Apply mortar upon fixed insulation, spread with a notched trowel and embed the fiberglass mesh. Embed the mesh with vertical strips and float smooth, so it's fully coated and does not contact polystyrene boards directly.

Base coat application on mineral wool

Base coat can be applied not earlier than 3 days since the boards fixing. It consists of fiberglass reinforcing mesh embedded in the adhesive mortar coat. Apply thin mortar coat upon fixed boards. After initial setting, apply subsequent mortar coat with a smooth float (use 2/3 of final mortar amount) and spread uniformly with a notched trowel. Embed mesh strips – press them at some points into the mass and embed with a notched trowel then, so they're fully coated with mortar. Apply the remaining 1/3 of the mass and smooth the surface. Grind any irregularities as they can prevent correct application of renders.

Finishing works

Rendering can commence when weather conditions meet the requirements listed in the technical data sheets of thin-coat renders, not earlier however than 3 days since the base coat installation.

Consumption

The actual consumption depends on substrate parametres (e.g. evenness) and technology of boards installation.
Boarding – polystyrene boards: from 4.0 up to 5.0 kg/1 m^2.
Base coat application: from 3.0 up to 3.5 kg/1 m^2.
Boarding – mineral wool: from 4.5 up to 5.5 kg/1 m^2.
Base coat application: from 5.5 up to 6.5 kg/1 m^2.

Important additional information

- Do not fix heated graphite polystyrene. Protect graphite polystyrene against heating up during installation and initial adhesive setting. Heating graphite polystyrene during any of these phases can result in the adhesive loosening.
- The mortar parametres are used to its full advantage only when applied in combination with other system components and according to the technology of system installation.
- Use scaffolding covers during work. Do not carry out installation during snowfall, rain and in strong wind.
- When fixing the boards onto poor substrates of hard to determine bearing capacity (e.g. unstable, dusty, hard to clean), it is advisable to conduct a test of bonding. It consists in fixing 8-10 cubes of insulating material (10x10 cm large) at various façade points and checking the bond after 3 days. The substrate strength can be assumed as acceptable when the cube breaks within when teared off. If the cube tears off with mortar or substrate layer, then the substrate bearing capacity is insufficient. In such case further procedure, e.g. technology of weak layer removal, should be described in the external insulation design.
- Tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with the ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Paper bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-03-03

Up to five
European Technical Approvals
for ATLAS insulation systems

ATLAS STOPTER K-20

2 in 1 - adhesive mortar for polystyrene and XPS and for mesh embedding

- very good bonding
- reinforced with microfibres
- resistant to cracks and scratches
- can be used in low temperature (even from 0°C)
- also for graphite polystyrene

Use

2 in 1 – for installation of thermal insulation boards and application of base coat of thermal insulation systems.
Component of thermal insulation systems – element of composite thermal insulation systems, which have been given both European (ETA) and domestic (AT) technical approvals.
Recommended for insulation of passive and energy efficient buildings – helps to reach the partition tightness required in passive housing, fixes insulation boards even 25 cm thick.
Installation of various types of polystyrene and extruded polystyrene boards – including graphite, graphite-enhanced and elastified ones.
Enables work within wide range of temperature – from 0°C during application and down to -5°C within 8 hours since the installation.

Types of substrates – concrete of any class, aerated concrete, cement and cement-lime plasters, sandstone, rough walls made of bricks, blocks, hollow blocks and other ceramic or silicate materials.

Properties

Improved resistance to cracking – reinforced with cellulose microfibres.
Highly flexible – perfectly compensates stress resulting from thermal and operation loads.
Very good bonding – strongly bonds to difficult substrates, e.g. surfaces coated with strongly bonded paints.
Water vapour permeable – does not limit free transfer of water vapour through the insulated partition.

Technical data

ATLAS STOPTER K-20 is manufactured as a dry mix of high quality cement binder, aggregates and modifiers, reinforced with cellulose fibres.

Bulk density (of dry mix)	approx. 1.55 kg/dm^3
Mass bulk density (after mixing)	approx. 1.60 kg/dm^3
Dry density (after setting)	approx. 1.47 kg/dm^3
Mixing ratio (water/dry mix)	0.20 ÷ 0.22 l/1 kg 5.00 ÷ 5.50 l/25 kg
Min./max base coat thickness	2 mm/ 5 mm
Bonding to concrete in air-dry state	≥ 0.25 MPa
Bonding to polystyrene in air-dry state	≥ 0.08 MPa
Mortar preparation temperature, substrate and ambient temperature during work	from 0°C to +25°C
Maturing time	approx. 5 minutes
Pot life	approx. 4 hours
Open time	min. 25 minutes

Technical requirements

ATLAS STOPTER K-20 is listed in the following technical approvals for thermal insulation systems:

System name	Technical Approval No.	Certificate No.
ATLAS	ETA 06/0081	EC 1488-CPD-0021
ATLAS XPS	ETA 07/0316	EC 1488-CPD-0075
ATLAS ETICS	AT-15-9090/2014	FPC No. ITB-0562/Z
ATLAS RENOTER	AT-15-8477/2010 + Annex 1	FPC No. ITB-0456/Z
ATLAS CERAMIK	AT-15-8592/2011 + Annex 1	FPC No. ITB-0472/Z

The product has been given the National Standard Authority of Ireland (NSAI) Certificate no. 10/0347 and the British Board of Agrément (BBA) Certificate no. 13/5018.
The product has also been given the ITB Technical Approval AT-15-3092/2013. Certificate of Factory Production Control Certificate no. ITB-0563/Z. Domestic Declaration of Conformity 003-1 of 22.04.2013. The product has been given the Hygienic Certificate and the Radiation Hygiene Certificate.

Boards and base coat installation

Substrate preparation for boarding

The substrate should be frost-free, stable, even and structurally sound, i.e. strong enough, free from layers which would impair the mortar bonding, in particular dust, dirt, lime, oil, grease, wax, remains of emulsion and oil paints. Prior to repair works substrate should be cleaned and, if excessively absorptive, primed with ATLAS UNI-GRUNT emulsion. Prime also weak cement, cement-lime plasters and rough walls made of cellular concrete or hollow cinder blocks. Mayor irregularities or cavities should be filled with ATLAS ZW 330 or ATLAS PLASTERING MIX.

Boards preparation for base coat

The boards surface should be frost-free, even, clean, stable and dusted, if boards have been grinded since fixing. It is advisable to grind and dust graphite boards prior to base coat application.

Mortar preparation

Pour the mortar from the bag into a clean container with the suitable amount of water (see Technical Data for ratio) and mix using a mixer with a drill until homogenous. Leave the mortar to rest for 5 minutes and remix. The mortar should be used up within approx. 4 hours.

Boarding

Apply the mortar on the back side of a board with the "strip-point method", i.e. apply continuous circumferential bead (min. 3 cm wide) along the board edges and 6-8 patches (of diameter 8-12 cm) evenly distributed upon the board surface. In total, mass should coat min. 40% of the board surface (60% after pressing the board to substrate) and provide appropriate bonding between the board and the wall. Just after mortar application the board should be placed upon substrate and pressed onto expected place, so the mortar thickness beneath the board does not exceed 10 mm. In case of even and smooth substrates, it is acceptable to spread the mortar evenly with a notched trowel upon the whole board surface, so it forms layer 2-5 mm thick after fixing.

Base coat application

Base coat can be applied when adhesive mortar used for boards fixing sets appropriately and after additional mechanical fixing (after 3 days on average). Apply mortar upon fixed insulation, spread with a notched trowel and embed the fiberglass mesh. Embed the mesh with vertical strips and float smooth, so it's fully coated and does not contact polystyrene boards directly.

Finishing works

Rendering can commence when weather conditions meet the requirements listed in the technical data sheets of thin-coat renders, not earlier however than 3 days since the base coat installation.

Consumption

The actual consumption depends on substrate parametres (e.g. evenness) and technology of boards installation.
Boarding: from 4.0 up to 5.0 kg/1 m^2.
Base coat application: from 3.0 up to 3.5 kg/1 m^2.

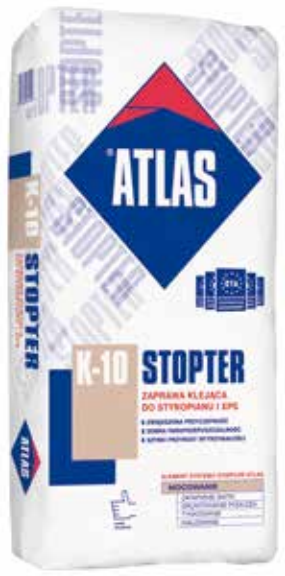
Important additional information

- Do not fix heated graphite polystyrene. Protect graphite polystyrene against heating up during installation and initial adhesive setting. Heating graphite polystyrene during any of these phases can result in the adhesive loosening.
- The mortar parametres are used to its full advantage only when applied in combination with other system components and according to the technology of system installation.
- Use scaffolding covers during work. Do not carry out installation during snowfall, rain and in strong wind.
- When fixing the boards onto poor substrates of hard to determine bearing capacity (e.g. unstable, dusty, hard to clean), it is advisable to conduct a test of bonding. It consists in fixing 8-10 polystyrene cubes (10x10 cm large) at various façade points and checking the bond after 3 days. The substrate strength can be assumed as acceptable when polystyrene cube breaks within when teared off. If the cube tears off with mortar or substrate layer, then the substrate bearing capacity is insufficient. In such case further procedure, e.g. technology of weak layer removal, should be described in the external insulation design.
- Tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with the ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Paper bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-11-09



Up to five
European Technical Approvals
for ATLAS insulation systems

ATLAS STOPTER K-10

adhesive mortar for polystyrene and XPS

- improved bonding
- good water vapour permeability
- rapid strength build-up
- on ceramic, concrete and silicate elements

Use

Installation of thermal insulation boards – when thermal insulation consists of polystyrene boards or extruded polystyrene (XPS) boards.
Component of thermal insulation systems – element of composite thermal insulation systems, which have been given both European (ETA) and domestic (AT) technical approvals.
Installation of various types of polystyrene and extruded polystyrene boards – including graphite, graphite-enhanced and elastified ones.

Types of substrates – concrete of any class, aerated concrete, cement and cement-lime plasters, sandstone, rough walls made of bricks, blocks, hollow blocks and other ceramic or silicate materials.

Properties

Water vapour permeable – does not limit free transfer of water vapour through the insulated partition.
Improved bonding – ensures durable bonding to mineral substrates and insulation boards.
Characterised by rapid strength build-up – sets fast and enables quick commencement of subsequent technological phases.

Technical data

ATLAS STOPTER K-10 is is listed in the following technical approvals for thermal insulation systems:.

Bulk density (of dry mix)	approx. 1.40 kg/dm^3
Mass bulk density (after mixing)	approx. 1.85 kg/dm^3
Dry density (after setting)	approx. 1.74 kg/dm^3
Mixing ratio (water/dry mix)	0.20 ÷ 0.22 l/1 kg 5.00 ÷ 5.50 l/25 kg
Bonding to concrete	≥ 0.25 MPa
Bonding to polystyrene	≥ 0.08 MPa
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Maturing time	approx. 5 minutes
Pot life	approx. 3 hours
Open time	min. 25 minutes

Technical requirements

ATLAS STOPTER K-10 is listed in the following technical approvals for thermal insulation systems:

System name	Technical Approval No.	Certificate No.
ATLAS	ETA 06/0081	EC 1488-CPD-0021
ATLAS XPS	ETA 07/0316	EC 1488-CPD-0075
ATLAS ETICS	AT-15-9090/2014	FPC No. ITB-0562/Z
ATLAS RENOTER	AT-15-8477/2010 + Annex 1	FPC No. ITB-0456/Z

The product has been given the National Standard Authority of Ireland (NSAI) Certificate no. 10/0347 and the British Board of Agrément (BBA) Certificate no. 13/5018.
The product has been given the Radiation Hygiene Certificate.

Boards installation

Substrate preparation

The substrate should be frost-free, stable, even and structurally sound, i.e. strong enough, free from layers which would impair the mortar bonding, in particular dust, dirt, lime, oil, grease, wax, remains of emulsion and oil paints. Prior to repair works substrate should be cleaned and, if excessively absorptive, primed with ATLAS UNI-GRUNT emulsion. Prime also weak cement, cement-lime plasters and rough walls made of cellular concrete or hollow cinder blocks. Mayor irregularities or cavities should be filled with ATLAS ZW 330 or ATLAS PLASTERING MIX.

Mortar preparation

Pour the mortar from the bag into a clean container with the suitable amount of water (see Technical Data for ratio) and mix using a mixer with a drill until homogenous. Leave the mortar to rest for 5 minutes and remix. The mortar should be used up within approx. 3 hours.

Boarding

Apply the mortar on the back side of a board with the "strip-point method", i.e. apply continuous circumferential bead (min. 3 cm wide) along the board edges and 6-8 patches (of diameter 8-12 cm) evenly distributed upon the board surface. In total, mass should coat min. 40% of the board surface (60% after pressing the board to substrate) and provide appropriate bonding between the board and the wall. Just after mortar application the board should be placed upon substrate and pressed onto expected place, so the mortar thickness beneath the board does not exceed 10 mm. In case of even and smooth substrates, it is acceptable to spread the mortar evenly with a notched trowel upon the whole board surface, so it forms layer 2-5 mm thick after fixing.

Consumption

The actual consumption depends on substrate parametres (e.g. evenness) and technology of boards installation. Average consumption: from 4.0 up to 5.0 kg/1 m^2.

Important additional information

- Do not fix heated graphite polystyrene. Protect graphite polystyrene against heating up during installation and initial adhesive setting. Heating graphite polystyrene during any of these phases can result in the adhesive loosening.
- The mortar parametres are used to its full advantage only when applied in combination with other system components and according to the technology of system installation.
- Use scaffolding covers during work. Do not carry out installation during snowfall, rain and in strong wind.
- When fixing the boards onto poor substrates of hard to determine bearing capacity (e.g. unstable, dusty, hard to clean), it is advisable to conduct a test of bonding. It consists in fixing 8-10 polystyrene cubes (10x10 cm large) at various façade points and checking the bond after 3 days. The substrate strength can be assumed as acceptable when polystyrene cube breaks within when teared off. If the cube tears off with mortar or substrate layer, then the substrate bearing capacity is insufficient. In such case further procedure, e.g. technology of weak layer removal, should be described in the external insulation design.
- Tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with the ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Paper bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-11-12

Up to five
European Technical Approvals
for ATLAS insulation systems

ATLAS HOTER U

2 in 1 - adhesive mortar for polystyrene and XPS and for mesh embedding

- improved bonding
- good water vapour permeability
- rapid strength build-up
- on ceramic, concrete and silicate elements

Use

2 in 1 – for installation of thermal insulation boards and application of base coat of thermal insulation systems.
Component of thermal insulation systems – element of composite thermal insulation systems, which have been given both European (ETA) and domestic (AT) technical approvals.
Recommended for insulation of passive and energy efficient buildings – helps to reach the partition tightness required in passive housing, fixes insulation boards even 25 cm thick.
Installation of various types of polystyrene and extruded polystyrene boards – including graphite, graphite-enhanced and elastified ones.

Types of substrates – concrete of any class, aerated concrete, cement and cement-lime plasters, sandstone, rough walls made of bricks, blocks, hollow blocks and other ceramic or silicate materials.

Properties

Flexible – compensates stress resulting from thermal and operation loads.
Improved resistance to cracking – reinforced with microfibres, therefore base coat perfectly transfers stress.
Very good bonding – strongly bonds to mineral substrates.
Water vapour permeable – does not limit free transfer of water vapour through the insulated partition.
Available in two versions: based on white and grey cement – the use of white cement improves the base coat resistance.

Technical data

ATLAS HOTER U is manufactured as a dry mix of high quality cement binder, aggregates and modifiers, reinforced with cellulose fibres.

Bulk density (of dry mix)	approx. 1.40 kg/dm^3
Mass bulk density (after mixing)	approx. 1.55 kg/dm^3
Dry density (after setting)	approx. 1.45 kg/dm^3
Mixing ratio (water/dry mix)	0.20 ÷ 0.22 l/1 kg 5.00 ÷ 5.50 l/25 kg
Min./max base coat thickness	2 mm/ 5 mm
Bonding to concrete in air-dry state	min. 0.25 MPa
Bonding to polystyrene in air-dry state	min. 0.08 MPa
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Maturing time	approx. 5 minutes
Pot life	approx. 4 hours
Open time	min. 25 minutes

Technical requirements

The product has been given the ITB Technical Approval AT-15-6347/2014. Domestic Declaration of Conformity 081-1 of 07.11.2014.
ATLAS HOTER U (grey version) is is listed in the following technical approvals for thermal insulation systems:

System name	Technical Approval No.	Certificate No.
ATLAS	ETA 06/0081	EC 1488-CPD-0021
ATLAS XPS	ETA 07/0316	EC 1488-CPD-0075
ATLAS ETICS	AT-15-9090/2014	FPC No. ITB-0562/Z
ATLAS RENOTER	AT-15-8477/2010	FPC No. ITB-0456/Z

ATLAS HOTER U (white version) is listed the following technical approvals for thermal insulation systems:

System name	Technical Approval No.	Certificate No.
ATLAS ETICS	AT-15-9090/2014	FPC No. ITB-0562/Z

The product has been given the National Standard Authority of Ireland (NSAI) Certificate no. 10/0347 and the British Board of Agrément (BBA) Certificate no. 13/5018.
The product has been given the Hygienic Certificate and the Radiation Hygiene Certificate.

Boards and base coat installation

Substrate preparation
The substrate should be frost-free, stable, even and structurally sound, i.e. strong enough, free from layers which would impair the mortar bonding, in particular dust, dirt, lime, oil, grease, wax, remains of emulsion and oil paints. Prior to repair works substrate should be cleaned and, if excessively absorptive, primed with ATLAS UNI-GRUNT emulsion. Prime also weak cement, cement-lime plasters and rough walls made of cellular concrete or hollow cinder blocks. Mayor irregularities or cavities should be filled with ATLAS ZW 330 or ATLAS PLASTERING MIX.

Boards preparation for base coat
The boards surface should be frost-free, even, clean, stable and dusted, if boards have been grinded since fixing. It is advisable to grind and dust graphite boards prior to base coat application.

Mortar preparation
Pour the mortar from the bag into a clean container with the suitable amount of water (see Technical Data for ratio) and mix using a mixer with a drill until homogenous. Leave the mortar to rest for 5 minutes and remix. The mortar should be used up within approx. 4 hours.

Boarding
Apply the mortar on the back side of a board with the "strip-point method", i.e. apply continuous circumferential bead (min. 3 cm wide) along the board edges and 6-8 patches (of diameter 8-12 cm) evenly distributed upon the board surface. In total, mass should coat min. 40% of the board surface (60% after pressing the board to substrate) and provide appropriate bonding between the board and the wall. Just after mortar application the board should be placed upon substrate and pressed onto expected place, so the mortar thickness beneath the board does not exceed 10 mm. In case of even and smooth substrates, it is acceptable to spread the mortar evenly with a notched trowel upon the whole board surface, so it forms layer 2-5 mm thick after fixing.

Base coat application
Base coat can be applied when adhesive mortar used for boards fixing sets appropriately and after additional mechanical fixing (after 3 days on average). Apply mortar upon fixed insulation, spread with a notched trowel and embed the fiberglass mesh. Embed the mesh with vertical strips and float smooth, so it's fully coated and does not contact polystyrene boards directly.

Finishing works
Rendering can commence when weather conditions meet the requirements listed in the technical data sheets of thin-coat renders, not earlier however than 3 days since the base coat installation.

Consumption

The actual consumption depends on substrate parametres (e.g. evenness) and technology of boards installation.
Boarding: from 4.0 up to 5.0 kg/1 m^2.
Base coat application: from 3.0 up to 3.5 kg/1 m^2.

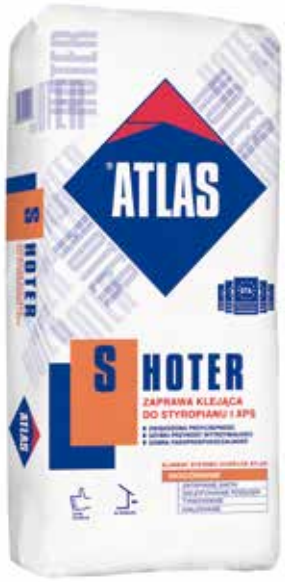
Important additional information

- Do not fix heated graphite polystyrene. Protect graphite polystyrene against heating up during installation and initial adhesive setting. Heating graphite polystyrene during any of these phases can result in the adhesive loosening.
- The mortar parametres are used to its full advantage only when applied in combination with other system components and according to the technology of system installation.
- Use scaffolding covers during work. Do not carry out installation during snowfall, rain and in strong wind.
- When fixing the boards onto poor substrates of hard to determine bearing capacity (e.g. unstable, dusty, hard to clean), it is advisable to conduct a test of bonding. It consists in fixing 8-10 polystyrene cubes (10x10 cm large) at various façade points and checking the bond after 3 days. The substrate strength can be assumed as acceptable when polystyrene cube breaks within when teared off. If the cube tears off with mortar or substrate layer, then the substrate bearing capacity is insufficient. In such case further procedure, e.g. technology of weak layer removal, should be described in the external insulation design.
- Tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with the ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Paper bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-02-19



Up to five
European Technical Approvals
for ATLAS insulation systems

ATLAS HOTER S

adhesive mortar for polystyrene and XPS

- improved bonding
- good water vapour permeability
- rapid strength build-up
- on ceramic, concrete and silicate elements

Use

Installation of thermal insulation boards – when thermal insulation consists of polystyrene boards (including boards with graphite) and extruded polystyrene (XPS) boards.
Component of thermal insulation systems – element of composite thermal insulation systems, which have been given both European (ETA) and domestic (AT) technical approvals.

Types of substrates – concrete of any class, aerated concrete, cement and cement-lime plasters, sandstone, rough walls made of bricks, blocks, hollow blocks and other ceramic or silicate materials.

Properties

Water vapour permeable – does not limit free transfer of water vapour through the insulated partition.
Improved bonding – ensures durable bonding to mineral substrates and insulation boards.
Characterised by rapid strength build-up – sets fast and enables quick commencement of subsequent technological phases.

Technical data

ATLAS HOTER S is manufactured as a dry mix of high quality cement binder, aggregates and modifiers.

Bulk density (of dry mix)	approx. 1.47 kg/dm^3
Mass bulk density (after mixing)	approx. 1.48 kg/dm^3
Dry density (after setting)	approx. 1.47 kg/dm^3
Mixing ratio (water/dry mix)	0.20 ÷ 0.22 l/1 kg 5.00 ÷ 5.50 l/25 kg
Bonding to concrete	min. 0.25 MPa
Bonding to polystyrene	min. 0.08 MPa
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Maturing time	approx. 5 minutes
Pot life	approx. 3 hours
Open time	min. 25 minutes

Technical requirements

ATLAS HOTER S is listed in the following technical approvals for thermal insulation systems:

System name	Technical Approval No.	Certificate No.
ATLAS	ETA 06/0081	EC 1488-CPD-0021
ATLAS XPS	ETA 07/0316	EC 1488-CPD-0075
ATLAS ETICS	AT-15-9090/2014	FPC No. ITB-0562/Z
ATLAS RENOTER	AT-15-8477/2010	FPC No. ITB-0456/Z

The product has been given the National Standard Authority of Ireland (NSAI) Certificate no. 10/0347 and the British Board of Agrément (BBA) Certificate no. 13/5018.
The product has also been given the ITB Technical Approval AT-15-6348/2014. Domestic Declaration of Conformity No. 080 of 06.11.2014. The product has been given the Radiation Hygiene Certificate.

Boards installation

Substrate preparation

The substrate should be frost-free, stable, even and structurally sound, i.e. strong enough, free from layers which would impair the mortar bonding, in particular dust, dirt, lime, oil, grease, wax, remains of emulsion and oil paints. Prior to repair works substrate should be cleaned and, if excessively absorptive, primed with ATLAS UNI-GRUNT emulsion. Prime also weak cement, cement-lime plasters and rough walls made of cellular concrete or hollow cinder blocks. Mayor irregularities or cavities should be filled with ATLAS ZW 330 or ATLAS PLASTERING MIX.

Mortar preparation

Pour the mortar from the bag into a clean container with the suitable amount of water (see Technical Data for ratio) and mix using a mixer with a drill until homogenous. Leave the mortar to rest for 5 minutes and remix. The mortar should be used up within approx. 3 hours.

Boarding

Apply the mortar on the back side of a board with the "strip-point method", i.e. apply continuous circumferential bead (min. 3 cm wide) along the board edges and 6-8 patches (of diameter 8-12 cm) evenly distributed upon the board surface. In total, mass should coat min. 40% of the board surface (60% after pressing the board to substrate) and provide appropriate bonding between the board and the wall. Just after mortar application the board should be placed upon substrate and pressed onto expected place, so the mortar thickness beneath the board does not exceed 10 mm. In case of even and smooth substrates, it is acceptable to spread the mortar evenly with a notched trowel upon the whole board surface, so it forms layer 2-5 mm thick after fixing.

Consumption

The actual consumption depends on substrate parametres (e.g. evenness) and technology of boards installation. Average consumption: from 4.0 up to 5.0 kg/1 m^2.

Important additional information

- Do not fix heated graphite polystyrene. Protect graphite polystyrene against heating up during installation and initial adhesive setting. Heating graphite polystyrene during any of these phases can result in the adhesive loosening.
- The mortar parametres are used to its full advantage only when applied in combination with other system components and according to the technology of system installation.
- Use scaffolding covers during work. Do not carry out installation during snowfall, rain and in strong wind.
- When fixing the boards onto poor substrates of hard to determine bearing capacity (e.g. unstable, dusty, hard to clean), it is advisable to conduct a test of bonding. It consists in fixing 8-10 polystyrene cubes (10x10 cm large) at various façade points and checking the bond after 3 days. The substrate strength can be assumed as acceptable when polystyrene cube breaks within when teared off. If the cube tears off with mortar or substrate layer, then the substrate bearing capacity is insufficient. In such case further procedure, e.g. technology of weak layer removal, should be described in the external insulation design.
- Tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with the ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Paper bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-02-25

Up to five
European Technical Approvals
for ATLAS insulation systems

ATLAS ROKER W-20

2 in 1 - adhesive mortar for mineral wool and for mesh embedding

- good bonding
- good water vapour permeability
- excellent flexibility
- resistant to cracks and scratches
- onto rough and plastered walls

Use

2 in 1 – for installation of thermal insulation boards and application of base coat of thermal insulation systems.
Component of thermal insulation systems – element of composite thermal insulation systems, which have been given both European (ETA) and domestic (AT) technical approvals.
Can be used with mineral wool thermal insulation with disordered (façade boards) and ordered fibre arrangement (lamella boards).

Types of substrates – concrete of any class, aerated concrete, cement and cement-lime plasters, sandstone, rough walls made of bricks, blocks, hollow blocks and other ceramic or silicate materials.

Properties

Very good bonding – strongly bonds to difficult substrates, e.g. surfaces coated with strongly bonded paints.
Highly flexible – perfectly compensates stress resulting from thermal and operation loads.
Element of mineral renovation of old, dusty plasters – in combination with reinforcing mesh embedded and façade paint it forms a repair layer for old plasters (cracked, poor, soiled).
Very high water vapour permeability – does not limit free transfer of water vapour through the insulated partition, which is particularly significant for mineral wool insulation.

Technical data

ATLAS ROKER W-20 is manufactured as a dry mix of high quality cement binder, aggregates and modifiers.

Bulk density (of dry mix)	approx. 1.24 kg/dm^3
Mass bulk density (after mixing)	approx. 1.55 kg/dm^3
Dry density (after setting)	approx. 1.43 kg/dm^3
Mixing ratio (water/dry mix)	0.22 ÷ 0.24 l/1 kg 5.50 ÷ 6.00 l/25 kg
Min./max base coat thickness	4 mm/ 6 mm
Bonding to concrete in air-dry state	≥ 0.25 MPa
Bonding to mineral wool in air-dry state	≥ 0.08 MPa
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Maturing time	approx. 5 minutes
Pot life	approx. 2 hours
Open time	min. 30 minutes

Technical requirements

ATLAS ROKER W-20 is is listed in the following technical approvals for thermal insulation systems:

System name	Technical Approval No.	Certificate No.
ATLAS ROKER	ETA 06/0173	EC 1488-CPD-0036
ATLAS ROKER G	AT-15-7314/2011	FPC No. ITB-0222/Z
ATLAS ROKER	AT-15-2930/2012	FPC No. ITB-0436/Z

The product has been given the National Standard Authority of Ireland (NSAI) Certificate no. 10/0347 and the British Board of Agrément (BBA) Certificate no. 13/5018.
The product has also been given the ITB Technical Approval AT-15-2927/2014. Certificate of Factory Production Control Certificate no. ITB-0604/Z. Domestic Declaration of Conformity 005-1 of 10.03.2014. The product has been given the Hygienic Certificate and the Radiation Hygiene Certificate.

Boards and base coat installation

Substrate preparation for boarding

The substrate should be frost-free, stable, even and structurally sound, i.e. strong enough, free from layers which would impair the mortar bonding, in particular dust, dirt, lime, oil, grease, wax, remains of emulsion and oil paints. Prior to repair works substrate should be cleaned and, if excessively absorptive, primed with ATLAS UNI-GRUNT emulsion. Prime also weak cement, cement-lime plasters and rough walls made of cellular concrete or hollow cinder blocks. Mayor irregularities or cavities should be filled with ATLAS ZW 330 or ATLAS PLASTERING MIX.

Boards preparation for base coat

The boards surface should be frost-free, even, clean and stable.

Mortar preparation

Pour the mortar from the bag into a clean container with the suitable amount of water (see Technical Data for ratio) and mix using a mixer with a drill until homogenous. Leave the mortar to rest for 5 minutes and remix. The mortar should be used up within approx. 2 hours.

Boarding

Float the board surface with mortar, leave for initial setting and apply the main mortar coat with the "strip-point method". Circumferential mortar bead along the board edges should be min. 3 cm wide. Apply 6-8 patches (of diameter 8-12 cm) evenly distributed upon the board surface. In total, mass should coat min. 40% of the board surface (60% after pressing the board to substrate) and provide appropriate bonding between the board and the wall. In case of even and smooth substrates it is acceptable to apply uniformly the mortar with a steel float upon the whole board surface. Just after mortar application the board should be placed upon substrate and pressed onto expected place. Fixing the boards with mechanical anchors can commence min. 1 day since the boards installation. Use fixings with galvanized pins, min. 8 pcs/m^2, follow the technical design.

Base coat application

Base coat can be applied not earlier than 3 days since the boards installation. It consists of fiberglass reinforcing mesh embedded in the adhesive mortar coat. Apply thin mortar coat upon fixed boards. After initial setting, apply subsequent mortar coat with a smooth float (use 2/3 of final mortar amount) and spread uniformly with a notched trowel. Embed mesh strips – press them at some points into the mass and embed with a notched trowel then, so they're fully coated with mortar. Apply the remaining 1/3 of the mass and smooth the surface. Grind any irregularities as they can prevent correct application of renders.

Finishing works

Rendering can commence when weather conditions meet the requirements listed in the technical data sheets of thin-coat renders, not earlier however than 3 days since the base coat installation.

Consumption

The actual consumption depends on substrate parametres (e.g. evenness) and technology of boards installation.
Boarding: from 4.5 up to 5.5 kg/1 m^2.
Base coat application: from 5.5 up to 6.5 kg/1 m^2.

Important additional information

- The mortar parametres are used to its full advantage only when applied in combination with other system components and according to the technology of system installation.
- Use scaffolding covers during work. Do not carry out installation during snowfall, rain and in strong wind.
- When fixing the boards onto poor substrates of hard to determine bearing capacity (e.g. unstable, dusty, hard to clean), it is advisable to conduct a test of bonding. It consists in fixing 8-10 wool cubes (10x10 cm large) at various façade points and checking the bond after 3 days. The substrate strength can be assumed as acceptable when cube breaks within when teared off. If the cube tears off with mortar or substrate layer, then the substrate bearing capacity is insufficient. In such case further procedure, e.g. technology of weak layer removal, should be described in the external insulation design.
- Tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with the ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Paper bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-04-20

ATLAS ROKER W-10

adhesive mortar for insulation of walls and ceilings

- very good bonding to mineral wool and substrate
- plastic during application
- water vapour permeable
- component of non-flammable insulation system

Use

Installation of mineral wool thermal insulation boards in the technology of external wall insulation with ATLAS ROKER system.
Installation of lamella wool thermal insulation in the technology of ceilings insulation with ATLAS ROKER G system (type III):
• **installation of boards upon ceilings (from the ceiling bottom side outdoors), above which heated rooms are located** – ceilings over passages, car parks, etc.
• **installation of boards onto walls and ceilings (from the ceiling bottom side indoors) in non-heated rooms, e.g. garages, cellars** – where heated rooms are located above or in close neighbourhood.

Types of substrates – concrete of any class, aerated concrete, cement and cement-lime plasters, rough walls made of bricks, blocks, etc.

Properties

Very good bonding – strongly bonds to typical construction substrates.
Flexible – compensates stress resulting from thermal loads.
Water vapour permeable – does not limit free transfer of water vapour through the insulated partition.
Forms layer of high resistance – durable bond between thermal insulation and substrate.
Convenient in use – very good workability, plastic during application, perfectly bonds to mineral wool.

Technical data

ATLAS ROKER W-10 is manufactured as a dry mix of high quality cement binder, aggregates and modifiers.

Bulk density (of dry mix)	approx. 1.30 kg/dm^3
Mass bulk density (after mixing)	approx. 1.65 kg/dm^3
Dry density (after setting)	approx. 1.45 kg/dm^3
Mixing ratio (water/dry mix)	0.21 ÷ 0.25 l/1 kg 5.25 ÷ 6.25 l/25 kg
Min./max base coat thickness	4 mm/ 6 mm
Bonding to concrete in air-dry state	min. 0.3 MPa
Bonding to mineral wool in air-dry state	min. 0.08 MPa
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +30°C
Maturing time	approx. 5 minutes
Pot life	approx. 4 hours
Open time	min. 25 minutes

Technical requirements

ATLAS ROKER W-10 is listed in the following technical approvals for thermal insulation systems:

System name	Technical Approval No.	Certificate No.
ATLAS ROKER G	AT-15-7314/2011	FPC No. ITB-0222/Z
ATLAS ROKER	AT-15-2930/2012	FPC No. ITB-0436/Z

Boards installation

Substrate preparation for boarding

The substrate should be frost-free, stable, even and structurally sound, i.e. strong enough, free from layers which would impair the mortar bonding, in particular dust, dirt, lime, oil, grease, wax, remains of emulsion and oil paints. Prior to repair works substrate should be cleaned and, if excessively absorptive, primed with ATLAS UNI-GRUNT emulsion. Prime also weak cement, cement-lime plasters and rough walls made of cellular concrete or hollow cinder blocks. Mayor irregularities or cavities should be filled with ATLAS ZW 330 or ATLAS PLASTERING MIX.

Mortar preparation

Pour the mortar from the bag into a clean container with the suitable amount of water (see Technical Data for ratio) and mix using a mixer with a drill until homogenous. Leave the mortar to rest for 5 minutes and remix. The mortar should be used up within approx. 4 hours.

Boarding in ATLAS ROKER G system (insulation of ceilings)

Float the lamella wool board surface with mortar, leave for initial setting and apply the main mortar coat with a notched trowel. Just after mortar application the board should be placed upon substrate and pressed onto expected place.

Boarding in ATLAS ROKER system (insulation of walls)

Float the board surface with mortar, leave for initial setting and apply the main mortar coat with the "strip-point method". Circumferential mortar bead along the board edges should be min. 3 cm wide. Apply 6-8 patches (of diameter 8-12 cm) evenly distributed upon the board surface. In total, mass should coat min. 40% of the board surface (60% after pressing the board to substrate) and provide appropriate bonding between the board and the wall. In case of even and smooth substrates it is acceptable to apply uniformly the mortar with a steel float upon the whole board surface. Just after mortar application the board should be placed upon substrate and pressed onto expected place. Fixing the boards with mechanical anchors can commence min. 1 day since the boards installation. Use fixings with galvanized pins, min. 8 pcs/m^2, follow the technical design.

Finishing works

Rendering can commence when weather conditions meet the requirements listed in the technical data sheets of thin-coat renders, not earlier however than 3 days since the base coat installation.

Consumption

The actual consumption depends on substrate parametres (e.g. evenness) and technology of boards installation. Average consumption: from 4.5 up to 5.5 kg/1 m^2.

Important additional information

- The mortar parametres are used to its full advantage only when applied in combination with other system components.
- Thermal insulation of outdoor ceilings must not be exposed to direct precipitation. Thermal insulation of ceilings and walls indoors must not be exposed to mechanical damage.
- When fixing the boards onto poor substrates of hard to determine bearing capacity (e.g. unstable, dusty, hard to clean), it is advisable to conduct a test of bonding. It consists in fixing 8-10 wool cubes (10x10 cm large) at various façade points and checking the bond after 3 days. The substrate strength can be assumed as acceptable when cube breaks within when teared off. If the cube tears off with mortar or substrate layer, then the substrate bearing capacity is insufficient. In such case further procedure, e.g. technology of weak layer removal, should be described in the external insulation design.
- Tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with the ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Paper bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-05-07

THIN-COAT RENDERS

THIN-COAT RENDERS

Owing to long time experience in production of thin-coat structural renders, ATLAS is nowadays among leading suppliers of thermal insulation products. In our portfolio one can find wide range of renders available in numerous colours.

Thin-coat structural renders are mostly supposed to:
- protect external walls against adverse atmospheric conditions
- improve façade aesthetics

Renders can be applied directly upon traditional plasters or form finishing coats of thermal insulation. Render properties, therefore product suitability for a particular project, result mainly from type of binder used in production. The most popular render types are:
- mineral
- acrylic
- silicone
- silicate
- hybrids

Criteria of render selection

In order to select appropriate render one should answer a few questions:

- What is the wall diffusion resistance?
  Render must not substantially limit free transfer of water vapour through partition (wall with all layers: internal plaster, external plaster, thermal insulation, etc.). It is advisable to check project documentation or use applications available on www.atlas.com.pl in order to build the partition correctly. If renders are applied upon walls made of materials of high water vapour permeability, e.g. cellular concrete, they must offer similar properties. In such case, products based on mineral or silicate binder should be used. Choose similarly when wall is insulated with mineral wool.

- How old is a building?
  Decade old buildings are characterised by very high water vapour permeability, therefore should be rendered with products of similar properties, especially based on silicate binder.

- Are there any clusters of greenery in neighbourhood?
  If so, risk of organic corrosion, development of fungi and mould is significant. In such cases it is advisable to use mineral or silicone-silicate renders characterised by very high alkaline reaction (pH ~ 12), which hinders development of microorganisms. Another ally fighting biological corrosion is low absorbability, which impairs deposition of spores.

- Is a building located close to busy street or other "source" of constant pollution?
  If so, one can face two problems. Buildings located close to busy streets get soiled very quickly, therefore silicone render, which is the easiest in keeping clean, is advisable. This render is called "self-cleaning", as minor contamination is cleaned itself with rain. Moreover, intensive vehicle traffic can cause render cracking. In order to prevent it, one should choose acrylic renders characterised by high elasticity and ability of stress compensation. These renders can be easily pressure washed.

- What colours are to be used on façade?
  ATLAS offers wide range of colours of renders and façade paints. It is significant to choose particular colours and join them thoroughly. This problem can be solved by use of applications available on www.atlas.com.pl/en, which are, e.g. helpful in shade selection.

TABLE 11.1

PRODUCT	 ATLAS CERMIT SN/DR AVAL KT 137	 ATLAS CERMIT SN-MAL	 ATLAS CERMIT ND	 ATLAS CERMIT WN	 ATLAS CERMIT PS	 ATLAS/AVAL ACRYLIC RENDER	 ATLAS/AVAL ACRYLIC-SILICONE RENDER	 ATLAS/AVAL SILICONE RENDER	 ATLAS SILICONE-SILICATE RENDER	 ATLAS DEKO M AVAL KT 77
Reference document	PN-EN 998-1:2012					PN-EN 15824:2010				
Render type	Mineral dry mixtures					Dispersion ready-to-use mix				
Binder	Cement					Styrene-acrylic resin	Styrene-acrylic and silicone resin	Styrene-acrylic and silicone resin	Styrene-acrylic resin, potassium silicate	Acrylic resin
Priming mass	Cerplast/ AVAL KT 16					Cerplast/ AVAL KT 16	Cerplast/ AVAL KT 16	Silkon ANX/ AVAL KT 76	Silkon ANX/ AVAL KT 76	Cerplast/ AVAL KT 16
Texture	spotted/rustic	spotted	spotted	wood-like	sandstone	spotted	spotted	spotted	spotted	mosaic
Colours	1 (white)	1 (white)	1 (white)	10***	1 (sandy)	400	400	400	400	60 – ready-to-use 84 – TM1 20 – TM3
Max. aggregate grain size [mm]	1.5/spotted 2.0/spotted/rustic 3.0/spotted/rustic	1.5/SN-MAL 15 2.5/SN-MAL 25	2.0	1.0	1.0	1.5/N-15 2.0/N-20	1.5	1.5/N-15 2.0/N-20	1.5/N-15 2.0/N-20	1.0-2.0 - ready-to-use 0.2-08 – TM1
Consumption [kg/m^2]	2.5 for 1.5 mm 3.0 for 2.0 mm 4.0 for 3.0 mm	2.5 for 1.5 mm 3.5-4.0 for 2.5 mm	2.8	2.5-3.0	2.0-2.5	2.5 for 1.5 mm 3.0 for 2.0 mm	2.5	2.5 for 1.5 mm 3.2 for 2.0 mm	2.5 for 1.5 mm 3.0 for 2.0 mm	3.0-5.5* - ready-to-use and TM3 1.5-2.5* - TM1
Mixing ratio [l/25kg]	5.75-6.50/spotted 5.0-6.0/rustic	5.0-6.25/SN-MAL15 4.5-5.5/SN-MAL 25	6.25	5.25-6.00	5.0-5.5	-	-	-	-	-
Pot life	1.5	1.5	1.5	1.0	1.5	-	-	-	-	-
USE										
Manual	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Machine	✓ **	✓ **			✓	✓ **	✓ **	✓ **	✓ **	

* The actual consumption can be established on basis of sample application upon particular substrate.
** Mineral renders CERMIT SN 1.5 mm and 2.0 mm, dispersion renders 1.5 mm thick can be applied with machines only. The machine-applied render forms texture differing from the one formed manually.
*** After coating with ATLAS BEJCA impregnator.

Up to five European Technical Approvals for ATLAS insulation systems

BBA CERTIFICATE 13/5018

NSAI

CS II PRODUCT CONFORMS WITH THE EUROPEAN STANDARD

ATLAS CERMIT SN and DR

thin-coat mineral render

- reinforced with polymers
- durable and resistant to micro-cracking
- water vapour permeable
- hydrophobic
- two textures – spotted and rustic

EASY IN USE · FOR WALLS · FROST- AND WATERPROOF · INDOORS AND OUTDOORS · MYCO PROTECT · APPLY WITH FLOAT · SPOTTED FINISH · RUSTIC FINISH

Use

Decorative and protective top finish of façades or internal walls.
Light and durable rendering coat – perfect top finish of thermal insulation systems.
Recommended for façades, where high water vapour permeability should be kept – porous structure of set render ensures free transfer of water vapour – therefore forms perfect finishing coat of external walls of pools, kitchens, drying houses, laundries, cold storage plants, gym halls, baths, old buildings, etc.
Recommended for buildings exposed to algae and fungi – situated close to clusters of greenery and water reservoirs; high pH (~12) hinders development of biological corrosion occurring in the form of brownish – green deposit and resulting in the surface damage.

Types of rendered buildings – single- and multi – family, public access buildings.
Types of substrates – concrete, traditional plasters on walls made of bricks, ceramic, cellular or silicate blocks or hollow blocks, plasterboards (indoors), thermal insulation systems with polystyrene, XPS and mineral wool.

Properties

Resistant to micro-cracking – contains special microfibres strengthening its structure.
Additional melioration of strength parametres in time - owing to positive influence of the natural process of mineral renders carbonation, which limits their absorbability, hardens structure and improves resistance to chemical aggression.
High strength and hardness – owing to polymer-reinforced mix of binders – white, fine, high grade cement type and lime as well as specially selected quartz aggregate.
Hydrophobic coat – content of hydrophobic agents reduces render absorptiveness and protects partition against precipitation.
MYCO PROTECT – contents lime, which naturally protects the render against biological corrosion, i.e. development of fungi and algae on the render surface, for long time.
Does not attract dust, dirt, pollen present in air.
Inflammable – in combination with mineral wool forms inflammable thermal insulation system for walls.
Does not require additional painting to unify the shade.
Can be applied with special rendering units – improved yield and pace of application, particularly upon curved and irregular surfaces. **Note. Renders CERMIT SN 15 and CERMIT SN 20 can be applied with machines only. The machine-applied render forms texture differing from the one formed manually.**

Technical data

ATLAS CERMIT SN and DR are manufactured as dry mixes of white cement, lime, quartz and lime aggregate.

Mixing ratio for CERMIT SN (water/dry mix)	5.75 ÷ 6.50 l/25 kg
Mixing ratio for CERMIT DR (water/dry mix)	5.00 ÷ 6.00 l/25 kg
Mass preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Maturing time	approx. 10 minutes
Pot life	1.5 hour
Open time	approx. 20 minutes

Textures: – spotted – CERMIT SN; – rustic – CERMIT DR

Aggregate grain size: – 1.5 mm – CERMIT SN 15; – 2.0 mm – CERMIT SN 20 and DR 20; – 3.0 mm – CERMIT SN 30 and DR 30

Technical requirements

Renders conform to PN-EN 998-1 standard. EC Declarations of Performance No. 013/CPR (SN render) and 014/CPR (DR render).

CE 0767	PN-EN 998-1:2012 (EN 998-1:2010)
Factory made single-coat (OC) rendering mortar	for outdoor use, on masonry walls, ceilings, posts and partition walls
Reaction to fire - class	A2 s1 d0
Water absorption - category	W1
Bonding after required freeze-thaw cycles	≥ 0.3 N/mm² - FP:B
Water vapour permeability coefficient μ	15/35 (EN 1745:2002, table A.12)
Thermal conductivity coefficient (average tabular value P=50%)	0.83 W/mk ($\lambda_{10, dry}$) (EN 1745:2002, table A.12)
Water permeability tested after required freeze-thaw cycles	≤ 1 ml/cm² after 48 h
Gross dry density	≤ 1800 kg/m³
Durability. Bonding after required freeze-thaw cycles.	≥ 0.3 N/mm² - FP:B
Durability. Water permeability after required freeze-thaw cycles	≤ 1 ml/cm² after 48 h
Release/content of hazardous substances	See: Safety Data Sheet

The renders are listed in the following approvals for thermal insulation systems:

System name	Technical Approval No.	Certificate No.
ATLAS	ETA 06/0081	EC 1488-CPD-0021
ATLAS XPS	ETA 07/0316	EC 1488-CPD-0075
ATLAS ROKER	ETA 06/0173	EC 1488-CPD-0036
ATLAS RENOTER	AT-15-8477/2010	FPC-ITB-0456/Z
ATLAS ETICS	AT-15-9090/2014	FPC-ITB-0562/Z
ATLAS ROKER	AT-15-2930/2012	FPC-ITB-0436/Z
ATLAS ROKER G	AT-15-7314/2011	FPC-ITB-0222/Z

The product has been given the National Standard Authority of Ireland (NSAI) Certificate no. 10/0347 and the British Board of Agrément (BBA) Certificate no. 13/5018.
The product has been given the Radiation Hygiene Certificate.

Rendering

Substrate preparation
The substrate should be:
- **stable** – sufficiently rigid and sufficiently long stabilized. The assumed stabilization time for substrates is respectively:
  - new cement plasters made of ATLAS mortars - min. 1 week for each 1 cm of thickness,
  - concrete walls – min. 28 days,
- **dry,**
- **even** – irregularities and gaps should be filled with, e. g. ATLAS ZW 50, ATLAS ZW 330, ATLAS PLASTERING MIX or adhesive mortars used for installation of base coats of thermal insulation systems; prime the surface with ATLAS UNI-GRUNT emulsion before repairs,
- **clean** – free from layers which would impair the render bonding, especially dust, dirt, lime, oil, grease, wax, residues of oil and emulsion paints; substrates infected by biological corrosion must be cleaned with ATLAS MYKOS agent,
- **primed** - with ATLAS CERPLAST priming mass.

Rendering mass preparation
Pour the material from the bag into a bucket and mix dry – aggregate segregation can occur in transportation. Next, pour the mix into a container with suitable amount of water (see Technical Data for ratio) and mix manually or mechanically until homogenous. Leave the mass to rest for 10 minutes and remix. The mass should be used up within approx. 1.5 hour. During application, mix the mass on regular basis in order to keep homogenous consistency.
When using a rendering unit the render should be mixed in accordance to the unit manufacturer's guidelines. The level of mix water should be set so the render consistency provides appropriate render texture.

Mass application
The mass can be applied manually or mechanically. Manual application consists in applying the rendering mass with a smooth stainless steel float, with coat of thickness equal to the aggregate grain size. Collect excessive material, put it back in the bucket and obligatorily remix. Machine application should be carried out with appropriate rendering units.

Texture forming
Freshly applied mass requires texture forming with a plastic float. The spotted effect (SN render) is formed by floating the rendering coat with circular moves, whereas the rustic effect (DR render) - by floating the rendering coat with circular, horizontal or vertical moves (depending on the expected direction of scores). Machine-applied renders are not textured – they form spotted texture differing from the one formed manually.

Finishing works
The render can be coated with any façade paints (e.g. silicate ATLAS ARKOL S, ATLAS SALTA S, silicone ATLAS SALTA, ATLAS FASTEL-NOVA, ATLAS SALTA N, acrylic ATLAS SALTA E, ATLAS ARKOL E). Painting is possible after 2 ÷ 6 weeks since the completion of render application (depending on type and colour of paint). Painting with ATLAS silicate paints ATLAS ARKOL S and ATLAS SALTA S or ATLAS silicone paints ATLAS SALTA and ATLAS FASTEL NOVA can start just when the render dries, not earlier, however, than after 48 hours (silicate paint) or 5 days (FASTEL NOVA and SALTA).

Consumption

CERMIT SN 15 - approx. 2.5 kg/1 m^2.
CERMIT SN 20 and DR 20 - approx. 3.0 kg/1 m^2.
CERMIT SN 30 and DR 30 - approx. 4.0 kg/1 m^2.

Important additional information

- The open time (between application and texture forming) depends on substrate absorbability, ambient temperature and render consistency. The maximum surface possible to render in a single technological cycle (application and floating; for particular substrate type and weather conditions) should be established experimentally.
- Apply the render with the "wet on wet method", prevent the textured coat from drying before application of the subsequent coat. Otherwise the seams will be visible. Technological breaks have to be planned in advance, e.g. in corners and angles of a building, under rainwater pipes, on lines of contact of two colours, etc.
- Protect the rendered surface both during work and render setting against direct sunlight, wind and precipitation.
- The setting time depends on substrate type, temperature and relative air humidity, and can vary from 12 up to 48 hours. The substrate and ambient temperature during work and render setting must be between +5°C and +25°C.
- Tools must be cleaned with clean water directly after use. Difficult to remove residues of the set render can be removed with ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The render must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Paper bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-03-31

Up to five European Technical Approvals for ATLAS insulation systems

CERTIFICATE 13/5018

ATLAS CERMIT SN-MAL

thin-coat mineral render for further painting

- render for further painting
- reinforced with polymers
- durable and resistant to micro-cracking
- water vapour permeable
- spotted texture – two aggregate thicknesses

EASY IN USE · FOR WALLS · FROST- AND WATERPROOF · INDOORS AND OUTDOORS

MYCO PROTECT · APPLY WITH FLOAT · SPOTTED FINISH

Use

Render for further painting – must be coated with façade paint.
Economical version of CERMIT SN render – when shade from wide ATLAS range of colours and further coating with façade paints is required.
Decorative and protective top finish of façades or internal walls.
Light and durable rendering coat – perfect top finish of thermal insulation systems.
Recommended for façades, where high water vapour permeability should be kept – porous structure of set render ensures free transfer of water vapour – therefore forms perfect finishing coat of external walls of pools, kitchens, drying houses, laundries, cold storage plants, gym halls, baths, old buildings, etc.
Recommended for buildings exposed to algae and fungi – situated close to clusters of greenery and water reservoirs; high pH (~12) hinders development of biological corrosion occurring in the form of brownish – green deposit and resulting in the surface damage.

Types of rendered buildings – single- and multi – family, public access buildings.
Types of substrates – concrete, traditional plasters on walls made of bricks, ceramic, cellular or silicate blocks or hollow blocks, plasterboards (indoors), thermal insulation systems with polystyrene, XPS and mineral wool.

Properties

Resistant to micro-cracking – contains special microfibres strengthening its structure.
Additional melioration of strength parametres in time - owing to positive influence of the natural process of mineral renders carbonation, which limits their absorbability, hardens structure and improves resistance to chemical aggression.
High strength and hardness – owing to polymer-reinforced mix of binders – white, fine, high grade cement type and lime as well as specially selected quartz aggregate.
MYCO PROTECT – contents lime, which naturally protects the render against biological corrosion, i.e. development of fungi and algae on the render surface, for long time.
Does not attract dust, dirt, pollen present in air.
Inflammable – in combination with mineral wool forms inflammable thermal insulation system for walls.
Can be applied with special rendering units – improved yield and pace of application, particularly upon curved and irregular surfaces. **Note. Renders CERMIT SN-MAL 15 can be applied with machines only. The machine-applied render forms texture differing from the one formed manually.**

Technical data

ATLAS CERMIT SN-MAL is manufactured as a dry mix of white cement, lime, quartz and lime aggregate.

Mixing ratio for CERMIT SN-MAL 15 (water/dry mix)	5.00 ÷ 6.25 l/25 kg
Mixing ratio for CERMIT SN-MAL 25 (water/dry mix)	4.50 ÷ 5.50 l/25 kg
Mass preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Maturing time	approx. 10 minutes
Pot life	1.5 hour
Open time	approx. 20 minutes

Texture:	– spotted
Aggregate grain size:	– 1.5 mm – CERMIT SN-MAL 15 – 2.5 mm – CERMIT SN-MAL 25

Technical requirements

Render conforms to PN-EN 998-1 standard. EC Declarations of Performance No. 053/CPR.

CE 0767	PN-EN 998-1:2012 (EN 998-1:2010)
Factory made single-coat (OC) rendering mortar	for outdoor use, on masonry walls, ceilings, posts and partition walls
Reaction to fire - class	A2 s1 d0
Water absorption - category	W1
Bonding after required freeze-thaw cycles	≥ 0.3 N/mm² - FP:B
Water vapour permeability coefficient μ	15/35 (EN 1745:2002, table A.12)
Thermal conductivity coefficient (average tabular value P=50%)	0.83 W/mk ($\lambda_{10, dry}$) (EN 1745:2002, table A.12)
Water permeability tested after required freeze-thaw cycles	≤ 1 ml/cm² after 48 h
Gross dry density	≤ 1800 kg/m³
Durability. Bonding after required freeze-thaw cycles.	≥ 0.3 N/mm² - FP:B
Durability. Water permeability after required freeze-thaw cycles	≤ 1 ml/cm² after 48 h
Release/content of hazardous substances	See: Safety Data Sheet

The render is listed in the following approvals for thermal insulation systems:

System name	Technical Approval No.	Certificate No.
ATLAS	ETA 06/0081	EC 1488-CPD-0021
ATLAS XPS	ETA 07/0316	EC 1488-CPD-0075
ATLAS ROKER	ETA 06/0173	EC 1488-CPD-0036
ATLAS RENOTER	AT-15-8477/2010	FPC-ITB-0456/Z
ATLAS ETICS	AT-15-9090/2014	FPC-ITB-0562/Z
ATLAS ROKER	AT-15-2930/2012	FPC-ITB-0436/Z
ATLAS ROKER G	AT-15-7314/2011	FPC-ITB-0222/Z

The product has been given the National Standard Authority of Ireland (NSAI) Certificate no. 10/0347 and the British Board of Agrément (BBA) Certificate no. 13/5018.
The product has been given the Radiation Hygiene Certificate.

Rendering

Substrate preparation
The substrate should be:
- **stable** – sufficiently rigid and sufficiently long stabilized. The assumed stabilization time for substrates is respectively:
  - new cement plasters made of ATLAS mortars - min. 1 week for each 1 cm of thickness,
  - concrete walls – min. 28 days,
- **dry,**
- **even** – irregularities and gaps should be filled with, e. g. ATLAS ZW 50, ATLAS ZW 330, ATLAS PLASTERING MIX or adhesive mortars used for installation of base coats of thermal insulation systems; prime the surface with ATLAS UNI-GRUNT emulsion before repairs,
- **clean** – free from layers which would impair the render bonding, especially dust, dirt, lime, oil, grease, wax, residues of oil and emulsion paints; substrates infected by biological corrosion must be cleaned with ATLAS MYKOS agent,
- **primed** - with ATLAS CERPLAST priming mass.

Rendering mass preparation
Pour the material from the bag into a bucket and mix dry – aggregate segregation can occur in transportation. Next, pour the mix into a container with suitable amount of water (see Technical Data for ratio) and mix manually or mechanically until homogenous. Leave the mass to rest for 10 minutes and remix. The mass should be used up within approx. 1.5 hour. During application, mix the mass on regular basis in order to keep homogenous consistency.
When using a rendering unit the render should be mixed in accordance to the unit manufacturer's guidelines. The level of mix water should be set so the render consistency provides appropriate render texture.

Mass application
The mass can be applied manually or mechanically. Manual application consists in applying the rendering mass with a smooth stainless steel float, with coat of thickness equal to the aggregate grain size. Collect excessive material, put it back in the bucket and obligatorily remix. Machine application should be carried out with appropriate rendering units.

Texture forming
Freshly applied mass requires texture forming with a plastic float. The spotted effect is formed by floating the rendering coat with circular moves. Machine-applied renders are not textured – they form spotted texture differing from the one formed manually.

Finishing works
The render can be coated with any façade paints (e.g. silicate ATLAS ARKOL S, ATLAS SALTA S, silicone ATLAS SALTA, ATLAS FASTEL-NOVA, ATLAS SALTA N, acrylic ATLAS SALTA E, ATLAS ARKOL E). Painting is possible after 2 ÷ 6 weeks since the completion of render application (depending on type and colour of paint). Painting with ATLAS silicate paints ATLAS ARKOL S and ATLAS SALTA S or ATLAS silicone paints ATLAS SALTA and ATLAS FASTEL NOVA can start just when the render dries, not earlier, however, than after 48 hours (silicate paint) or 5 days (FASTEL NOVA and SALTA).

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Consumption

CERMIT SN-MAL 15 - approx. 2.5 kg/1 m^2.
CERMIT SN-MAL 25 - approx. 3.5-4.0 kg/1 m^2.

Important additional information

- The open time (between application and texture forming) depends on substrate absorbability, ambient temperature and render consistency. The maximum surface possible to render in a single technological cycle (application and floating; for particular substrate type and weather conditions) should be established experimentally.
- Apply the render with the "wet on wet method", prevent the textured coat from drying before application of the subsequent coat. Otherwise the seams will be visible. Technological breaks have to be planned in advance, e.g. in corners and angles of a building, under rainwater pipes, on lines of contact of two colours, etc.
- Protect the rendered surface both during work and render setting against direct sunlight, wind and precipitation.
- The setting time depends on substrate type, temperature and relative air humidity, and can vary from 12 up to 48 hours. The substrate and ambient temperature during work and render setting must be between +5°C and +25°C.
- Tools must be cleaned with clean water directly after use. Difficult to remove residues of the set render can be removed with ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The render must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Paper bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-05-07

ATLAS CERMIT ND

thin-coat mineral render

- reinforced with polymers
- durable and resistant to micro-cracking
- water vapour permeable
- spotted 2.0 mm
- two colour versions – white and for painting

Render based on dolomite aggregate

Owing to the use of specially chosen and selected dolomite aggregate mixes the render offers exceptional features:

- perfect working parameters – very good bonding to the substrate during application (almost no material loss), very easy structure forming and optional painting.
- uniform, repeatable spotted texture.

Use

Decorative and protective top finish of façades or internal walls.
Light and durable rendering coat – perfect top finish of thermal insulation systems.
Recommended for façades, where high water vapour permeability should be kept – porous structure of set render ensures free transfer of water vapour – therefore can be used, e.g. as finishing coat of external walls of roofed pools, kitchens, drying houses, laundries, cold storage plants, gym halls, baths, old buildings, where keeping proper warm and humidity parameters of partition is essential.
Recommended for buildings exposed to algae and fungi – situated close to clusters of greenery and water reservoirs; high pH (~12) hinders development of biological corrosion occurring in the form of brownish – green deposit and resulting in the surface damage.

Types of rendered buildings – single- and multi – family, public access buildings.
Types of substrates – concrete, traditional plasters on walls made of bricks, ceramic, cellular or silicate blocks or hollow blocks, plasterboards (indoors), thermal insulation systems with polystyrene, XPS and mineral wool.

Properties

Allows for free technological areas adjoining.
Forms snow-white surface, does not require painting (white version of ATLAS CERMIT ND) – version for painting must be finished with paint coat, e.g. ATLAS SALTA. Paint must be applied not later than 1 year since the render application (render can be left unpainted during single winter time only).
Resistant to micro-cracking – contains special microfibres strengthening its structure.
Additional melioration of strength parametres in time - owing to positive influence of the natural process of mineral renders carbonation, which limits their absorbability, hardens structure and improves resistance to chemical aggression.
High strength and hardness – owing to polymer-reinforced mix of binders – white, fine, high grade cement type and lime as well as specially selected dolomite aggregate.
MYCO PROTECT – high pH naturally protects the render against biological corrosion, i.e. development of fungi and algae on the render surface, for long time.
Does not attract dust, dirt, pollen as well as pollution from exhaust fumes.
Inflammable – in combination with mineral wool forms inflammable thermal insulation system for walls.

Technical data

ATLAS CERMIT ND is manufactured as a dry mix of white cement and dolomite aggregate.

Mixing ratio (water/dry mix)	approx. 6.25 l / 25 kg
Mass preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Maturing time	approx. 10 minutes
Pot life	1.5 hour
Open time	approx. 20 minutes

Technical requirements

Render conforms to PN-EN 998-1 standard. EC Declaration of Performance No. 135/CPR.

CE	PN-EN 998-1:2012 (EN 998-1:2010)
Factory made single-coat (OC) rendering mortar	for outdoor use, on masonry walls, ceilings, posts and partition walls
Reaction to fire - class	A1
Water absorption - category	W1
Bonding after required freeze-thaw cycles	≥ 0.5 N/mm² - FP:B
Water vapour permeability coefficient μ	15/35 (EN 1745:2002, table A.12)
Thermal conductivity coefficient (average tabular value P=50%)	0.83 W/mk ($\lambda_{10, dry}$) (EN 1745:2002, table A.12)
Water permeability tested after required freeze-thaw cycles	≤ 1 ml/cm² after 48 h
Gross dry density	≤ 1800 kg/m³
Durability. Bonding after required freeze-thaw cycles.	≥ 0.5 N/mm² - FP:B
Durability. Water permeability after required freeze-thaw cycles	≤ 1 ml/cm² after 48 h
Release/content of hazardous substances	See: Safety Data Sheet

The render has been given the Radiation Hygiene Certificate. Additionally it is listed in the following approvals for thermal insulation systems:

System name	Technical Approval No.	Certificate No.
ATLAS RENOTER	AT-15-8477/2010	FPC-ITB-0456/Z
ATLAS ETICS	AT-15-9090/2014	FPC-ITB-0562/Z
ATLAS ROKER	AT-15-2930/2012	FPC-ITB-0436/Z
ATLAS ROKER G	AT-15-7314/2011	FPC-ITB-0222/Z

Rendering

Substrate preparation

The substrate should be:

- **stable** – sufficiently rigid and sufficiently long stabilized. The assumed stabilization time for substrates is respectively:
  - new cement plasters made of ATLAS mortars - min. 1 week for each 1 cm of thickness,
  - concrete walls – min. 28 days,
- **air–dry** – in the state of moisture equilibrium in standard operation conditions,
- **even** – irregularities and gaps, which would hinder formation of proper render texture, should be filled with, e. g. ATLAS ZW 50, ATLAS ZW 330, ATLAS PLASTERING MIX or adhesive mortars used for installation of base coats of thermal insulation systems; prime the surface with ATLAS UNI-GRUNT emulsion before repairs,
- **clean** – free from layers which would impair the render bonding, especially dust, dirt, lime, oil, grease, wax, residues of oil and emulsion paints; substrates infected by biological corrosion must be cleaned with ATLAS MYKOS agent,
- **primed** - with ATLAS CERPLAST priming mass.

Rendering mass preparation

Pour the material from the bag into a bucket and mix dry – aggregate segregation can occur in transportation. Next, pour the mix into a container with suitable amount of water (see Technical Data for ratio) and mix manually or mechanically until homogenous. Leave the mass to rest for 10 minutes and remix. The mass should be used up within approx. 1.5 hour. During application, mix the mass on regular basis in order to keep homogenous consistency.

Mass application

The mass can be applied manually. It should be applied with a smooth stainless steel float, with coat of thickness equal to the aggregate grain size. Collect excessive material, put it back in the bucket and obligatorily remix.

Texture forming

Freshly applied mass requires texture forming with a plastic float. The spotted effect is formed by floating the rendering coat with circular moves.

Finishing works

Depending on render type, the finishing coat can be left without painting (white version of ATLAS CERMIT ND) or requires coating with a façade paint (version ATLAS CERMIT ND for painting). The render can be coated with any façade paints (e.g. silicate ATLAS ARKOL S, ATLAS SALTA S, silicone ATLAS SALTA, ATLAS FASTEL-NOVA, ATLAS SALTA N, acrylic ATLAS SALTA E, ATLAS ARKOL E). Painting is possible after 2 ÷ 6 weeks since the completion of render application (depending on type and colour of paint). Painting with ATLAS silicate paints ATLAS ARKOL S and ATLAS SALTA S or ATLAS silicone paints ATLAS SALTA and ATLAS FASTEL NOVA can start just when the render dries, not earlier, however, than after 48 hours (silicate paint) or 5 days (FASTEL NOVA and SALTA).

Consumption

Average consumption - approx. 2.8 kg/1 m^2.

Important additional information

- The open time (between application and texture forming) depends on substrate absorbability, ambient temperature and render consistency. The maximum surface possible to render in a single technological cycle (application and floating; for particular substrate type and weather conditions) should be established experimentally.
- Apply the render with the "wet on wet method", prevent the textured coat from drying before application of the subsequent coat. Otherwise the seams will be visible. Technological breaks have to be planned in advance, e.g. in corners and angles of a building, under rainwater pipes, on lines of contact of two colours, etc.
- Protect the rendered surface both during work and render setting against direct sunlight, wind and precipitation.
- The setting time depends on substrate type, temperature and relative air humidity, and can vary from 12 up to 48 hours. The substrate and ambient temperature during work and render setting must be between +5°C and +25°C.
- Tools must be cleaned with clean water directly after use. Difficult to remove residues of the set render can be removed with ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The render must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Paper bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

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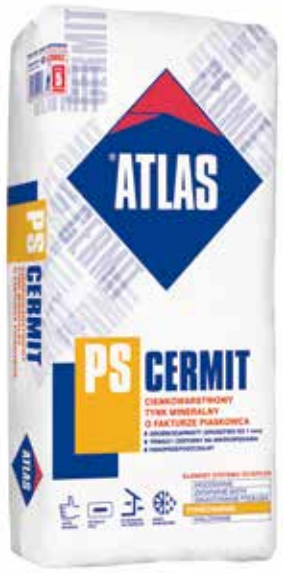
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-08-05



ATLAS CERMIT PS

mineral render with sandstone texture

- fine aggregate (grain size up to 1 mm)
- durable and resistant to micro-cracking
- water vapour permeable
- sandstone texture

Use

Sandstone texture – forms decorative and protective top finish of façades or internal walls.
Recommended for façades, where high water vapour permeability should be kept – porous structure of set render ensures free transfer of water vapour – therefore forms perfect finishing coat of external walls of pools, kitchens, drying houses, laundries, cold storage plants, gym halls, baths, old buildings, etc.
Recommended for buildings exposed to algae and fungi – situated close to clusters of greenery and water reservoirs; high pH (~12) hinders development of biological corrosion occurring in the form of brownish – green deposit and resulting in the surface damage.

Types of rendered buildings – single- and multi – family, public access buildings.
Types of substrates – concrete, traditional plasters on walls made of bricks, ceramic, cellular or silicate blocks or hollow blocks, plasterboards (indoors).

Properties

Resistant to micro-cracking – contains special microfibres strengthening its structure.
Additional melioration of strength parametres in time - owing to positive influence of the natural process of mineral renders carbonation, which limits their absorbability, hardens structure and improves resistance to chemical aggression.
High strength and hardness – owing to polymer-reinforced mix of binders – white, fine, high grade cement type and lime as well as specially selected quartz aggregate.
MYCO PROTECT – contents lime, which naturally protects the render against biological corrosion, i.e. development of fungi and algae on the render surface, for long time.
Content of hydrophobic agents reduces render absorptiveness and protects partition against precipitation.
Does not attract dust, dirt, pollen present in air.
Can be applied with special rendering units – improved yield and pace of application, particularly upon curved and irregular surfaces.

Colour and texture:	– sandstone
Aggregate thickness:	– up to 1.0 mm

Technical data

ATLAS CERMIT PS is manufactured as a dry mix of white cement, lime, quartz and lime aggregate.

Mixing ratio (water/dry mix)	5.00 ÷ 5.50 l/25 kg
Mass preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Maturing time	approx. 10 minutes
Pot life	1.5 hour
Open time	approx. 15 minutes

Technical requirements

Render conforms to PN-EN 998-1 standard. EC Declarations of Performance No. 053/CPR:

CE 0767	PN-EN 998-1:2012 (EN 998-1:2010)
Factory made single-coat (OC) rendering mortar	for outdoor use, on masonry walls, ceilings, posts and partition walls
Reaction to fire - class	A2 s1 d0
Water absorption - category	W1
Bonding after required freeze-thaw cycles	≥ 0.3 N/mm² - FP:B
Water vapour permeability coefficient μ	15/35 (EN 1745:2002, table A.12)
Thermal conductivity coefficient (average tabular value P=50%)	0.83 W/mk ($\lambda_{10, dry}$) (EN 1745:2002, table A.12)
Water permeability tested after required freeze-thaw cycles	≤ 1 ml/cm² after 48 h
Gross dry density	≤ 1800 kg/m³
Durability. Bonding after required freeze-thaw cycles.	≥ 0.3 N/mm² - FP:B
Durability. Water permeability after required freeze-thaw cycles	≤ 1 ml/cm² after 48 h
Release/content of hazardous substances	See: Safety Data Sheet

The render is listed in the following approvals for thermal insulation systems:

System name	Technical Approval No.	Certificate No.
ATLAS RENOTER	AT-15-8477/2010	FPC-ITB-0456/Z
ATLAS ETICS	AT-15-9090/2014	FPC-ITB-0562/Z
ATLAS ROKER G	AT-15-7314/2011	FPC-ITB-0222/Z

The product has been given the Hygienic Evaluation and the Radiation Hygiene Certificate.

Rendering

Substrate preparation

The substrate should be:

- **stable** – sufficiently rigid and sufficiently long stabilized. The assumed stabilization time for substrates is respectively:
  - new cement plasters made of ATLAS mortars - min. 1 week for each 1 cm of thickness,
  - concrete walls – min. 28 days,
- **dry,**
- **even** – irregularities and gaps should be filled with, e. g. ATLAS ZW 50, ATLAS ZW 330, ATLAS PLASTERING MIX or adhesive mortars used for installation of base coats of thermal insulation systems; prime the surface with ATLAS UNI-GRUNT emulsion before repairs,
- **clean** – free from layers which would impair the render bonding, especially dust, dirt, lime, oil, grease, wax, residues of oil and emulsion paints; substrates infected by biological corrosion must be cleaned with ATLAS MYKOS agent,
- **primed** - with ATLAS CERPLAST priming mass.

Rendering mass preparation

Pour the material from the bag into a bucket and mix dry – aggregate segregation can occur in transportation. Next, pour the mix into a container with suitable amount of water (see Technical Data for ratio) and mix manually or mechanically until homogenous. Leave the mass to rest for 10 minutes and remix. The mass should be used up within approx. 1.5 hour. During application, mix the mass on regular basis in order to keep homogenous consistency.

When using a rendering unit the render should be mixed in accordance to the unit manufacturer's guidelines. The level of mix water should be set so the render consistency provides appropriate render texture.

Mass application and texture forming

The mass can be applied manually or mechanically. Manual application consists in applying the rendering mass with a smooth stainless steel float, with coat of thickness equal to the aggregate grain size. Collect excessive material, put it back in the bucket and obligatorily remix. When applying and collecting excessive rendering mass, one should float it with a smooth float, so the expected texture forms. Render does not require additional texturing. Machine application should be carried out with appropriate rendering units. The applied mass can be smoothed (similarly to manual application) or left unsmoothed – fine spotted texture is formed then.

Finishing works

The render can be coated with any façade paints (e.g. silicate ATLAS ARKOL S, ATLAS SALTA S, silicone ATLAS SALTA, ATLAS FASTEL-NOVA, ATLAS SALTA N, acrylic ATLAS SALTA E, ATLAS ARKOL E). Painting is possible after 2 ÷ 6 weeks since the completion of render application (depending on type and colour of paint). Painting with ATLAS silicate paints ATLAS ARKOL S and ATLAS SALTA S or ATLAS silicone paints ATLAS SALTA and ATLAS FASTEL NOVA can start just when the render dries, not earlier, however, than after 48 hours (silicate paint) or 5 days (FASTEL NOVA and SALTA).

Consumption

The actual consumption can be established on basis of sample application upon particular substrate. Average consumption: approx. 2.0-2.5 kg/1 m^2.

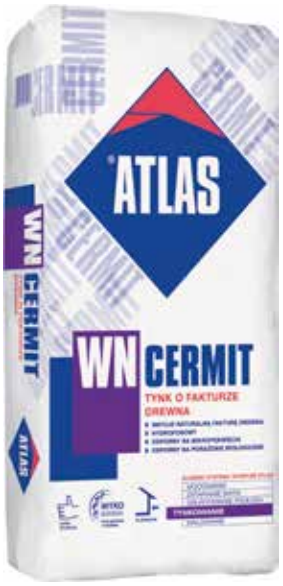
Important additional information

- The open time (between application and texture forming) depends on substrate absorbability, ambient temperature and render consistency. The maximum surface possible to render in a single technological cycle (application and floating; for particular substrate type and weather conditions) should be established experimentally.
- Apply the render with the "wet on wet method", prevent the textured coat from drying before application of the subsequent coat. Otherwise the seams will be visible. Technological breaks have to be planned in advance, e.g. in corners and angles of a building, under rainwater pipes, etc.
- Protect the rendered surface both during work and render setting against direct sunlight, wind and precipitation.
- The setting time depends on substrate type, temperature and relative air humidity, and can vary from 12 up to 48 hours. The substrate and ambient temperature during work and render setting must be between +5°C and +25°C.
- In order to avoid differences in colour shades an individual surface should be coated with render of the same manufacturing date.
- Tools must be cleaned with clean water directly after use. Difficult to remove residues of the set render can be removed with ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The render must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Paper bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

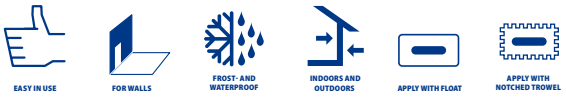
The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-05-15



ATLAS CERMIT WN

mineral render imitating natural wood texture

- perfectly imitates natural wood texture
- durable and resistant to micro-cracking
- highly water vapour permeable
- hydrophobic
- resistant to biological corrosion



Use

Application of surface imitating wood texture, which is pressed in the render with a silicone mold – forms durable and decorative finishing coat of façades and indoor walls, in various room types. Can be applied upon whole façade surface as well as fragments only.
Application of thin-coat renders imitating wood texture – rendering coat ensures free transfer of water vapour; forms perfect finishing coats of external partitions (one- and two-layer), internal walls, masonry and casted architectonic elements, etc. in single- and multi-family housing, public access, commercial, service and gastronomy buildings, etc.
General use – ATLAS CERMIT WN is recommended for application of stylized rendering coats imitating natural wood texture on external wall insulation systems (ETICS), concrete substrates, mineral renders of any type (smooth, textured, etc.), gypsum plasters and top coats, plasterboards, fibre cement boards, etc.

Properties

Highly resistant to micro-cracking – owing to specially selected fillers and additional structural reinforcement with microfibres.
High strength and durability – owing to the use of polymerized cement-lime mortar based on white cement and hydrophobic agents ensuring very good structural tightness of coating. The natural process of mineral renders carbonation limits the absorbability, hardens structure and improves resistance to chemical aggression.
MYCO PROTECT – high rendering coat alkalinity and hydrophobisation form natural protection against development of fungi and algae – particularly important for buildings located in the vicinity of clusters of greenery, water tanks, in shadowed city zones of high pollution concentration.
Does not attract dust, dirt, pollen present in air.
Can be applied with recommended rendering units.

Colour and texture: – white, imitating wood (after pressing with silicone mold)
Aggregate grain size: – up to 1.0 mm

Technical data

ATLAS CERMIT WN is manufactured as a dry mix of white cement and lime, selected dolomite aggregates and quartz powder, modifiers and hydrophobic agents.

Mixing ratio (water/dry mix)	0.21 ÷ 0.24 l/1 kg 5.25 ÷ 6.00 l/25 kg
Mass preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Maturing time	approx. 10 minutes
Pot life	1 hour

Technical requirements

The render is listed in the following approvals for thermal insulation systems:

System name	Technical Approval No.	Certificate No.
ATLAS ETICS	AT-15-9090/2014	FPC-ITB-0562/Z
ATLAS ROKER	AT-15-2930/2012	FPC-ITB-0436/Z

The render has been given the Radiation Hygiene Certificate.

Rendering

Substrate preparation
The substrate should be:
- **stable** – sufficiently rigid and sufficiently long stabilized and primed
- **dry**,
- **even** – irregularities and gaps should be filled with, e. g. ATLAS ZW 50, ATLAS ZW 330, ATLAS PLASTERING MIX or adhesive mortars used for installation of base coats of thermal insulation systems; prime the surface with ATLAS UNI-GRUNT emulsion before repairs,
- **clean** – free from layers which would impair the render bonding, especially dust, dirt, lime, oil, grease, wax, residues of oil and emulsion paints; substrates infected by biological corrosion must be cleaned with ATLAS MYKOS agent,

Detailed requirements for substrates:

Substrate type	Requirements for stabilisation	Priming
Base coat of external thermal insulation systems (ETICS) made of ATLAS adhesive mortars	min. 3 days*	ATLAS CERPLAST
Fresh cement plasters made of ATLAS mortars, traditional cement and cement-lime plasters	min. 7 days*, moisture content 4%	
Concrete	min. 28 days*, structural moisture content < 4%	
Gypsum	moisture content < 2%	
Plasterboards and fibre cement boards, firmly fixed according to manufacturer's guidelines and building technology	moisture content < 2%	
Well bonded paint coatings indoors	No requirements	

*) Note: for setting conditions: temperature+20°C, air humidity 50%

Rendering mass preparation
Pour the material from the bag into a bucket and mix dry. Next, pour the mix into a container with suitable amount of water (see Technical Data for ratio) and mix mechanically until homogenous. Leave the mass to rest for 10 minutes and remix. The mass should be used up within approx. 1 hour. During application, mix the mass on regular basis in order to keep homogenous consistency.

Mass application and texture forming
The mass should be applied with a smooth stainless steel float, with coat approx. 4 mm thick. In order to unify the coat thickness, one can float it with a notched trowel (notch size 10 mm), led at an angle and smooth again. Leave the mass for initial setting and slight surface drying (approx. 20-60 minutes depending on weather conditions). Monitor this time thoroughly. Press the wood texture with a silicone mold upon the prepared surface. Coat the mold with ATLAS ANTI-ADHESION AGENT before use. Remove any render residues from the mold cavities before the next use. The mass hardens within 24 hours and can be coated with colouring impregnator ATLAS BEJCA after 3 days (for setting conditions: temperature+20°C, air humidity 50%).

Consumption

Average consumption - approx. 2.5-3.0 kg/1 m^2. The actual consumption can be established on basis of sample application upon particular substrate.

Important additional information

- Apply the render with the "wet on wet method", prevent the textured coat from drying before application of the subsequent coat. Otherwise the seams will be visible. Technological breaks have to be planned in advance, e.g. in corners and angles of a building, under rainwater pipes, etc.
- Protect the rendered surface both during work and render setting against direct sunlight, wind and precipitation.
- The setting time depends on substrate type, temperature and relative air humidity, and can vary from 12 up to 48 hours. The substrate and ambient temperature during work and render setting must be between +5°C and +25°C.
- Tools must be cleaned with clean water directly after use. Difficult to remove residues of the set render can be removed with ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The render must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Paper bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

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At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-09-14

Up to five European Technical Approvals for ATLAS insulation systems

Resistant to cracking

ELASTICITY STRENGTH

bio protection

Environmentally friendly

400 COLOURS SAH

Colour durability

ATLAS SILICONE RENDER

thin – coat silicone render

- water vapour permeable
- low water absorptiveness
- very high resistance to soiling
- very good bonding to substrates

FOR WALLS | FROST- AND WATERPROOF | INDOORS AND OUTDOORS | EASY IN USE | APPLY WITH FLOAT | SPOTTED FINISH

Use

Thin-coat render for application of finishing coats with decorative spotted texture.
For indoor and outdoor use.
Recommended as a finishing coat during installation of building insulation with the use of polystyrene, XPS or mineral wool boards.
For façades exposed to soiling and difficult operation conditions – perfect for buildings located in the vicinity of busy roads, in cities or highly contaminated zones, in areas surrounded by clusters of greenery.

Types of rendered buildings – single- and multi – family, public access, industrial buildings.
Types of substrates – concrete, traditional plasters on walls made of bricks, blocks and ceramic, cellular or silicate hollow bricks, plasterboards, base coats of thermal insulation systems with polystyrene, XPS and mineral wool boards.

Properties

Modern thin-coat silicone render based on advanced siloxane resins.
Resistant to deposition of pollution from the surroundings – forms coat of tight and low absorbent structure, which prevents moisture penetration into its structure – therefore surface keeps dry and impairs deposition of contamination.
Self-cleaning during precipitation – does not require frequent preserving actions.
Forms dense and very clear spotted texture 1.5 mm or 2.0 mm thick.
Render with aggregate 1.5 mm thick is also recommended for machine application with rendering units.
BIO PROTECTION – creates unfavorable conditions for fungi and algae growth due to low water absorption and acid-alkaline reaction.
ELASTICITY AND STRENGTH – formula providing improved elasticity and resistance to impacts; render compensates stress resulting from surface hits better, keeps consistent, does not chip off.
COLOUR DURABILITY – advanced technology provides colour durability resulting from the use of modern pigments, automatic system of dozing and permanently supervised process of manufacturing – render keeps its initial colour, is more resistant to bleaching and UV radiation.
ENVIRONMENTALLY FRIENDLY – render recipe was designed in accordance to the sustainable development aspects: maximally reduced amount of volatile organic compounds and use of natural fillers only.
RESISTANT TO CRACKING – improved resistance resulting from the presence of dispersed microfibers, which strengthen the render within its entire volume – render is protected against possible cracks caused by tension and alternate surface heating and cooling.

400 colours – in accordance with SAH Colour Scheme for Renders and Paints
1 texture – spotted – N
Aggregate grain size: – up to 1.5 mm – N-15
– up to 2.0 mm – N-20

Technical data

ATLAS SILICONE RENDER is manufactured on the basis of water dispersion of synthetic resins and dolomite aggregate.

Density of the ready-to-use product	approx. 1.9 g/cm^3
Mass preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Water vapour permeability g/m^{2}d	$15 < V_2 \leq 150$
Diffusion depending on the air layer thickness	$0.14 \leq S_d \leq 1.4$m

Technical requirements

ATLAS SILICONE RENDER conforms to PN-EN 15824 standard. EC Declaration of Performance No. 145/CPR.

CE 0767	PN-EN 15824:2010 (EN 15824:2009)
Thin-coat silicone render, water – dilutable	for use on internal and external walls, posts and partition walls
Reaction to fire – class	A2-s1, d0
Water vapour permeability – category	V_2 – medium
Water absorption – category	W_2 – medium
Bonding	≥ 0.35 MPa
Durability (resistance to freeze-thaw cycles)	According to the standard PN-EN 1062-3:2008, for absorption $W_2 \leq 0.5$ kg/m^2·h$^{0.5}$ testing of freeze – thaw resistance is not obligatory.
Thermal conductivity coefficient (average tabular value, P=90%)	0,67 W/mK ($\lambda_{10,dry}$) (EN 1745:2002 tab. A.12)

The render is listed in the following approvals for thermal insulation systems:

System name	Technical Approval No.	Certificate No.
ATLAS	ETA 06/0081	EC 1488-CPD-0021
ATLAS ROKER	ETA 06/0173	EC 1488-CPD-0036
ATLAS ETICS	AT-15-9090/2014	FPC-ITB-0562/Z

The product has been given the National Standard Authority of Ireland (NSAI) Certificate no. 10/0347 and the British Board of Agrément (BBA) Certificate no. 13/5018.

Rendering

Substrate preparation

The substrate should be:

- **stable** – sufficiently rigid and sufficiently long stabilized. The assumed stabilization time for substrates is respectively:
  - new cement plasters made of ATLAS mortars - min. 1 week for each 1 cm of thickness,
  - concrete walls – min. 28 days,
- **dry,**
- **even** – irregularities and gaps should be filled with, e. g. ATLAS ZW 50, ATLAS ZW 330, ATLAS PLASTERING MIX or adhesive mortars used for installation of base coats of thermal insulation systems; prime the surface with ATLAS UNI-GRUNT emulsion before repairs,
- **clean** – free from layers which would impair the render bonding, especially dust, dirt, lime, oil, grease, wax, residues of oil and emulsion paints; substrates infected by biological corrosion must be cleaned with ATLAS MYKOS agent,
- **primed** - with ATLAS SILKON ANX priming mass.

Rendering mass preparation

The render is delivered as a ready to use mass. It must not be mixed with other materials, diluted, or thickened. Just before application, the mass should be mixed in order to unify the consistency.

Mass application

Apply the rendering mass with a smooth stainless steel float, with coat of thickness equal to the aggregate grain size. Collect excessive material, put it back in the bucket and remix. Renders of aggregate 1.5 mm thick can be applied mechanically – the following units recommended:
- WAGNER PC 830e with nozzle 6 mm, operational pressure 1 bar,
- MAI 2MULTIPUMP with nozzle 6 mm, operational pressure 1 bar,
- GRACO Textspray RTX 1500 with nozzle 6 mm.

Texture forming

Freshly applied mass requires texture forming with a plastic float, with circular moves. Machine-applied renders are not textured.

Consumption

Average consumption for manual application depends on substrate and render type:
– 2.5 kg for 1 m^2 for N-15 render,
– 3.2 kg for 1 m^2 for N-20 render.
The average consumption for machine application is lower than the one listed above, which results from different rendering coat texture (smaller aggregate concentration).
The actual consumption can be established on basis of sample application upon particular substrate.

Important additional information

- **ATTENTION! Bucket with a silicone render, apart from a description placed on the identification label, is highlighted also with a blue lid.**
- The maximum surface possible to render in a single technological cycle (application and floating; for particular substrate type and weather conditions) should be established experimentally.
- Apply the render with the "wet on wet method", prevent the textured coat from drying before application of the subsequent coat. Otherwise the seams will be visible. Technological breaks have to be planned in advance, e.g. in corners and angles of a building, under rainwater pipes, on lines of contact of two colours, etc.
- Protect the rendered surface both during application and render setting against direct sunlight, wind and precipitation.
- The setting time depends on substrate type, temperature and relative air humidity, and can vary from 12 up to 48 hours. In high humidity and temperature close to +5°C the setting time can extend.
- In order to avoid differences in colour shades an individual surface should be coated with silicone render of the same manufacturing date.
- When rendering external thermal insulation systems one should avoid the use of dark colours, of diffuse reflection coefficient lower than 20%. The share of these colours on façades should not exceed 10% of the surface.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set render can be removed with ATLAS SZOP 2000 agent.
- Harmful to aquatic life with long lasting effects. Keep out of reach of children. Avoid release to the environment. Dispose of contents/ container to appropriately labeled containers designed for selective waste treatment, emptied by an authorized company. Follow the instructions of the Safety Data Sheet.
- Keep in tightly sealed original and labeled containers. Keep in dry and cool places, protect against overheating (> 30 °C) and freezing - the product freezes and irreversibly loses its performance in temperature below 0 °C. Protect against direct sunshine. Incompatible materials: avoid contact with aluminum, copper and alloys of these metals. Shelf life in conditions as specified is 12 months from the production date shown on the packaging.

Packaging

Plastic buckets: 25 kg
Pallet: 600 kg in 25 kg buckets

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-05-09

Up to five
European Technical Approvals
for ATLAS insulation systems

Resistant to cracking

ELASTICITY STRENGTH

bio protection

Environmentally friendly

400 COLOURS SAH

Colour durability

ATLAS ACRYLIC RENDER

thin – coat acrylic render

- low water absorptiveness
- resistant to soiling
- very good bonding to substrates
- easy texture forming
- improved resistance to mechanical damage

FOR WALLS · FROST- AND WATERPROOF · INDOORS AND OUTDOORS · EASY IN USE · APPLY WITH FLOAT · SPOTTED FINISH

Use

Thin-coat render for application of finishing coats with decorative spotted texture.
For indoor and outdoor use.
Recommended as a finishing coat during installation of building insulation with the use of polystyrene or XPS boards.
For façades exposed to dirt and difficult operation conditions – works perfectly on commercial, public access buildings (schools, kindergartens, hospitals, etc.), outhouses.

Types of rendered buildings – single- and multi – family, public access, industrial buildings.
Types of substrates – concrete, traditional plasters on walls made of bricks, blocks and ceramic, cellular or silicate hollow bricks, plasterboards, base coats of thermal insulation systems with polystyrene and XPS boards.

Properties

Thin-coat render based on advanced acrylic resin – up-to-date polymer binder significantly enhances previous limitations of acrylic renders – low water vapour permeability and vulnerability to soiling.
Forms dense and very clear spotted texture 1.5 mm or 2.0 mm thick.
Render with aggregate 1.5 mm thick is also recommended for machine application with rendering units.
BIO PROTECTION – creates unfavorable conditions for fungi and algae growth due to low water absorption and acid-alkaline reaction.
ELASTICITY AND STRENGTH – formula providing improved elasticity and resistance to impacts; render compensates stress resulting from surface hits better, keeps consistent, does not chip off.
COLOUR DURABILITY – advanced technology provides colour durability resulting from the use of modern pigments, automatic system of dozing and permanently supervised process of manufacturing – render keeps its initial colour, is more resistant to bleaching and UV radiation.
ENVIRONMENTALLY FRIENDLY – render recipe was designed in accordance to the sustainable development aspects: maximally reduced amount of volatile organic compounds and use of natural fillers only.
RESISTANT TO CRACKING – improved resistance resulting from the presence of dispersed microfibers, which strengthen the render within its entire volume – render is protected against possible cracks caused by tension and alternate surface heating and cooling.

400 colours – in accordance with SAH Colour Scheme for Renders and Paints	
1 texture	– spotted – N
Aggregate grain size:	– up to 1.5 mm – N-15
	– up to 2.0 mm – N-20

Technical data

ATLAS ACRYLIC RENDER is manufactured on the basis of water dispersion of synthetic resins and dolomite aggregate.

Density of the ready-to-use product	approx. 1.9 g/cm^3
Mass preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Water vapour permeability g/m^{2}d	$15 < V_2 \leq 150$
Diffusion depending on the air layer thickness	$0.14 \leq S_d \leq 1.4$m

Technical requirements

ATLAS ACRYLIC RENDER conforms to PN-EN 15824 standard. EC Declaration of Performance No. 137/CPR.

CE 0767	PN-EN 15824:2010 (EN 15824:2009)
Thin-coat acrylic render, water – dilutable	for use on internal and external walls, posts and partition walls
Reaction to fire – class	A2-s1, d0
Water vapour permeability – category	V_2 – medium
Water absorption – category	W_2 – medium
Bonding	≥ 0.35 MPa
Durability (resistance to freeze-thaw cycles)	According to the standard PN-EN 1062-3:2008, for absorption $W_2 \leq 0.5$ kg/m^2·h$^{0.5}$ testing of freeze – thaw resistance is not obligatory.
Thermal conductivity coefficient (average tabular value, P=90%)	0,67 W/mK ($\lambda_{10,dry}$) (EN 1745:2002 tab. A.12)

The render is listed in the following approvals for thermal insulation systems:

System name	Technical Approval No.	Certificate No.
ATLAS	ETA 06/0081	EC 1488-CPD-0021
ATLAS ETICS	AT-15-9090/2014	FPC-ITB-0562/Z

The product has been given the National Standard Authority of Ireland (NSAI) Certificate no. 10/0347 and the British Board of Agrément (BBA) Certificate no. 13/5018.

Rendering

Substrate preparation

The substrate should be:

- **stable** – sufficiently rigid and sufficiently long stabilized. The assumed stabilization time for substrates is respectively:

- new cement plasters made of ATLAS mortars - min. 1 week for each 1 cm of thickness,
- concrete walls – min. 28 days,

- **dry,**
- **even** – irregularities and gaps should be filled with, e. g. ATLAS ZW 50, ATLAS ZW 330, ATLAS PLASTERING MIX or adhesive mortars used for installation of base coats of thermal insulation systems; prime the surface with ATLAS UNI-GRUNT emulsion before repairs,
- **clean** – free from layers which would impair the render bonding, especially dust, dirt, lime, oil, grease, wax, residues of oil and emulsion paints; substrates infected by biological corrosion must be cleaned with ATLAS MYKOS agent,
- **primed** - with ATLAS CERPLAST priming mass.

Rendering mass preparation

The render is delivered as a ready to use mass. It must not be mixed with other materials, diluted, or thickened. Just before application, the mass should be mixed in order to unify the consistency.

Mass application

Apply the rendering mass with a smooth stainless steel float, with coat of thickness equal to the aggregate grain size. Collect excessive material, put it back in the bucket and remix. Renders with aggregate 1.5 mm thick can be applied mechanically – the following units recommended:

- WAGNER PC 830e with nozzle 6 mm, operational pressure 1 bar,
- MAI 2MULTIPUMP with nozzle 6 mm, operational pressure 1 bar,
- GRACO Textspray RTX 1500 with nozzle 6 mm.

Before the rendering mass application, apply through the hose a little bit of ATLAS CERPLAST mass in order to liquefy the hose and prevent clogging.

Texture forming

Freshly applied mass requires texture forming with a plastic float, with circular moves. Machine-applied renders are not textured.

Consumption

Average consumption for manual application depends on substrate and render type:

– 2.5 kg for 1 m^2 for N-15 render,
– 3.0 kg for 1 m^2 for N-20 render.

The average consumption for machine application is lower than the one listed above, which results from different rendering coat texture (smaller aggregate concentration).

The actual consumption can be established on basis of sample application upon particular substrate.

Important additional information

- **ATTENTION! Bucket with acrylic render, apart from a description placed on the identification label, is highlighted also with a yellow lid.**
- The maximum surface possible to render in a single technological cycle (application and floating; for particular substrate type and weather conditions) should be established experimentally.
- Apply the render with the "wet on wet method", prevent the textured coat from drying before application of the subsequent coat. Otherwise the seams will be visible. Technological breaks have to be planned in advance, e.g. in corners and angles of a building, under rainwater pipes, on lines of contact of two colours, etc.
- Protect the rendered surface both during application and render setting against direct sunlight, wind and precipitation.
- The setting time depends on substrate type, temperature and relative air humidity, and can vary from 12 up to 48 hours. In high humidity and temperature close to +5°C the setting time can extend.
- In order to avoid differences in colour shades an individual surface should be coated with acrylic render of the same manufacturing date.
- When rendering external thermal insulation systems one should avoid the use of dark colours, of diffuse reflection coefficient lower than 20%. The share of these colours on façades should not exceed 10% of the surface.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set render can be removed with ATLAS SZOP 2000 agent.
- Harmful to aquatic life with long lasting effects. Keep out of reach of children. Avoid release to the environment. Dispose of contents/ container to appropriately labeled containers designed for selective waste treatment, emptied by an authorized company. Follow the instructions of the Safety Data Sheet.
- Keep in tightly sealed original and labeled containers. Keep in dry and cool places, protect against overheating (> 30 °C) and freezing - the product freezes and irreversibly loses its performance in temperature below 0 °C. Protect against direct sunshine. Incompatible materials: avoid contact with aluminum, copper and alloys of these metals. Shelf life in conditions as specified is 12 months from the production date shown on the packaging.

Packaging

Plastic buckets: 25 kg
Pallet: 600 kg in 25 kg buckets

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-05-09

Up to five
European Technical Approvals
for ATLAS insulation systems

ATLAS ACRYLIC-SILICONE RENDER

thin – coat acrylic - silicone render

- water vapour permeability
- very low water absorptiveness
- very high resistance to soiling
- very good bonding to substrates

Resistant to cracking

ELASTICITY STRENGTH

bio protection

Environmentally friendly

400 COLOURS SAH

Colour durability

FOR WALLS

FROST- AND WATERPROOF

INDOORS AND OUTDOORS

APPLY WITH FLOAT

APPLY WITH FLOAT

SPOTTED FINISH

Use

Thin-coat render for application of finishing coats with decorative spotted texture.
For indoor and outdoor use.
Recommended as a finishing coat during installation of building insulation with the use of polystyrene and XPS.
For façades exposed to soiling and difficult operation conditions – perfect for buildings located in the vicinity of busy roads, in cities or highly contaminated zones, in areas surrounded by clusters of greenery.

Types of rendered buildings – single- and multi – family, public access, industrial buildings.
Types of substrates – concrete, traditional plasters on walls made of bricks, blocks and ceramic, cellular or silicate hollow bricks, plasterboards, base coats of thermal insulation systems with polystyrene and XPS boards.

Properties

Modern thin-coat render based on innovative mix of two binders – acrylic and silicone resin.
Characterised by the lowest surface water absorptiveness among render types, perfectly protects substrates against water action.
Owing to silicone resin, it offers significantly higher resistance to soiling in comparison to standard acrylic renders.
Forms dense and very clear spotted texture 1.5 mm thick.
Recommended also for machine application with rendering units.
BIO PROTECTION – creates unfavorable conditions for fungi and algae growth due to low water absorption and acid-alkaline reaction.
ELASTICITY AND STRENGTH – formula providing improved elasticity and resistance to impacts; render compensates stress resulting from surface hits better, keeps consistent, does not chip off.
COLOUR DURABILITY – advanced technology provides colour durability resulting from the use of modern pigments, automatic system of dozing and permanently supervised process of manufacturing – render keeps its initial colour, is more resistant to bleaching and UV radiation.
ENVIRONMENTALLY FRIENDLY – render recipe was designed in accordance to the sustainable development aspects: maximally reduced amount of volatile organic compounds and use of natural fillers only.
RESISTANT TO CRACKING – improved resistance resulting from the presence of dispersed microfibers, which strengthen the render within its entire volume – render is protected against possible cracks caused by tension and alternate surface heating and cooling.

400 colours	– in accordance with SAH Colour Scheme for Renders and Paints
1 texture	– spotted – N
Aggregate grain size:	– up to 1.5 mm – N-15

Technical data

ATLAS ACRYLIC-SILICONE RENDER is manufactured on the basis of water dispersion of synthetic resins and dolomite aggregate.

Density of the ready-to-use product	approx. 1.9 g/cm^3
Mass preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Water vapour permeability g/m^{2}d	$15 < V_2 \leq 150$
Diffusion depending on the air layer thickness	$0.14 \leq S_d \leq 1.4$m

Technical requirements

ATLAS ACRYLIC-SILICONE RENDER conforms to PN-EN 15824 standard. EC Declaration of Performance No. 124/CPR.

CE 0767	PN-EN 15824:2010 (EN 15824:2009)
Thin-coat acrylic-silicone render, water – dilutable	for use on internal and external walls, posts and partition walls
Reaction to fire – class	A2-s1, d0
Water vapour permeability – category	V_2 – medium
Water absorption – category	W_2 – medium
Bonding	≥ 0.35 MPa
Durability (resistance to freeze-thaw cycles)	According to the standard PN-EN 1062-3:2008, for absorption $W_2 \leq 0.5$ kg/m^2·h$^{0.5}$ testing of freeze – thaw resistance is not obligatory.
Thermal conductivity coefficient (average tabular value, P=90%)	0,67 W/mK ($\lambda_{10,dry}$) (EN 1745:2002 tab. A.12)

The render is listed in the following approvals for thermal insulation systems:

System name	Technical Approval No.	Certificate No.
ATLAS	ETA 06/0081	EC 1488-CPD-0021
ATLAS ETICS	AT-15-9090/2014	FPC-ITB-0562/Z

Rendering

Substrate preparation

The substrate should be:

- **stable** – sufficiently rigid and sufficiently long stabilized. The assumed stabilization time for substrates is respectively:
- new cement plasters made of ATLAS mortars - min. 1 week for each 1 cm of thickness,
- concrete walls – min. 28 days,
- **dry,**
- **even** – irregularities and gaps should be filled with, e. g. ATLAS ZW 50, ATLAS ZW 330, ATLAS PLASTERING MIX or adhesive mortars used for installation of base coats of thermal insulation systems; prime the surface with ATLAS UNI-GRUNT emulsion before repairs,
- **clean** – free from layers which would impair the render bonding, especially dust, dirt, lime, oil, grease, wax, residues of oil and emulsion paints; substrates infected by biological corrosion must be cleaned with ATLAS MYKOS agent,
- **primed** - with ATLAS CERPLAST priming mass.

Rendering mass preparation

The render is delivered as a ready to use mass. It must not be mixed with other materials, diluted, or thickened. Just before application, the mass should be mixed in order to unify the consistency.

Mass application

Apply the rendering mass with a smooth stainless steel float, with coat of thickness equal to the aggregate grain size. Collect excessive material, put it back in the bucket and remix. Renders can also be applied mechanically – the following units recommended:

- WAGNER PC 830e with nozzle 6 mm, operational pressure 1.5 bar,
- MAI 2MULTIPUMP with nozzle 6 mm, operational pressure 1 bar,
- GRACO Textspray RTX 1500 with nozzle 6 mm.

Texture forming

Freshly applied mass requires texture forming with a plastic float, with circular moves. Machine-applied renders are not textured.

Consumption

Consumption for manual application depends on substrate and render type, on average 2.5 kg for 1 m^2.

The average consumption for machine application is lower than the one listed above, which results from different rendering coat texture (smaller aggregate concentration).

The actual consumption can be established on basis of sample application upon particular substrate.

Important additional information

- **ATTENTION! Bucket with acrylic-silicone render, apart from a description placed on the identification label, is highlighted also with a green lid.**
- The maximum surface possible to render in a single technological cycle (application and floating; for particular substrate type and weather conditions) should be established experimentally.
- Apply the render with the "wet on wet method", prevent the textured coat from drying before application of the subsequent coat. Otherwise the seams will be visible. Technological breaks have to be planned in advance, e.g. in corners and angles of a building, under rainwater pipes, on lines of contact of two colours, etc.
- Protect the rendered surface both during application and render setting against direct sunlight, wind and precipitation.
- The setting time depends on substrate type, temperature and relative air humidity, and can vary from 12 up to 48 hours. In high humidity and temperature close to +5°C the setting time can extend.
- In order to avoid differences in colour shades an individual surface should be coated with acrylic-silicone render of the same manufacturing date.
- When rendering external thermal insulation systems one should avoid the use of dark colours, of diffuse reflection coefficient lower than 20%. The share of these colours on façades should not exceed 10% of the surface.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set render can be removed with ATLAS SZOP 2000 agent.
- Harmful to aquatic life with long lasting effects. Keep out of reach of children. Avoid release to the environment. Dispose of contents/ container to appropriately labeled containers designed for selective waste treatment, emptied by an authorized company. Follow the instructions of the Safety Data Sheet.
- Keep in tightly sealed original and labeled containers. Keep in dry and cool places, protect against overheating (> 30 °C) and freezing - the product freezes and irreversibly loses its performance in temperature below 0 °C. Protect against direct sunshine. Incompatible materials: avoid contact with aluminum, copper and alloys of these metals. Shelf life in conditions as specified is 12 months from the production date shown on the packaging.

Packaging

Plastic buckets: 25 kg
Pallet: 600 kg in 25 kg buckets

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-05-09

Up to five
European Technical Approvals
for ATLAS insulation systems

ATLAS SILICONE-SILICATE RENDER

thin – coat silicone-silicate render

- very high water vapour permeability
- low water absorptiveness
- resistant to soiling
- very good bonding to substrates

Resistant to cracking

ELASTICITY STRENGTH

bio protection

Environmentally friendly

400 COLOURS SAH

Colour durability

FOR WALLS

FROST- AND WATERPROOF

INDOORS AND OUTDOORS

APPLY WITH FLOAT

APPLY WITH FLOAT

SPOTTED FINISH

Use

Thin-coat render for application of finishing coats with decorative spotted texture.
For indoor and outdoor use.
Recommended as a finishing coat during installation of building insulation with the use of polystyrene, XPS or mineral wool boards.
For façades where it is crucial to keep high water vapour permeability of external partitions – perfect for buildings made of cellular concrete, walls of old buildings, swimming pools or kitchens.

Types of rendered buildings – single- and multi – family, public access, industrial buildings.
Types of substrates – concrete, traditional plasters on walls made of bricks, blocks and ceramic, cellular or silicate hollow bricks, plasterboards, base coats of thermal insulation systems with polystyrene, XPS and mineral wool boards.

Properties

Modern thin-coat render based on unique mix of organic and inorganic binder. Characterised by very high water vapour permeability assisted by low water absorptiveness and, which is typical for pure silicone renders, great resistance to dirt.
Forms dense and very clear spotted texture 1.5 mm or 2.0 mm thick.
Render with aggregate 1.5 mm thick is also recommended for machine application with rendering units.
BIO PROTECTION – creates unfavorable conditions for fungi and algae growth due to low water absorption and acid-alkaline reaction.
ELASTICITY AND STRENGTH – formula providing improved elasticity and resistance to impacts; render compensates stress resulting from surface hits better, keeps consistent, does not chip off.
COLOUR DURABILITY – advanced technology provides colour durability resulting from the use of modern pigments, automatic system of dozing and permanently supervised process of manufacturing – render keeps its initial colour, is more resistant to bleaching and UV radiation.
ENVIRONMENTALLY FRIENDLY – render recipe was designed in accordance to the sustainable development aspects: maximally reduced amount of volatile organic compounds and use of natural fillers only.
RESISTANT TO CRACKING – improved resistance resulting from the presence of dispersed microfibers, which strengthen the render within its entire volume – render is protected against possible cracks caused by tension and alternate surface heating and cooling.

400 colours	– in accordance with SAH Colour Scheme for Renders and Paints
1 texture	– spotted – N
Aggregate grain size:	– up to 1.5 mm – N-15 – up to 2.0 mm – N-20

Technical data

ATLAS SILICONE-SILICATE RENDER is manufactured on the basis of organic binders and marble aggregate.

Density of the ready-to-use product	approx. 1.9 g/cm^3
Mass preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Water vapour permeability g/m^{2}d	V_1 > 150
Diffusion depending on the air layer thickness	S_d < 0.14 m

Technical requirements

ATLAS SILICONE-SILICATE RENDER conforms to PN-EN 15824 standard. EC Declaration of Performance No. 125/CPR.

CE 0767	PN-EN 15824:2010 (EN 15824:2009)
Thin-coat silicone-silicate render, water – dilutable	for use on internal and external walls, posts and partition walls
Reaction to fire – class	A2-s1, d0
Water vapour permeability – category	V_1 – high
Water absorption – category	W_2 – medium
Bonding	≥ 0.35 MPa
Durability (resistance to freeze-thaw cycles)	According to the standard PN-EN 1062-3:2008, for absorption $W_2 \leq 0.5$ kg/m^2·h$^{0.5}$ testing of freeze – thaw resistance is not obligatory.
Thermal conductivity coefficient (average tabular value, P=90%)	0,67 W/mK ($\lambda_{10,dry}$) (EN 1745:2002 tab. A.12)

The render is listed in the following approvals for thermal insulation systems:

System name	Technical Approval No.	Certificate No.
ATLAS	ETA 06/0081	EC 1488-CPD-0021
ATLAS ROKER	ETA 06/0173	EC 1488-CPD-0036
ATLAS ETICS	AT-15-9090/2014	FPC-ITB-0562/Z

Rendering

Substrate preparation

The substrate should be:

- **stable** – sufficiently rigid and sufficiently long stabilized. The assumed stabilization time for substrates is respectively:
  - new cement plasters made of ATLAS mortars - min. 1 week for each 1 cm of thickness,
  - concrete walls – min. 28 days,
- **dry,**
- **even** – irregularities and gaps should be filled with, e. g. ATLAS ZW 50, ATLAS ZW 330, ATLAS PLASTERING MIX or adhesive mortars used for installation of base coats of thermal insulation systems; prime the surface with ATLAS UNI-GRUNT emulsion before repairs,
- **clean** – free from layers which would impair the render bonding, especially dust, dirt, lime, oil, grease, wax, residues of oil and emulsion paints; substrates infected by biological corrosion must be cleaned with ATLAS MYKOS agent,
- **primed** - with ATLAS SILKON ANX priming mass.

Rendering mass preparation

The render is delivered as a ready to use mass. It must not be mixed with other materials, diluted, or thickened. Just before application, the mass should be mixed in order to unify the consistency.

Mass application

Apply the rendering mass with a smooth stainless steel float, with coat of thickness equal to the aggregate grain size. Collect excessive material, put it back in the bucket and remix. Renders with aggregate 1.5 mm thick can be applied mechanically – the following units recommended:
- MAI 2MULTIPUMP with nozzle 6 mm, operational pressure 1 bar,
- GRACO Textspray RTX 1500 with nozzle 6 mm.

Texture forming

Freshly applied mass requires texture forming with a plastic float, with circular moves. Machine-applied renders are not textured.

Consumption

Average consumption for manual application depends on substrate and render type:
- 2.5 kg for 1 m^2 for N-15 render,
- 3.2 kg for 1 m^2 for N-20 render.

The average consumption for machine application is lower than the one listed above, which results from different rendering coat texture (smaller aggregate concentration).
The actual consumption can be established on basis of sample application upon particular substrate.

Important additional information

- **ATTENTION! Bucket with a silicone-silicate render, apart from a description placed on the identification label, is highlighted also with an orange lid.**
- The maximum surface possible to render in a single technological cycle (application and floating; for particular substrate type and weather conditions) should be established experimentally.
- Apply the render with the "wet on wet method", prevent the textured coat from drying before application of the subsequent coat. Otherwise the seams will be visible. Technological breaks have to be planned in advance, e.g. in corners and angles of a building, under rainwater pipes, on lines of contact of two colours, etc.
- Protect the rendered surface both during application and render setting against direct sunlight, wind and precipitation.
- The setting time depends on substrate type, temperature and relative air humidity, and can vary from 12 up to 48 hours. In high humidity and temperature close to +5°C the setting time can extend.
- In order to avoid differences in colour shades an individual surface should be coated with silicone-silicate render of the same manufacturing date.
- When rendering external thermal insulation systems one should avoid the use of dark colours, of diffuse reflection coefficient lower than 20%. The share of these colours on façades should not exceed 10% of the surface.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set render can be removed with ATLAS SZOP 2000 agent.
- Harmful to aquatic life with long lasting effects. Keep out of reach of children. Avoid release to the environment. Dispose of contents/ container to appropriately labeled containers designed for selective waste treatment, emptied by an authorized company. Follow the instructions of the Safety Data Sheet.
- Keep in tightly sealed original and labeled containers. Keep in dry and cool places, protect against overheating (> 30 °C) and freezing - the product freezes and irreversibly loses its performance in temperature below 0 °C. Protect against direct sunshine. Incompatible materials: avoid contact with aluminum, copper and alloys of these metals. Shelf life in conditions as specified is 12 months from the production date shown on the packaging.

Packaging

Plastic buckets: 25 kg
Pallet: 600 kg in 25 kg buckets

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At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-05-09

ATLAS DEKO M

decorative mosaic render

- compositions of coloured quartz aggregates
- highly resistant to mechanical damage
- highly resistant to washing and abrasion
- for walls of corridors, exhibition halls, offices
- for façades, plinths, fencing and posts

Use

Forms unique colour compositions based on coloured quartz aggregate – rich colour palette allows for remarkable freedom of designing and execution of exhibition rooms, car showrooms, offices, apartments, staircases, waiting rooms, halls, hallways, façades, etc.
Forms light and durable render of improved resistance to washing, cleaning and abrasion – perfect for plinths, fences, resistance walls, posts - extremely resistant to damage resulting from atmospheric conditions and surface washing.
Recommended for surfaces exposed to high thermal and operation loads – owing to high elasticity, perfectly compensates stress resulting from different heat expansion of layers beneath, caused, e.g., by long term exposition to sunlight.

Types of rendered buildings – single- and multi – family, public access, industrial buildings.
Types of substrates – concrete, traditional plasters (cement, cement-lime and gypsum) on walls made of bricks, blocks and ceramic hollow blocks, plasterboards, base coats of thermal insulation systems with polystyrene and XPS boards.

Properties

Resistant to structural soiling – low absorptiveness limits the possibility of render structural soiling.
High hardness – owing to the use of quartz aggregate.
Protected with MYCO PROTECT system - creates unfavorable conditions for fungi and algae growth due to low water absorption and acid-alkaline reaction.
Water vapour permeable – enables diffusion of water vapour.
Hydrophobic – polymer dispersions limit render absorptiveness without limiting its water vapour permeability.
Can be used in low temperature (0-5°C) and high humidity (above 80%) – after adding ATLAS ESKIMO agent

ATLAS DEKO M render is available in the following options:

Option	Form	Colours
Option DEKO M: ready–to–use	package contains ready–to–use mass	60 ready–to–use colour compositions – preparation of custom compositions possible as well.
Option DEKO M: base + aggregate	two components (base in a bucket and aggregate dosed according to recipe of a particular colour)	
Option TM1	• four components (base in a bucket and aggregate in a particular colour) • additionally buckets with silver brocade or black mica	84 colour compositions available – on the basis of 7 aggregate colours. Aggregate of a particular colour packed in a separate bag. Three bags required for render preparation. Available aggregate colours: A1 black, A2 white, A3 brick red, A4 brown, A5 sandstone, A7 silver. Sample colour labelling (three numbers): A1 A2 A3, A1 A1 A1, A4 A5 A1, etc.
Option TM3	two components (base in a bucket and a bag of aggregate composition)	20 ready–to–use colour compositions marked TM3. Sample colour labelling (TM3 and three numbers): TM3 017, TM3 018, etc.

Technical data

ATLAS DEKO M is manufactured on the basis of acrylic resin with coloured quartz aggregate.

Density of the ready-to-use product	approx. 1.7 g/cm^3 (ATLAS DEKO M TM1) approx. 1.6 g/cm^3 (ATLAS DEKO M other types)
Mass preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C

Technical requirements

ATLAS DEKO M conforms to PN-EN 15824:2010 standard. EC Declaration of Performance No. 049/CPR.

CE 0767	PN-EN 15824:2010 (EN 15824:2009)
Thin-coat acrylic render, water – dilutable	for use on internal and external walls, posts and partition walls
Reaction to fire – class • for renders up to 2.0 mm • for renders up to 1.2 mm	 A2-s1, d0 B-s1, d0
Water vapour permeability – category	V_2 – medium
Water absorption – category	W_2 – medium
Bonding	≥ 0.35 MPa
Durability (resistance to freeze-thaw cycles)	According to the standard PN-EN 1062-3:2008, for absorption W2 ≤ 0.5 kg/m^2·h^{0,5} testing of freeze – thaw resistance is not obligatory.
Thermal conductivity coefficient (average tabular value, P=90%)	0.67 W/mK ($\lambda_{10,dry}$) (EN 1745:2002 tab. A.12)

The render is listed in the following approvals for thermal insulation systems:

System name	Technical Approval No.	Certificate No.
ATLAS ETICS	AT-15-9090/2014	FPC-ITB-0562/Z

The product has been given the Radiation Hygiene Certificate.

Rendering

Substrate preparation

The substrate should be:

- **stable** – sufficiently rigid and sufficiently long stabilized. The assumed stabilization time for substrates is respectively:
  - new cement plasters made of ATLAS mortars - min. 1 week for each 1 cm of thickness,
  - gypsum plasters approx. 1.5 cm thick drying in temperature approx. 20°C - 14 days,
  - concrete walls – min. 28 days.

Plasters beneath ATLAS DEKO M should be finished rough, do not extract "bleed water" from gypsum plasters. Traditionally smoothed gypsum plasters should be made matt.

- **dry,**
- **even** – irregularities and gaps should be filled with, e. g. ATLAS ZW 50, ATLAS ZW 330, ATLAS PLASTERING MIX or adhesive mortars used for installation of base coats of thermal insulation systems; prime the surface with ATLAS UNI-GRUNT emulsion before repairs. (CAUTION! Pay special attention to substrate evenness when using very fine aggregate DEKO M TM1 renders),
- **clean** – free from layers which would impair the render bonding, especially dust, dirt, lime, oil, grease, wax, residues of oil and emulsion paints; substrates infected by biological corrosion must be cleaned with ATLAS MYKOS agent,
- **primed**
  - with ATLAS CERPLAST priming mass,
  - with ATLAS CERPLAST S priming mass – beneath ATLAS DEKO M TM1 type renders used with templates (available on custom order).

Beneath particular colour compositions one should use coloured priming mass ATLAS CERPLAST or ATLAS CERPLAST S available in colours: clinker, brown, graphite, sandstone, grey. In order to emphasize the results of application with templates it is advisable to choose priming mass ATLAS CERPLAST S in colour contrasting with the render composition.

Rendering mass preparation

The render is delivered in the following options:

- ready-to-use mass in a bucket,
- two components – base in a bucket and aggregate in a bag (ATLAS DEKO M option TM3),
- four components – base in a bucket and aggregate in 3 bags (ATLAS DEKO M option TM1).

The rendering mass preparation depends on the product form:

Option 1 – mass needs to be stirred before use. It must not be mixed with other materials, diluted or thickened. Just before application, the mass should be mixed in order to unify the consistency.

Option 2 – two components. Pour the aggregate into a bucket with base and mix thoroughly with a mixer with a drill for mortars.

Additionally, ATLAS DEKO M option TM1 can be supplemented with mica or brocade. Note: use only one of the additives with an individual render. Mica or brocade can be added during rendering mass preparation only – pour whole additive package into a bucket with base or a bucket with mixed rendering mass. In the second case – mix thoroughly in order to distribute the additive uniformly within the mass.

Mass application and render smoothing

Apply the rendering mass with a smooth stainless steel trowel, with coat of thickness equal to the aggregate grain size, smooth in one direction in the same time. Lead the trowel at small angle towards the smoothed surface in order to avoid irregularities.

CAUTION! For renders ATLAS DEKO M option TM1, due to fine aggregate, one may find necessary to apply the render in two coats. The second coat can be applied when the first one dries, after approx. 24 hours. Irregular floating (particularly when using brocade or mica additives) can result in uneven render texture and can cause local differences in render shade.

Collect excessive material, put it back in the bucket and remix.

Mass application and render smoothing with templates

When using ATLAS DEKO M option TM1 renders, in order to form additional visual effect, one can use self-adhesive cardboard templates (available on custom order). The template projects shape of natural stone or brick on walls. Coat the substrate with ATLAS CERPLAST S priming mass available on custom order in colours listed in the technical data sheet. When the priming mass dries, stick the templates upon the wall, make sure they adjoin precisely and bond well to the substrate. Apply ATLAS DEKO M option TM1 render as described above. Just after the render application and smoothing, remove the templates – ATLAS CERPLAST S imitates grout between surfaces imitating stones.

Consumption

The actual consumption can be established on basis of sample application upon particular substrate. Depending on coat thickness and substrate type, the average consumption is:

ATLAS DEKO M option: - ready–to–use - base + aggregate Colours labelled with numbers from 111 up to 522	approx. 3 - 4 kg / 1 m^2	approx. 4.5-5.5 kg / 1 m^2 for renders 120,122, 216, 218, 219, 222, 313, 314, 317, 420, 514, 515
Option TM1	approx. 1.5 – 2.5 kg / 1 m^2	
Option TM3 Colours labelled with symbols TM3	approx. 3 - 4 kg / 1 m^2	approx. 4.5-5.5 kg / 1 m^2 for renders TM3-007, TM3-012

Important additional information

- Use coloured ATLAS CERPLAST or ATLAS CERPLAST S beneath particular render colour compositions:

Priming mass colour	DEKO M colour	DEKO M TM1 colour	DEKO M TM3 colour
brown	120, 221, 316, 512, 513, 514, 516	A4 A4 A1, A3 A4 A1, A4 A4 A3, A4 A5 A3, A4 A7 A3, A4 A4 A4, A3 A4 A2, A4 A4 A2, A4 A5 A4, A4 A7 A4, A4 A6 A4, A4 A6 A3	TM3 013, TM3 016, TM3 017, TM3 018
clinker	121, 220, 319, 320, 416, 417, 418, 517	A3 A3 A1, A3 A5 A3, A3 A6 A3, A3 A7 A3, A3 A4 A3, A3 A3 A3, A3 A3 A2	TM3 019
graphite	122, 219, 314, 315, 419, 420, 518, 519, 522	A1 A7 A1, A1 A6 A1, A1 A1 A1, A4 A5 A1, A1 A5 A1, A1 A2 A1, A1 A4 A1, A1 A3 A1, A3 A5 A1	
sandstone		A5 A5 A2, A5 A5 A5, A5 A7 A5, A5 A6 A5, A5 A5 A1, A5 A5 A3, A5 A5 A4, A5 A6 A4	
grey		A6 A6 A5, A6 A7 A2, A6 A6 A2, A7 A7 A2, A7 A7 A5, A6 A7 A5, A7 A7 A7, A6 A6 A6, A6 A7 A6, A7 A7 A6, A2 A7 A1, A2 A6 A1, A5 A6 A1, A5 A7 A1, A6 A7 A1, A7 A7 A1, A4 A6 A1, A4 A7 A1, A6 A6 A1, A3 A6 A1, A3 A7 A1, A6 A7 A4, A7 A7 A4, A6 A6 A3, A7 A7 A3, A6 A7 A3, A6 A6 A4	

- After application render has milky-white colour and gets proper colour shade after setting. High air humidity and low temperature can extend the time of setting and can cause change in the colour shade.
- On constant contact with water, render can get milky-white colour which disappears when the surface dries. It is not recommended to apply the render upon surfaces exposed to prolonged water action or damp (e.g. horizontal surfaces or those with slight slope, in ponds, etc.) or those without appropriate damp proofing.
- In order to avoid differences in colour shades:
  - for ready-to-use option - an individual surface should be coated with render of the same manufacturing date,
  - for option TM1 – when two or three packages of same colour used – use packages of the same manufacturing date (date shown on labels on bag front).
- The maximum surface possible to render in a single technological cycle (application and floating; for particular substrate type and weather conditions) should be established experimentally.
- When joining application areas, apply render with the "wet on wet method", prevent the smoothed coat from drying. Otherwise the seams will be visible. Technological breaks have to be planned in advance, e.g. in corners and angles of a building, under rainwater pipes, on lines of contact of two colours, etc.
- Protect the rendered surface both during application and render setting against direct sunlight, wind and precipitation.
- The setting time depends on substrate type, temperature and relative air humidity, and can vary from 12 up to 48. In high humidity and temperature close to +5°C the setting time can extend.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set render can be removed with ATLAS SZOP 2000 agent.
- Harmful to aquatic life with long lasting effects. Keep out of reach of children. Avoid release to the environment. Dispose of contents/ container to appropriately labeled containers designed for selective waste treatment, emptied by an authorized company. Follow the instructions of the Safety Data Sheet.
- Keep in tightly sealed original and labeled containers. Keep in dry and cool places, protect against overheating (> 30 °C) and freezing - the product freezes and irreversibly loses its performance in temperature below 0 °C. Protect against direct sunshine. Incompatible materials: avoid contact with aluminum, copper and alloys of these metals. Shelf life in conditions as specified is 12 months from the production date shown on the packaging (for ATLAS DEKO M ready-to-use). For ATLAS DEKO M option TM3 and TM1 as well as option base + aggregate, the mixed product should be used not later than 12 months from the base production date.

Packaging

Option	Packaging
ATLAS DEKO M ready-to-use	Plastic buckets 15 kg, 25 kg Pallet: 540 kg in 15 kg buckets, 600 kg in 25 kg buckets
ATLAS DEKO M, option TM3	Plastic buckets with base 7.6 kg Paper bags with aggregate 17.7 kg
ATLAS DEKO M, option TM1	Plastic buckets with base 7.6 kg Paper bags with aggregate 5.4 kg Plastic bucket with brocade 125 g Plastic bucket with mica 75 g

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-12-04

TABLE 11. 2

PRODUCT		
	ATLAS CERPLAST/ AVAL KT 16*	ATLAS SILKON ANX/ AVAL KT 76
Reference document	Primers are covered with technical approvals for the thermal insulation systems	
TYPE OF RENDER		
Mineral	✓	
Acrylic	✓	
Mosaic (e.g. DEKO M/ KT 77)	✓	
Silicone		✓
Acrylic-silicone	✓	
Silicone-silicate		✓
TECHNICAL DATA		
Density [g/cm^3]	1.5	1.5
Application of render after [h]	4-6	4-6
Temperature during application and substrate temperature [°C]	5-30	5-30
Consumption [kg/m^2]	0.3	0.3

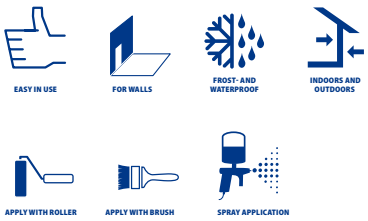
Note:

* Product can be applied as contact coat on difficult substrates e.g. OSB boards, old terrazzo.

Up to five European Technical Approvals for ATLAS insulation systems

ATLAS CERPLAST
priming mass for renders

- ensures perfect bonding of renders
- reduces absorptiveness and strengthens substrates
- facilitates render application and texture forming
- unifies substrate colour
- available in several colours



Use

Primes substrates beneath ATLAS thin-coat renders – mineral, acrylic, acrylic-silicone and mosaic DEKO M.
Improves bonding – strongly bonds to substrates and applied renders.
Limits substrate absorptiveness – prevents excessive water transfer from freshly applied renders into substrates.
Facilitates application of subsequent coat – rough surface reduces "slip" of the applied render.
Forms temporary protective layer for a façade – protects non-rendered façade against weather conditions within half a year.

Types of substrates – concrete, traditional plasters on walls made of bricks, ceramic, cellular or silicate blocks or hollow blocks, plasterboards, thermal insulation systems with polystyrene, XPS and mineral wool.

Properties

Contains aggregate – improves bonding owing to significant broadening of the effective surface between layers (forms rough surface).
Protects substrates against adverse effects of the new coat – forms chemical barrier between substrate and render, limits their interaction – reduces colour penetration from substrates and occurrence of stains on the render surface.
High bonding – min. 1.0 MPa for concrete.
White priming mass – additionally, with particular ATLAS DEKO M and other thin-coat renders, available in three main colours: brown, clinker, graphite. The priming mass can also be coloured according to SAH Colour Scheme by the tinting systems.

CERPLAST colour (available in 15 kg and 25 kg packages only)	Number of DEKO M render
Brown	120, 221, 316, 512, 513, 514 and 516
Clinker	121, 220, 319, 320, 416, 417, 418 and 517
Graphite	122, 219, 314, 315, 419, 420, 518, 519 and 522

Technical data

ATLAS CERPLAST is manufactured on the basis of acrylic resins and quartz powder.

Density of the ready-to-use product	approx. 1.5 g/cm^3
Bonding to concrete	> 1.0 MPa
Mass preparation temperature, substrate and ambient temperature during work	from +5°C to +30°C
Drying time	4 ÷ 6 h

Technical requirements

ATLAS CERPLAST is listed in the following approvals for thermal insulation systems:

System name	Technical Approval No.	Certificate No.
ATLAS	ETA 06/0081	EC 1488-CPD-0021
ATLAS XPS	ETA 07/0316	EC 1488-CPD-0075
ATLAS ROKER	ETA 06/0173	EC 1488-CPD-0036
ATLAS RENOTER	AT-15-8477/2010	FPC-ITB-0456/Z
ATLAS ETICS	AT-15-9090/2014	FPC-ITB-0562/Z
ATLAS ROKER	AT-15-2930/2012	FPC-ITB-0436/Z
ATLAS ROKER G	AT-15-7314/2011	FPC-ITB-0222/Z

The product has been given the National Standard Authority of Ireland (NSAI) Certificate no. 10/0347 and the British Board of Agrément (BBA) Certificate no. 13/5018.
The mass has been given the Hygienic Evaluation of the National Institute of Hygiene and the Radiation Hygiene Certificate.

Priming

Substrate preparation

The substrate should be:

- **stable** – sufficiently rigid and sufficiently long stabilized. The assumed stabilization time for substrates is respectively:
  - new cement plasters made of ATLAS mortars - min. 1 week for each 1 cm of thickness,
  - concrete walls – min. 28 days,
- **dry**,
- **even** – irregularities and gaps should be filled with, e. g. ATLAS ZW 50, ATLAS ZW 330, ATLAS PLASTERING MIX or adhesive mortars used for installation of base coats of thermal insulation systems; prime the surface with ATLAS UNI-GRUNT emulsion before repairs,
- **clean** – free from layers which would impair the render bonding, especially dust, dirt, lime, oil, grease, wax, residues of oil and emulsion paints; substrates infected by biological corrosion must be cleaned with ATLAS MYKOS agent.

Mass preparation

The product is manufactured as a ready-to-use mass. It must not be mixed with other materials, thinned or thickened. Just before use, mix the mass in order to unify the consistency.

Mass application

Apply the priming mass upon prepared substrate (uniformly upon the whole surface) using a roller, a brush or mechanically.

Rendering

Rendering or cladding fixing can commence when the mass dries completely, i.e. after 4 ÷ 6 hours since application.

Consumption

Average consumption: approx. 0.3 kg/1 m^2.

Important additional information

- Protect the primed surface both during application and mass drying against direct sunlight, wind and precipitation.
- Tools must be cleaned with clean water directly after use.
- Avoid contact with skin and eyes. Avoid release to the environment. Follow the instructions of the Safety Data Sheet.
- Keep in tightly sealed original and labeled containers. Keep in dry and cool places, protect against overheating (> 30 °C) and freezing - the product freezes and irreversibly loses its performance in temperature below 0 °C. Protect against direct sunshine. Incompatible materials: avoid contact with aluminum, copper and alloys of these metals. Shelf life in conditions as specified is 12 months from the production date shown on the packaging.

Packaging

Plastic buckets: 5 kg, 10 kg, 15 kg and 25 kg
Pallet: 625 kg in 5 kg buckets, 650 kg in 10 kg buckets, 660 kg in 15 kg buckets, 600 kg in 25 buckets.

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-05-26

Up to five European Technical Approvals for ATLAS insulation systems

ATLAS SILKON ANX

priming mass for silicone and silicone-silicate renders

- ensures perfect bonding of renders
- reduces absorptiveness and strengthens substrates
- facilitates render application and texture forming
- unifies substrate colour
- water vapour permeable

Use

Primes substrates beneath ATLAS thin-coat silicone and silicone-silicate renders.
Improves bonding – strongly bonds to substrates and applied renders.
Limits substrate absorptiveness – prevents excessive water transfer from freshly applied renders into substrates.
Facilitates application of subsequent coat – rough surface reduces "slip" of the applied render.
Forms temporary protective layer for a façade – protects non-rendered façade against weather conditions within half a year.

Types of substrates – concrete, traditional plasters on walls made of bricks, ceramic, cellular or silicate blocks or hollow blocks, plasterboards, thermal insulation systems with polystyrene, XPS and mineral wool.

Properties

Contains aggregate – improves bonding owing to significant broadening of the effective surface between layers (forms rough surface).
Protects substrates against adverse effects of the new coat – forms chemical barrier between substrate and render, limits their interaction – reduces colour penetration from substrates and occurrence of stains on the render surface.
High bonding – min. 1.0 MPa for concrete.

Technical data

ATLAS SILKON ANX is manufactured on the basis of organosilicon resin and quartz powder.

Density of the ready-to-use product	approx. 1.5 g/cm^3
Bonding to concrete	> 1.0 MPa
Mass preparation temperature, substrate and ambient temperature during work	from +5°C to +30°C
Drying time	4 ÷ 6 h

Technical requirements

ATLAS SILKON ANX is listed in the following approvals for thermal insulation systems:

System name	Technical Approval No.	Certificate No.
ATLAS	ETA 06/0081	EC 1488-CPD-0021
ATLAS XPS	ETA 07/0316	EC 1488-CPD-0075
ATLAS ROKER	ETA 06/0173	EC 1488-CPD-0036
ATLAS RENOTER	AT-15-8477/2010	FPC-ITB-0456/Z
ATLAS ETICS	AT-15-9090/2014	FPC-ITB-0562/Z
ATLAS ROKER	AT-15-2930/2012	FPC-ITB-0436/Z
ATLAS ROKER G	AT-15-7314/2011	FPC-ITB-0222/Z

The product has been given the National Standard Authority of Ireland (NSAI) Certificate no. 10/0347 and the British Board of Agrément (BBA) Certificate no. 13/5018.
The mass has been given the Radiation Hygiene Certificate.

Priming

Substrate preparation

The substrate should be:

- **stable** – sufficiently rigid and sufficiently long stabilized. The assumed stabilization time for substrates is respectively:
  - new cement plasters made of ATLAS mortars - min. 1 week for each 1 cm of thickness,
  - concrete walls – min. 28 days,
- **dry**,
- **even** – irregularities and gaps should be filled with, e. g. ATLAS ZW 50, ATLAS ZW 330, ATLAS PLASTERING MIX or adhesive mortars used for installation of base coats of thermal insulation systems; prime the surface with ATLAS UNI-GRUNT emulsion before repairs,
- **clean** – free from layers which would impair the render bonding, especially dust, dirt, lime, oil, grease, wax, residues of oil and emulsion paints; substrates infected by biological corrosion must be cleaned with ATLAS MYKOS agent.

Mass preparation

The product is manufactured as a ready-to-use mass. It must not be mixed with other materials, thinned or thickened. Just before use, mix the mass in order to unify the consistency.

Mass application

Apply the priming mass upon prepared substrate (uniformly upon the whole surface) using a roller or a brush.

Rendering

Rendering can commence when the mass dries completely, i.e. after 4 ÷ 6 hours since application.

Consumption

Average consumption: approx. 0.3 kg/1 m^2.

Important additional information

- Protect the primed surface both during application and mass drying against direct sunlight, wind and precipitation.
- Tools must be cleaned with clean water directly after use.
- Avoid contact with skin and eyes. In case of contact with eyes seek medical advice. Follow the instructions of the Safety Data Sheet.
- Keep in tightly sealed original and labeled containers. Keep in dry and cool places, protect against overheating (> 30 °C) and freezing - the product freezes and irreversibly loses its performance in temperature below 0 °C. Protect against direct sunshine. Incompatible materials: avoid contact with aluminum, copper and alloys of these metals. Shelf life in conditions as specified is 12 months from the production date shown on the packaging.

Packaging

Plastic buckets: 15 kg
Pallet: 660 kg in 15 kg buckets.

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-03-05

FAÇADE PAINTS

FAÇADE PAINTS

Painting is one of the most common techniques of façade refurbishment – it improves aesthetics and resistance to outdoor conditions. ATLAS façade paints are next products allowing our partners to finish their houses with materials of the highest quality. Wide colour range meets expectations of any, even the most demanding tastes, and numerous types of paints enable to choose the most suitable top finish.

Good façade paint should be resistant to unfavourable action of:
- **water** - in form of rain and air humidity
- **sun** - change of temperature and UV radiation causing façade fading (colours fading)
- **chemical compounds** - contained by polluted air and acid rains which contribute to render and façade top finish deterioration

The most important components of paints are:
- **binder** - determining their properties
- **pigmen**t – giving them required colour
- **fillers** – ensuring very good coating

There are various types of paints available nowadays and we can divide them on the basis of binder used in the production process:
- **acrylic** – binder consists of acrylic resin. The most common type of façade paints. Owing to very good bonding to substrate, these paints can be used for initial and refurbishment painting. They offer long term durability and high resistance to abrasion. They coat surfaces perfectly, therefore are economical in use. Acrylic paints can be easily coloured, therefore they are offered in wide range of shades allowing to coat various decorative elements. Acrylic paint coating is elastic, free of own strain, chemically neutral (pH approx. 7-8).

- **silicate** - binder consists of potassium silicate. Silicate paints, owing to chemical binding between ingredients, perfectly bond to mineral substrates. They are resistant to aggressive ingredients of mineral renders, therefore can be used before the end of render carbonation process (which significantly shortens technological breaks). They are resistant to precipitation, weathering and aggressive environmental compounds. Silicate paints do not form coats, but penetrate into substrate pores and perfectly reflect structure of painted substrates.

- **silicone** - binder consists of silicone resins, i.e. polymers with silicone molecules. These paints form coating protecting against water ingress, therefore form environment less vulnerable to microbiological corrosion (water does not penetrate into wall structure), so called hydrophobic coat. Simultaneously, owing to good water vapour permeability, this paint ensures free water vapour permeability, i.e. free transfer of water vapour from interiors. This paint also holds anti-adhesion properties – dirt and dust bond façade poorly and façade cleans itself with precipitation. This effect is often called the "lotus effect"..

TABLE 12.1

PRODUCT			
	ATLAS UNI-GRUNT/ AVAL KT 17	ATLAS ARKOL SX	ATLAS ARKOL NX
Reference document	Primers are covered with technical approvals for the thermal insulation systems		
TYPE OF FAÇADE PAINT			
Acrylic	✓		
Silicate		✓	
Silicone			✓
TECHNICAL DATA			
Density [g/cm^3]	1.0	1.0	1.0
Drying time [min]	30	30	30
Temperature of application [°C]	5-25	5-30	5-30
Painting after [h]	2	4	4
Consumption [kg/m^2]	0.05-0.2	0.2	0.05-0.2

Note:
Primers beneath paints are used when unification of substrate absorptiveness is required.

TABLE 12.2

PRODUCT			
	ATLAS SALTA E	ATLAS SALTA S	ATLAS SALTA/ AVAL KT 46
Reference document	Paints are covered with technical approvals for the thermal insulation systems		
Type of paint	Acrylic	Silicate	Silicone modified
Number of colours	400	352	400
TECHNICAL DATA			
Primer	Not required	ARKOL SX	Not required
Density [kg/dm^3]	1.5	1.5	1.4
Temperature during application and substrate temperature [°C]	5-30	5-25	5-30
Drying time [h]	2-4	2-6	2-6
Next coat application after [h]	6	6	6
Application on fresh mineral render after min. [days]	28	2	5
Coverage from 1 litre (single application) [m^2] *	4-8	3.5-5	4-8
SUBSTRATE TYPE			
Mineral substrates: concrete, traditional plasters	✓	✓	✓
Thin-coat mineral renders	✓	✓	✓
Thin-coat acrylic render	✓		✓
Thin-coat acrylic-silicone render	✓		✓
Thin-coat silicone render			✓
Thin-coat silicone-silicate render			✓
Thin-coat silicate render		✓	✓
FINISHING COAT FOR THERMAL INSULATION			
Insulation system with EPS/XPS	✓	✓	✓
Insulation system with mineral wool		✓	✓

* Actual coverage depends on the substrate absorptiveness and the texture of painted surface. We recommend establishing the exact consumption on a test basis.

Up to five
European Technical Approvals
for ATLAS insulation systems

ATLAS SALTA E
façade acrylic paint

- outstanding colour durability
- perfectly coating and efficient
- highly resistant to algae contamination
- self–cleaning ability

bio protection

environmentally friendly

colour durability

400 COLOURS SAH

FOR WALLS | INDOORS AND OUTDOORS | EASY IN USE | APPLY WITH BRUSH | APPLY WITH ROLLER | SPRAY APPLICATION

Durable colours

ATLAS SALTA E paint offers high resistance to fading, UV radiation and soiling. The use of modern pigments, advanced technology of production and ingredients dosing gives the paint very good working and operation parametres, and, above all, long term colour durability.

Use

Recommended for surfaces exposed to pollution and significant operation load – due to high abrasion resistance and low absorptiveness, it is perfect for places exposed to these factors: on façades of schools, shops, sport facilities, buildings situated along communication routes, in staircases, corridors, etc.
Recommended for surfaces exposed to high thermal load – due to elasticity and high resistance to cracks and scratches, the paint compensates strain resulting from different heat expansion of layers beneath, e.g. present on sunlit façades.
Can be used as decorative and protective coat.

Types of substrates – cement and cement-lime plasters, thin-coat mineral and dispersion renders, rough walls made of concrete, bricks, blocks and ceramic or silicate hollow blocks.
Types of painted buildings - residential, single- and multi-family housing, industrial, public access building, outhouses.

Properties

Low water absorption – protects substrate against moisture permeating from the outside.
Perfect operation parametres – resistant to weathering, precipitation and any type of aggressive substances present both in substrates and natural environment.
Well coating.
BIO PROTECTION – creates unfavorable conditions for fungi and algae growth due to low water absorption and acid-alkaline reaction.
Self–cleaning effect - paint surface is extremely consistent, microscopically smooth, therefore particles of dirt, algae and fungi spores easily lose contact with and are naturally removed with rain and wind.
Application in low temperature (from 0°C) and high humidity (above 80%) – after adding ATLAS ESKIMO agent.
Forms smooth and matt surface – no wrinkles, cracks or gloss.
Colour durability – the use of modern pigments and fillers allows for freedom of the façade colour selection and unchanged shade durability for many years.
400 colours – in accordance with SAH Colour Scheme for Renders and Paints.

Technical data

ATLAS SALTA E paint is manufactured on the basis of acrylic dispersion with addition of high quality fillers and chemical agents. ATLAS SALTA E wall paint for outdoor use: maximum content of VOC in the product: 26.5 g/l, maximum allowable content of VOC: 40 g/l.

Density	approx. 1.52 kg/dm^3
Bonding grade (according to PN-80/C-81531)	1
S_d	0.14 - 1.4 m
Paint preparation, substrate and ambient temperature during work	from +5°C to +25°C
Next coat application*	after approx. 6 h
Drying time*	from 2 to 4 h

*) Note: for setting conditions: temperature+20°C, air humidity 50%

Parametres of ATLAS SALTA E according to EN 1062-1:2004 standard.

Gloss G	G_3 – matt
Coat thickness E	E_3 – 100 <E <200 µm
Grain size	S_1 – fine < 100 µm
Water vapour permeability coefficient V	medium 15 > V_1 > 150 [g/m^{2}d]
Water permeability W	low W_3 < 0.1 [kg/m^{2}h$^{0.5}$]

Technical requirements

The paint is listed in the following approvals for thermal insulation systems:

System name	Technical Approval No.	Certificate No.
ATLAS	ETA 06/0081	EC 1488-CPD-0021

The product has been given the Radiation Hygiene Certificate.

Painting

Substrate preparation
The substrate should be dry and structurally sound, i.e. strong enough and free from layers which would impair paint bonding, in particular efflorescence, dust, dirt, wax and grease. Thoroughly remove any old paint coats and poorly bonded layers. Repair and float minor defects (e.g. cracks or gaps), e. g with ATLAS ZW 330 mortar. Highly absorbable and absorptive substrates should be primed with ATLAS UNI-GRUNT emulsion.
Rendering coats can be painted when they set fully, not earlier however than after:

mineral renders ATLAS CERMIT SN, DR, SN-MAL, ND and ND for painting	4–6 weeks
acrylic renders	7 days
traditional plasters	4–6 weeks

Paint preparation

The paint is delivered ready to use. It must not be mixed with other materials. Mix well before use in order to unify consistency. Mechanical mixing with a low speed mixer with a drill recommended.

Paint dilution
For the first, base paint coating, paint can be diluted with water in ratio: max. 0.15 l of water with 10 l of paint. Keep the same dilution ratio over the whole painted surface. **Use undiluted paint for final painting.**

Painting
Apply the paint upon prepared and stable substrate with thin and uniform coat. Paint can be applied with a roller, a brush or sprayed (nozzle PAA517, pressure 200 bars). Depending on substrate absorptiveness and structure, paint can be applied with one or two coats. When applying the first (base) coat upon structural renders it is advisable to use diluted paint, keep the ratio as listed above. The subsequent coat can be applied when the first one dries fully (after min. 6 hours), with criss-cross pattern, keep the same application direction of a particular paint coat. Technological breaks have to be planned in advance, e.g. in corners and angles of a building, under rainwater pipes, on lines of contact of two colours, etc. Apply the paint continuously (using the "wet on wet method") and avoid breaks in application. The time of drying depends on substrate, temperature and relative air humidity and can vary from approx. 2 up to 4 hours.

Consumption

Consumption depends on substrate absorptiveness and surface structure The actual consumption can be established on basis of sample application upon particular substrate. The average consumption for one coat painting upon renders and plasters is listed in the table below.

Render/plaster type	Consumption for 1 m^2	Coverage of 1l
mineral, e.g. CERMIT SN, DR, and SN-MAL, ND and ND for painting	approx. 0.25 l	approx. 4.0 m^2
dispersion, e.g. SAH renders	approx. 0.20 l	approx. 5.0 m^2
traditional, e.g. ATLAS PLASTERING MIX, ATLAS REKORD GREY	approx. 0.15 l	approx. 7.0 – 8.0 m^2

Important additional information

- Protect the painted surface both during application and paint drying against direct sunlight, wind and precipitation.
- In order to avoid differences in colour shades an individual surface should be coated with paint of the same manufacturing date
- As a result of painting, natural slight smoothing of substrate texture occurs. Painting surfaces differing in surface structure and technological parametres can result in the effect of various shades of the same paint colour.
- Clean the tools with clean water directly after use, before paint setting.
- Harmful to aquatic life with long lasting effects. Keep out of reach of children. Avoid release to the environment. Dispose of contents/container to appropriately labeled containers designed for selective waste treatment, emptied by an authorized company. Follow the instructions of the Safety Data Sheet.
- Keep in tightly sealed original and labeled containers. Keep in dry and cool places, protect against overheating (> 30 °C) and freezing - the product freezes and irreversibly loses its performance in temperature below 0 °C. Protect against direct sunshine. Incompatible materials: avoid contact with aluminum, copper and alloys of these metals. Shelf life in conditions as specified is 12 months from the production date shown on the packaging.

Packaging

Plastic buckets: 10 l
Pallet: 440 l in 10 l buckets

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-08-10

Up to five
European Technical Approvals
for ATLAS insulation systems

ATLAS SALTA S
façade silicate paint

- highly alkaline, resistant to fungi, algae, lichen
- perfect water vapour permeability
- long term durability and façade protection
- for painting fresh mineral renders

bio protection | environmentally friendly | colour durability | 352 COLOURS SAH | FOR WALLS | INDOORS AND OUTDOORS | EASY IN USE | APPLY WITH BRUSH | APPLY WITH ROLLER | SPRAY APPLICATION

Technology

Hybrid silicate binder – ATLAS SALTA S is manufactured on the basis of mineral binder – potassium silicate supported by polymers – therefore it offers unique physical and chemical properties, perfect workability and, above all, long term durability with no change of technical and aesthetic parametres.
Mineral characteristic of paint offers:
- **the highest water vapour permeability, therefore full permeability of building walls and no accumulation of damp in partition** – product recommended for application upon heritage or renovated buildings and renovation plasters.
- **chemical binding which permanently bonds paint to substrate, therefore eliminates risk of paint cracking and loosening under static stress and thermal deformation,**
- **resistance to microbiological aggression: algae, moss and lichen even in most demanding locations (close to forests, parks, meadows, water reservoirs)** – high product alkalinity protects against biological corrosion which destroys surface aesthetics,
- **shorter technological breaks during façade work and reduction of costs** – fresh mineral renders can be painted three days since their application with no risk of efflorescence.

Inorganic pigments – specially selected pigments ensure long term resistance to destructive action of UV radiation and colour durability.
Polymer additives – binding additives and coat hydrophobic agents reduce product absorptiveness and protect substrate against precipitation, damp ingress and soiling.

Use

Wide range of use – on single- and multi-family housing, public access, commercial, healthcare buildings, outhouses, heritage buildings.
Types of substrates – cement and cement-lime plasters, thin-coat mineral and silicate renders, concrete (monolithic and prefabricated), gypsum plasters and finishes, plasterboards, rough walls made of concrete, bricks, blocks and ceramic or silicate hollow blocks, silicate paint coatings.

Properties

Very high water vapour permeability – ensures free transfer of water vapour and damp diffusion through substrate the paint is used upon.
Penetrates the substrate structure and forms uniform system, invulnerable to cracking and loosening.
Available in 352 colours - in accordance to SAH Colour Scheme for Renders and Paints.
Perfect coating – owing to the use of inorganic pigments, the paint offers perfect and durable effect after single coating.
BIO PROTECTION – creates unfavorable conditions for fungi and algae growth due to highly alkaline reaction, ensures long term protection.
Enables painting fresh thin-coat mineral renders 48 hours since their application.

Technical data

ATLAS SALTA S paint is manufactured on the basis of potassium silicate and high quality polymers, fillers and chemical agents. ATLAS SALTA S wall paint for outdoor use: maximum content of VOC in the product: 22.29 g/l, maximum allowable content of VOC (category A/a): 30 g/l.

Density	approx. 1.50 kg/dm^3
Bonding grade (according to PN-80/C-81531)	1
S_d	0.02 m
Coating	Class 2/ coverage 8 m^2
pH	11-12
Content of solid substances	56 %
Paint preparation, substrate and ambient temperature during work	from +5°C to +25°C
Next coat application*	after approx. 6 h
Drying time*	from 2 h

*) Note: for setting conditions: temperature+20°C, air humidity 50%

Parametres of ATLAS SALTA S according to EN 1062-1:2004 standard.

Gloss G	G_3 – matt
Coat thickness E	E_3 – 100 <E <200 µm
Grain size	S_1 – fine < 100 µm
Coating the cracks	A1 < 100 µm
Water vapour permeability coefficient V	high V_1 > 150 [g/m^{2}d]
Water permeability W	medium 0.1 < W_2 < 0.5 [kg/m^{2}h$^{0.5}$]

Technical requirements

The paint is listed in the following approvals for thermal insulation systems:

System name	Technical Approval No.	Certificate No.
ATLAS	ETA 06/0081	EC 1488-CPD-0021
ATLAS ROKER	ETA 06/0173	EC 1488-CPD-0036
ATLAS ETICS	AT-15-9090/2016	FPC-ITB-0562/Z
ATLAS ROKER	AT-15-2930/2016	FPC-ITB-0436/Z

The product has been given the Radiation Hygiene Certificate.

Painting

Substrate preparation
The substrate should be dry and structurally sound, i.e. strong enough and free from layers which would impair paint bonding, in particular efflorescence, dust, dirt, wax and grease. Thoroughly remove any old paint coats and poorly bonded layers. Repair and float minor defects (e.g. cracks or gaps), e.g. with ATLAS ZW 330 mortar. Substrates of low absorptiveness and fresh render do not require priming. Highly absorbable and absorptive substrates should be primed with ATLAS ARKOL SX emulsion.
Rendering coats can be painted when they set fully, not earlier however than after:

mineral renders ATLAS CERMIT SN, DR, SN-MAL, ND and ND for painting	72 hours
ATLAS PLASTERING MIX	72 hours

Paint preparation
The paint is delivered ready to use. Mix well before use in order to unify consistency, remove foil separator (when using uncoloured paint).

Paint dilution
For the first paint coating, particularly when carrying out work in ambient or substrate temperature close to maximum allowable (+25°C), paint can be diluted with ATLAS ARKOL SX emulsion in ratio: max. 0.70 l of preparation with 10 l of paint. Keep the same dilution ratio over the whole painted surface. **Use undiluted paint for final painting.**

Painting
Apply the paint with thin and uniform coat with a roller, a brush or spray. Depending on substrate absorptiveness and structure, paint can be applied with one or two coats. Technological breaks have to be planned in advance, e.g. in corners and angles of a building, under rainwater pipes, on lines of contact of two colours, etc. Apply the paint continuously (using the "wet on wet method") and avoid breaks in application. The time of drying depends on substrate, temperature and relative air humidity and can vary from approx. 2 up to 6 hours.

Consumption

Consumption depends on substrate absorptiveness and surface structure. The actual consumption can be established on basis of sample application upon particular substrate. The average consumption for one coat painting upon renders and plasters is listed in the table below.

Render/plaster type	Consumption for 1 m^2	Coverage of 1l
mineral, e.g. CERMIT SN, DR, and SN-MAL, ND and ND for painting	approx. 0.22 l	approx. 3.5-4.5 m^2
silicate, e.g. SILKAT N	approx. 0.20 l	approx. 4.5-5.0 m^2
traditional, e.g. ATLAS PLASTERING MIX, ATLAS REKORD GREY	approx. 0.20 l	approx. 5.0 m^2

Important additional information

- Before painting, protect any elements close to the area of application, e.g. window panes, joinery, flashings, etc. When silicate paint dries, stains caused by it cannot be removed without risk of damage to the surface.
- Protect the painted surface both during application and paint drying against direct sunlight, wind and precipitation.
- In order to avoid differences in colour shades an individual surface should be coated with paint of the same manufacturing date
- As a result of painting, natural slight smoothing of substrate texture occurs. Painting surfaces differing in surface structure and technological parametres can result in the effect of various shades of the same paint colour.
- Clean the tools with clean water directly after use, before paint setting.
- Harmful to aquatic life with long lasting effects. Keep out of reach of children. Avoid release to the environment. Dispose of contents/container to appropriately labeled containers designed for selective waste treatment, emptied by an authorized company. Follow the instructions of the Safety Data Sheet.
- Keep in tightly sealed original and labeled containers. Keep in dry and cool places, protect against overheating (> 30 °C) and freezing - the product freezes and irreversibly loses its performance in temperature below 0 °C. Protect against direct sunshine. Incompatible materials: avoid contact with aluminum, copper and alloys of these metals. Shelf life in conditions as specified is 12 months from the production date shown on the packaging.

Packaging

Plastic buckets: 10 l
Pallet: 300 l in 10 l buckets

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-09-07

Up to five
European Technical Approvals
for ATLAS insulation systems

ATLAS ARKOL SX

primer for silicate paints

- for absorptive and absorbable substrates
- improves bonding
- strengthens substrates
- fast drying and efficient

Use

Primes substrates beneath silicate paints – e.g. ATLAS SALTA S – allows to keep outstanding paint properties concerning bonding to substrates, water vapour permeability, etc.
Primes substrates before application of repair mortars – in case of leveling surfaces for further painting or coating with silicate renders.
Used for dilution of silicate paints, e.g. ATLAS SALTA S – only for paint used as the base coat.

Types of substrates – cement and cement-lime plasters, thin-coat mineral renders, rough walls of concrete, bricks, blocks and ceramic or silicate hollow blocks.

Properties

Strengthens and unifies substrate absorptiveness.
Improves bonding of ATLAS SALTA S silicate paint.
Transparent after drying.

Technical data

ATLAS ARKOL SX is manufactured on the basis of potassium silicate. ATLAS ARKOL SX priming paint: maximum content of VOC in the product: 7.39 g/l, maximum allowable VOC content: 30 g/l.

Density	approx. 1.0 kg/dm^3
Substrate and ambient temperature during work	from +5°C to +30°C
Drying time	approx. 30 minutes
Next coat application	after approx. 4 hours
Painting	after approx. 4 hours

Technical requirements

The product is not classified as construction material. ATLAS ARKOL SX is listed in the following approvals for thermal insulation systems:

System name	Technical Approval No.	Certificate No.
ATLAS	ETA 06/0081	EC No. 1488-CPD-0021
ATLAS ROKER	ETA 06/0173	EC No. 1488-CPD-0036
ATLAS XPS	ETA 07/0316	EC No. 1488-CPD-0075
ATLAS ROKER G	AT-15-7314/2011	FPC - ITB-0222/Z
ATLAS ROKER	AT-15-2930/2012	FPC - ITB-0436/Z
ATLAS RENOTER	AT-15-8477/2010	FPC-ITB-0456/Z
ATLAS ETICS	AT-15-9090/2014	FPC-ITB-0562/Z

The product has been given the National Standard Authority of Ireland (NSAI) Certificate no. 10/0347 and the British Board of Agrément (BBA) Certificate no. 13/5018.
The product has been given the Radiation Hygiene Certificate.

Priming

Substrate preparation
The substrate should be dry and structurally sound, i.e. strong enough and free from layers which would impair paint bonding, in particular efflorescence, dust, dirt, wax and grease. Thoroughly remove any old paint coats and poorly bonded layers. Repair and float minor defects (e.g. cracks or gaps).

Primer preparation
ATLAS ARKOL SX is manufactured as a ready-to-use emulsion. It must not be mixed with other materials or thickened.

Silicate paint dilution
Use maximum 7% of primer (in volume ratio) to dilute ATLAS SALTA S paint – max. 0.7 l of primer can be added to one 10 l bucket of paint. Only paint used as the first, base coat can be diluted. **Use undiluted paint for final painting.**

Priming
Apply the primer upon substrate with a roller or a brush, with thin and uniform coat. Priming can be repeated upon very absorbable surfaces, apply the primer perpendicularly to the first coat. The second coat can be applied after minimum 4 hours since the first priming. The time of drying depends on substrate, temperature and relative air humidity, approx. 30 minutes. Substrates to be coated with silicate paints must be primed min. 4 hours before the paint application.

Consumption

The average consumption is 0.2 kg of emulsion for 1 m^2. Actual consumption depends on the substrate absorptiveness and can be established on basis of sample application upon particular substrate.

Important additional information

- Before priming, protect any elements close to the area of application, e.g. window panes, joinery, flashings, etc. When silicate primer or paint dries, stains caused by it cannot be removed without risk of damage to the surface.
- Protect the primed surface both during application and emulsion drying against direct sunlight, wind and precipitation.
- Clean the tools with clean water directly after use before primer setting.
- The product contains water glass and can be aggressive to metals, glass and wood. Keep out of reach of children. After direct contact with eyes – wash with plenty of water and contact a doctor. Follow the instructions of the Safety Data Sheet.
- Keep in tightly sealed original and labeled containers. Keep in dry and cool places, protect against overheating (> 30 °C) and freezing - the product freezes and irreversibly loses its performance in temperature below 0 °C. Protect against direct sunshine. Incompatible materials: avoid contact with aluminum, copper and alloys of these metals. Shelf life in conditions as specified is 12 months from the production date shown on the packaging.

Packaging

Plastic drums: 5 kg
Pallet: 540 kg in 5 kg drums

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-03-05

Up to five European Technical Approvals for ATLAS insulation systems

ATLAS SALTA
modified silicone paint

- outstanding colour durability
- well coating
- highly resistant to soiling
- no primer required
- low absorptiveness

bio protection | environmentally friendly | colour durability | 400 COLOURS SAH

FOR WALLS | INDOORS AND OUTDOORS | EASY IN USE | APPLY WITH BRUSH | APPLY WITH ROLLER | SPRAY APPLICATION

Durable colours

ATLAS SALTA paint offers high resistance to fading, UV radiation and soiling. The use of modern pigments, advanced technology of production and ingredients dosing gives the paint very good working and operation parametres, and, above all, long term colour durability.

Use

Wide range of use – on single- and multi-family housing, industrial, public access buildings, outhouses.
Can be used as decorative and protective coat – also upon surfaces exposed to high thermal and operation load.
Recommended upon fresh renders – painting thin-coat mineral renders 5 days since their application.

Types of substrates – cement and cement-lime plasters, thin-coat mineral and dispersion renders, gypsum plasters and finishes, rough walls made of concrete, bricks, blocks and ceramic or silicate hollow blocks.

Properties

BIO PROTECTION – creates unfavorable conditions for fungi and algae growth due to low water absorption and acid-alkaline reaction.
PEARL EFFECT – water absorbability reduced to minimum – advanced technology based on silicone dispersion effectively protects painted wall against soaking.
Forms surface resistant to dirt bonding - paint surface is extremely consistent, microscopically smooth, therefore particles of dirt, algae and fungi spores easily lose contact with and are naturally removed with rain and wind.
ENVIRONMENTALLY FRIENDLY – by our concern for the natural environment the paint recipe is based on natural fillers only, with maximum volatile compounds content reduction.
Does not require a primer – the first paint coat primes the substrate (refers to fresh renders).
Water vapour permeability – paint surface forms microscopic, so called "breathing", structure providing free transfer of water vapour through the painted partition.
Elasticity – high resistance to cracks and scratches owing to compensation of strains resulting from different thermal expansion of substrate layers.
Stable in use – resistant to weathering, changeable atmospheric conditions and aggressive elements contained by substrate and natural environment, obtained due to binders combination – paint combines the advantages of silicate and dispersion paints, high elasticity, perfect water vapour permeability, low absorptiveness and good resistance to abrasion.
Free arrangement - palette of 400 popular colours, in accordance to SAH Colour Scheme for Renders and Paints.
Application in low temperature (from 0°C) and high humidity (above 80%) – after adding ATLAS ESKIMO agent.

Technical data

ATLAS SALTA paint is manufactured on the basis of specially selected polymer dispersion and high quality fillers and pigments. ATLAS SALTA wall paint for outdoor use: maximum content of VOC in the product: 39.9 g/l, maximum allowable content of VOC: 40 g/l.

Density	approx. 1.45 kg/dm^3
Bonding grade (according to PN-80/C-81531)	1
S_d	< 0.14 m
Paint preparation, substrate and ambient temperature during work	from +5°C to +30°C
Next coat application*	after approx. 6 h
Drying time*	from 2 to 6 h

*) Note: for setting conditions: temperature +20°C, air humidity 50%

Parametres of ATLAS SALTA according to EN 1062-1:2004 standard.

Gloss G	G_3 – matt
Coat thickness E	E_3 – 100 <E <200 µm
Grain size	S_1 – fine < 100 µm
Water vapour permeability coefficient V	medium $15 > V_2 > 150$ [g/m^{2}d]
Water permeability W	low $W_3 < 0.1$ [kg/m^{2}h$^{0.5}$]

Technical requirements

The paint is listed in the following approvals for thermal insulation systems

System name	Technical Approval No.	Certificate No.
ATLAS	ETA 06/0081	EC 1488-CPD-0021
ATLAS ROKER	ETA 06/0173	EC 1488-CPD-0036
ATLAS ETICS	ATLAS ETICS	FPC-ITB-0562/Z

The product has been given the Radiation Hygiene Certificate.

Painting

Substrate preparation
The substrate should be dry and structurally sound, i.e. strong enough and free from layers which would impair paint bonding, in particular efflorescence, dust, dirt, wax and grease. Thoroughly remove any old paint coats and poorly bonded layers. Repair and float minor defects (e.g. cracks or gaps), e.g. with ATLAS ZW 330 mortar. Substrates of low absorptiveness and fresh render do not require priming. Highly absorbable and absorptive substrates should be primed with ATLAS ARKOL NX emulsion.
Rendering coats can be painted when they fully set, not earlier however than after:

mineral renders ATLAS CERMIT SN, DR, SN-MAL, ND and ND for painting	5 days
acrylic renders	7 days
traditional plasters	2–4 weeks

Paint preparation
The paint is delivered ready to use. It must not be mixed with other materials. Mix well before use in order to unify consistency. Mechanical mixing with a low speed mixer with a drill recommended.

Paint dilution
For base paint coating, particularly upon substrates with clear texture, e.g. thin-coat renders, paint can be diluted with water in ratio: max. 0.20 l of water with 10 l of paint. Keep the same dilution ratio over the whole painted surface. **Use undiluted paint for final painting.**

Painting
Apply the paint with thin and uniform coat with a roller, a brush or spray. When applying the first (base) coat upon structural renders it is advisable to use diluted paint, keep the ratio as listed above. The subsequent coat can be applied in direction perpendicular to the previous one, after min. 6 hours. Technological breaks have to be planned in advance, e.g. in corners and angles of a building, under rainwater pipes, on lines of contact of two colours, etc. Apply the paint continuously (using the "wet on wet method") and avoid breaks in application. The time of drying depends on substrate, temperature and relative air humidity and can vary from approx. 2 up to 6 hours. The time of drying depends on paint colour intensity.

Consumption

Consumption depends on substrate absorptiveness and surface structure. The actual consumption can be established on basis of sample application upon particular substrate. The average consumption for one coat painting upon renders and plasters is listed in the table below.

Render/plaster type	Consumption for 1 m^2	Coverage of 1l
mineral, e.g. CERMIT SN, DR, and SN-MAL, ND and ND for painting	approx. 0.25 l	approx. 4.0 m^2
dispersion, e.g. SAH renders	approx. 0.20 l	approx. 5.0 m^2
traditional, e.g. ATLAS PLASTERING MIX, ATLAS REKORD GREY	approx. 0.15 l	approx. 7.0 – 8.0 m^2

Important additional information

- Painting must not be carried out in high humidity and low temperature below +5°C (with ATLAS ESKIMO below 0°C). Protect the painted surface both during application and paint drying against direct sunlight, wind and precipitation. In adverse weather conditions, application of the third coat may be necessary to unify the surface.
- When painting fresh render/plaster, façade must be protected with covers from the commencement of rendering/plastering until 24 hours since finishing the painting. Fresh mineral renders set within minimum 5 days in favorable conditions (temperature above +5°C, humidity below 65%). In adverse weather conditions the time of setting can extend.
- When painting old renders/plasters, at least 48 hours of drying must be provided since the end of precipitation (the higher air humidity, the longer this time should be).
- Failure to observe the manufacturer's requirements concerning substrate preparation, technology of use and façade protection can lead to natural phenomenon of discolouration and salt efflorescence.
- Surface colour uniformity depends largely on dryness of substrate. Mixing all the buckets together assure homogenous colour upon an individual substrate.
- In order to avoid differences in colour shades an individual surface should be coated with paint of the same manufacturing date
- As a result of painting, natural slight smoothing of substrate texture occurs. Painting surfaces differing in surface structure and technological parametres can result in the effect of various shades of the same paint colour.
- Clean the tools with clean water directly after use, before paint setting.
- Harmful to aquatic life with long lasting effects. Keep out of reach of children. Avoid release to the environment. Dispose of contents/container to appropriately labeled containers designed for selective waste treatment, emptied by an authorized company. . The paint is marketed in the form of paste - water suspension, there is no possibility of dust inhalation. Following the Regulation of the Minister of Health on labelling hazardous substances and hazardous mixtures and some mixtures, supported by opinion of the Chemical Substances Office, labeling the paint was renounced. Follow the instructions of the Safety Data Sheet.
- Keep in tightly sealed original and labeled containers. Keep in dry and cool places, protect against overheating (> 30 °C) and freezing - the product freezes and irreversibly loses its performance in temperature below 0 °C. Protect against direct sunshine. Incompatible materials: avoid contact with aluminum, copper and alloys of these metals. Shelf life in conditions as specified is 12 months from the production date shown on the packaging.

Packaging

Plastic buckets: 10 l
Pallet: 440 l in 10 l buckets

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-06-30

Up to five
European Technical Approvals
for ATLAS insulation systems

ATLAS ARKOL NX

primer for silicone paints

- for absorptive and absorbable substrates
- improves bonding
- strengthens substrates
- fast drying and efficient

Use

Primes substrates beneath silicone paints – e.g. ATLAS SALTA – allows to keep outstanding paint properties concerning bonding to substrates, water vapour permeability, etc.

Types of substrates – cement and cement-lime plasters, thin-coat mineral and dispersion renders, gypsum plasters and finishes, rough walls made of concrete, bricks, blocks and ceramic or silicate hollow blocks.

Properties

Strengthens and unifies substrate absorptiveness.
Improves bonding of ATLAS SALTA silicone paint.
Transparent after drying.

Technical data

ATLAS ARKOL NX is manufactured on the basis of specially selected organosilicone dispersion. ATLAS ARKOL NX priming paint: maximum content of VOC in the product: 19.93 g/l, maximum allowable VOC content: 30 g/l.

Density	approx. 1.0 kg/dm^3
Substrate and ambient temperature during work	from +5°C to +30°C
Drying time	approx. 30 minutes
Next coat application	after approx. 4 hours
Painting	after approx. 4 hours

Technical requirements

The product is not classified as construction material. ATLAS ARKOL NX is listed in the following approvals for thermal insulation systems:

System name	Technical Approval No.	Certificate No.
ATLAS	ETA 06/0081	EC No. 1488-CPD-0021
ATLAS ROKER	ETA 06/0173	EC No. 1488-CPD-0036
ATLAS XPS	ETA 07/0316	EC No. 1488-CPD-0075
ATLAS ROKER G	AT-15-7314/2011	FPC - ITB-0222/Z
ATLAS ROKER	AT-15-2930/2012	FPC - ITB-0436/Z
ATLAS RENOTER	AT-15-8477/2010	FPC-ITB-0456/Z
ATLAS ETICS	AT-15-9090/2014	FPC-ITB-0562/Z

The product has been given the National Standard Authority of Ireland (NSAI) Certificate no. 10/0347 and the British Board of Agrément (BBA) Certificate no. 13/5018.
The product has been given the Radiation Hygiene Certificate.

Priming

Substrate preparation
The substrate should be dry and structurally sound, i.e. strong enough and free from layers which would impair paint bonding, in particular efflorescence, dust, dirt, wax and grease. Thoroughly remove any old paint coats and poorly bonded layers. Repair and float minor defects (e.g. cracks or gaps).

Primer preparation
ATLAS ARKOL NX is manufactured as a ready-to-use emulsion. It must not be mixed with other materials or thickened.

Priming
Apply the primer upon substrate with a roller or a brush, with thin and uniform coat. Priming can be repeated upon very absorbable surfaces, apply the primer perpendicularly to the first coat. The second coat can be applied after minimum 4 hours since the first priming. The time of drying depends on substrate, temperature and relative air humidity, approx. 30 minutes. Substrates to be coated with silicone paints must be primed min. 4 hours before the paint application.

Consumption

The average consumption is 0.05-0.2 kg of emulsion for 1 m^2. Actual consumption depends on the substrate absorptiveness and can be established on basis of sample application upon particular substrate.

Important additional information

- Protect the primed surface both during application and emulsion drying against direct sunlight, wind and precipitation.
- Clean the tools with clean water directly after use before primer setting.
- Keep out of reach of children. After direct contact with eyes – wash with plenty of water and contact a doctor. Follow the instructions of the Safety Data Sheet.
- The emulsion must be transported and stored in tightly sealed packaging, in dry conditions and positive temperature. Protect against overheating. The emulsion shelf life is 12 months from the production date shown on the packaging.

Packaging

Plastic drums: 5 kg
Pallet: 540 kg in 5 kg drums

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-05-14

INTERIOR PAINTS

INTERIOR PAINTS

Selected physical and chemical parameters of paints

Viscosity

When applying paints in standard conditions, their viscosity, i.e. level of material liquidity, decreases after mixing or adding water. However, there are products with ingredients which can reverse this process. These materials are called thixotropic and process of thixotropy is nothing else, but change of viscosity during mixing or mechanical application. Thixotropy is a desired phenomenon, although it does not apply to all products for painting. One of the advantages of thixotropic effect is that it also limits the risk of application of too thin coats.

Time of drying

One can determine three degrees of paint drying time:

1. Dry to the touch

Paint coating is dry enough so that delicate touch does not damage it and most of solvent has already evaporated. In practice, this time depends on conditions and type of application, e.g. when painting with a roller, paint may be dry to the touch already after a few minutes. On the other hand, when pressure sprayed it is dry to the touch even after 30 minutes or more.

2. Ready for next painting

Paint coating has set enough so that the subsequent coat does not damage it. It is usually reached after 2 up to 4 hours.

3. Fully dry

All chemical and physical processes have finished. Coating has reached levels of its main parameters, e.g. scrub resistance. This process may last 14 - 28 days depending on conditions and coating thickness.

Gloss

Gloss is an optical characteristic of coating which defines the ability of light reflection. The most accurate classification is given by the PN-EN 13300:2002 standard:

Term	Angle while testing	Reflection coefficient
Gloss	60°	≥60
Medium gloss	60° 85°	<60 ≥10
Matt	85°	<10
Deep matt	85°	<5

Water vapour permeability

Paint water vapour permeability means free transfer of gases or liquids through the paint coating. Owing to their composite structure (particles of binder and filler have different sizes) most of emulsion paints are water vapour permeable.

Surrounding conditions

Processes related to paint drying start just after paint application upon substrate. Performance of paint coating depends on surrounding conditions as well. One should remember to keep optimal temperature and humidity conditions not only during coat application, but also during coat drying.

Ambient temperature

Optimal ambient temperature during painting should be between 5°C and 30°C. Keeping appropriate conditions while painting is crucial and it allows to form uniform and strong coating.

Substrate temperature

Temperature of substrate beneath paint should not drop below 5°C. Temperature below this level may seriously lower or even eliminate bonding to substrate. Water-dilutable paint applied upon such cold substrate may loosen just after application.

Product temperature

Most of water-dilutable products are not resistant to long time operation both in low and high temperature. In particular, paint should be protected from freezing as it is not possible to use it after storage in negative temperature.

Level of humidity

Optimal level of humidity, which indicates optimum content of water vapour in air, ranges from 40 up to 70%. If humidity exceeds these values, one may face serious problems with product application. When humidity level drops below 40% during application (e.g. in winter time), water contained by paint will quickly evaporate to atmosphere and, as a result, coating will not reach appropriate appearance. The most commonly reported problems related to such conditions are cavities in coating and reduced bonding. On the other hand, too high humidity may disturb the process of product drying and weaken its strength parameters.

Wet scrub resistance

Scrubbing is one of basic parameters in technical documentation for paints. In Europe it is determined by the standard PN-EN-13300:2002 ***Paints and varnishes. Water--borne coating materials and coating systems for interior walls and ceilings. Classification.***

The harmonised standard (PN-EN 13300:2002) lists classes for scrubbing accurately. It distinguishes five classes for wet scrub resistance, where Class 1 stands for the most resistant paints and Class 5 corresponds with the least resistant.

CLASS 1 < 5 µm after 200 scrubbing cycles
CLASS 2 ≥ 5 µm and < 20 µm after 200 scrubbing cycles
CLASS 3 ≥ 20 µm and < 70 µm after 200 scrubbing cycles
CLASS 4 < 70 µm after 40 scrubbing cycles
CLASS 5 ≥ 70 µm after 40 scrubbing cycles

Apart from listed parameters, standard determines also gloss level, aggregate size and contrast coefficient.

TABLE 13.1

PRODUCT				
	ATLAS proFarba	ATLAS optiFarba*	ATLAS ecoFarba	ATLAS BASE COAT PAINT
Reference document	Paints are not classified as construction products, thus they are not covered with standards and there is no need to issue technical approvals for them			
Type of paint	LATEX	LATEX	ACRYLIC	ACRYLIC
TECHNICAL DATA				
Densitye [g/cm^3]	1.45	1.45	1.45	1.45
Viscosity [cP]	13,000-16,000	6,000-9,000	6,000-9,000	6,000-9,000
Content of volatile organic compounds (VOC) [g/l]	29.9	1.1	29.9	29.9
Scrub resistance according to PN EN 13 300:2002	Class 2	Class 3	Class 4	not applicable
Water vapour permeability, S_d	< 0.3 m	< 0.3 m	< 0.3 m	-
Thixotropy	yes	no	no	no
Coat appearance	white matt	white matt	white matt	white matt
Hygienic certificate	✓	✓	✓	✓
PAINTING TOOLS				
Roller	✓	✓	✓	✓
Brush	✓	✓	✓	✓
Spray	✓	✓	✓	✓
USE				
Investment painting: offices, staircases, utility rooms, etc.	● ●	● ● ●	● ● ●	● ● ●
Painting public access buildings: schools, kindergartens, nursing homes, agencies, theatres, sport halls, traffic routes, etc.	● ● ●	● ● ●	●	● ● ●
Painting health service facilities: medical centres, hospitals, surgeries, treatment and emergency rooms	● ● ●			●
Dry compartments: rooms, antechambers	● ● ●	● ● ●	● ● ●	● ● ●
Wet compartments: bathrooms, kitchens	● ● ●	● ●	●	

* Recommendation of the Polish Allergy Society

** - (for humidity 55% and temperature 23°C +/- 2°C)

●	permissible
● ●	recommended
● ● ●	particularly recommended

ATLAS ecoFARBA

white acrylic interior paint

- well coating
- high yield
- for walls and ceilings
- matt, snow-white

Use

Painting walls and ceilings indoors – decorative or protective.

Types of painted substrates – cement or cement-lime plasters, thin-coat mineral renders, gypsum plasters and top finishes, polymer top finishes, plasterboards, wallpapers, rough walls of concrete, bricks, blocks, hollow blocks.

Properties

Vapour – permeable, Sd < 0.03 m – ensures water vapour permeability.
Snow-white after drying.
Well coating.
Matt - coats the substrate irregularities.
Perfect for spray application – does not brighten after hydrodynamic spraying.

Technical data

ATLAS ecoFARBA paint is manufactured on the basis of acrylic binder with addition of high quality fillers and chemical agents. ATLAS ecoFARBA interior paint: maximum content of VOC in the product 29.9 g/l, allowable VOC content: 30 g/l.

Density	approx. 1.45 kg/dm^3
Viscosity	6,000-9,000cP Brookfield viscometer
Paint preparation, substrate, and ambient temperature during work and paint drying	from +5 °C to +25 °C
Sd value	< 0.03 m (for double painting) according to PN-EN ISO 7783:2012
Quality coating	III (PN-89/C-81536)
Scrub resistance (after 28 days)	Class 4 (PN-EN 13300:2002)
Coat appearance	White, matt
Drying time until grade 3 (temp. 23 °C ± 2 °C, air relative humidity 55±5%)	2h PN-C-81519:1979
Next coat application	after min. 3 h*

* Depending on thermal and humidity conditions in a room.

Technical requirements

The product has been given the Hygiene Certificate by the National Institute of Hygiene and the Radiation Hygiene Certificate.

Painting

Substrate preparation

The substrate should be air-dry, free from cracks and layers which would impair the paint bonding, in particular dust, dirt, wax and grease. Thoroughly remove any old adhesion paints and other coatings of poor bonding to the substrate. Clean old emulsion paint coatings with water with addition of detergents and leave to dry. Minor defects (e.g. cracks or gaps) should be repaired and floated. ATLAS GIPS RAPID recommended for substrate surface repairs. Places infected with mould should be cleaned and protected with ATLAS MYKOS agent. Prime substrates of high absorptivity and absorbability or dusty ones with one of two priming emulsions (in each case the primer after drying should form matt surface):
- ATLAS UNI-GRUNT diluted with water in weight ratio 1:3 (emulsion : water),
- ATLAS OPTI-GRUNT.

On non-absorptive substrates, e.g. plasterboards or surfaces coated with emulsion paints, one can apply ATLAS BASE COAT PAINT without priming with priming emulsions. Prior to wallpapers painting one should check the quality of bond between the paper and the substrate. Painting poorly bonded wallpapers can cause formation of blisters. Plasters can be painted after full drying, not earlier than:
- cement and cement-lime plasters - after 3-4 weeks,
- gypsum plasters - after 2 weeks.

Paint preparation

The paint is delivered ready to use. It must not be mixed with other materials. Before use, mix well with low speed mixer with drill for paints in order to unify the consistency.

Paint dilution

For the first paint coating, so-called pre-coat, paint can be diluted with water in ratio: max. 0.5 l of water with 10 l of paint. Keep the same dilution ratio over the whole painted surface. Use undiluted paint for final painting.

Painting

Apply the paint upon prepared and stable substrate with thin and uniform coat. Paint can be applied with a roller, a brush or sprayed. It is recommended to use rollers made of microphase or polyacryl of 11 mm fiber length. Painting the ceilings should commence from the by-window zone and continued inwards. The paint should be applied at least two times. The first coat can be applied with ATLAS BASE COAT PAINT as well. The second coat may be applied when the previous coat fully dries (after min. 3 hours, depending on substrate, air temperature and relative humidity). Keep the same application direction for a particular coat. Technological breaks should be planned in advance, e.g. in the corners, etc. Apply the paint continuously and avoid breaks in application.

Data for spray application with aggregate GRACO CED StMax II 595			
Nozzle	Filter	Pressure	Material preparation
PAA517	60 mesh	220 bar	undiluted

Coverage

Coverage: up to 14 m^2/ 1 l of paint with single painting of smooth surfaces. Actual coverage depends on the substrate absorptiveness.

Important additional information

- Use paint of the same production date on an individual surface.
- Air the room during painting and directly after until characteristic smell disappears.
- Painting surfaces differing in structure may cause difference in the paint shade.
- The tools must be cleaned with clean water directly after use, before the paint dries.
- Keep out of reach of children. Follow the instructions of the Safety Data Sheet. Unconditionally use respiratory, eyes and hands protective equipment when spraying.
- Transport and store the product in tightly sealed buckets, in dry conditions and positive temperatures (preferably on pallets). Protect against overheating. Shelf life in conditions as specified is 24 months from the production date shown on the packaging.

Packaging

Plastic buckets: 5 l, 10 l
Pallet: 440 l in 10 l buckets, 400 l in 5 l buckets

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-07-13

ATLAS optiFARBA
white latex interior paint

- very good coating
- high yield
- resistant to washing
- matt, snow-white

Use

Painting walls and ceilings indoors – decorative or protective.

Types of painted substrates – cement or cement-lime plasters, thin-coat mineral renders, gypsum plasters and top finishes, polymer top finishes, plasterboards, wallpapers, rough walls of concrete, bricks, blocks.

Properties

Latex paint – forms coating highly resistant to repeated washing – much more durable than standard emulsion interior paints.
Vapour – permeable, S_d < 0.03 m – ensures water vapour permeability.
Snow-white after drying.
Paint coating keeps elastic.
Very good coating.
Ecological – slender (close to zero) content of volatile organic compounds – VOC ≤ 1.1 g/l – level 30 times lower than the permissible one, which makes the paint friendly and safe both for painters and room users.
Perfect for hydrodynamic spraying.

Technical data

ATLAS optiFARBA paint is manufactured on the basis of acrylic binder with addition of high quality fillers and chemical agents. ATLAS optiFARBA interior paint: maximum content of VOC in the product 1.1 g/l, allowable VOC content: 30 g/l.

Density	approx. 1.45 kg/dm^3
Viscosity	6,000-9,000cP Brookfield viscometer
Paint preparation, substrate, and ambient temperature during work and paint drying	from +5 °C to +25 °C
S_d value	< 0.03 m (for double painting) according to PN-EN ISO 7783:2012
Quality coating	III (PN-89/C-81536)
Scrub resistance (after 28 days)	Class 3 (PN-EN 13300:2002)
Coat appearance	White, matt
Drying time until grade 3 (temp. 23 °C ± 2 °C, air relative humidity 55±5%)	2h PN-C-81519:1979
Next coat application	after min. 2 h*

* Depending on thermal and humidity conditions in a room.

Technical requirements

The product has been given the Hygiene Certificate by the National Institute of Hygiene and the Radiation Hygiene Certificate. The product has been given the Recommendation of Polish Society of Allergology.

Painting

Substrate preparation

The substrate should be air-dry, free from cracks and layers which would impair the paint bonding, in particular dust, dirt, wax and grease. Thoroughly remove any old adhesion paints and other coatings of poor bonding to the substrate. Clean old emulsion paint coatings with water with addition of detergents and leave to dry. Minor defects (e.g. cracks or gaps) should be repaired and floated. ATLAS GIPS RAPID recommended for substrate surface repairs. Places infected with mould should be cleaned and protected with ATLAS MYKOS agent. Prime substrates of high absorptivity and absorbability or dusty ones with one of two priming emulsions (in each case the primer after drying should form matt surface):
- ATLAS UNI-GRUNT diluted with water in weight ratio 1:3 (emulsion : water),
- ATLAS OPTI-GRUNT.

On non-absorptive substrates, e.g. plasterboards or surfaces coated with emulsion paints, one can apply ATLAS BASE COAT PAINT without priming with priming emulsions. Prior to wallpapers painting one should check the quality of bond between the paper and the substrate. Painting poorly bonded wallpapers can cause formation of blisters. Plasters can be painted after full drying, not earlier than:
- cement and cement-lime plasters - after 3-4 weeks,
- gypsum plasters - after 2 weeks.

Paint preparation

The paint is delivered ready to use. It must not be mixed with other materials. Before use, mix well with low speed mixer with drill for paints in order to unify the consistency.

Paint dilution

For the first paint coating, so-called pre-coat, paint can be diluted with water in ratio: max. 0.5 l of water with 10 l of paint. Keep the same dilution ratio over the whole painted surface. Use undiluted paint for final painting.

Painting

Apply the paint upon prepared and stable substrate with thin and uniform coat. Paint can be applied with a roller, a brush or sprayed. It is recommended to use rollers made of microphase or polyacryl of 11 mm fiber length. Painting the ceilings should commence from the by-window zone and continued inwards. The paint should be applied at least two times. The first coat can be applied with ATLAS BASE COAT PAINT as well. The second coat may be applied when the previous coat fully dries (after min. 2 hours, depending on substrate, air temperature and relative humidity). Keep the same application direction for a particular coat. Technological breaks should be planned in advance, e.g. in the corners, etc. Apply the paint continuously and avoid breaks in application.

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Data for spray application with aggregate GRACO CED StMax II 595			
Nozzle	Filter	Pressure	Material preparation
PAA517	60 mesh	200 bar	undiluted
PAA521	60 mesh	200 bar	undiluted
PAA521	60 mesh	200 bar	diluted with 5% of water

Coverage

Coverage: up to 14 m^2/ 1 l of paint with single painting of smooth surfaces. Actual coverage depends on the substrate absorptiveness.

Important additional information

- Use paint of the same production date on an individual surface.
- Air the room during painting and directly after until characteristic smell disappears.
- Painting surfaces differing in structure may cause difference in the paint shade.
- The tools must be cleaned with clean water directly after use, before the paint dries.
- Keep out of reach of children. Follow the instructions of the Safety Data Sheet. Unconditionally use respiratory, eyes and hands protective equipment when spraying.
- Transport and store the product in tightly sealed buckets, in dry conditions and positive temperatures (preferably on pallets). Protect against overheating. Shelf life in conditions as specified is 24 months from the production date shown on the packaging.

Packaging

Plastic buckets: 5 l, 10 l
Pallet: 440 l in 10 l buckets, 400 l in 5 l buckets

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-07-13

ATLAS proFARBA
white latex interior paint

- perfect coating
- high yield
- highly resistant to scrubbing and washing
- matt, snow-white
- with thixotropic effect

Use

Painting walls and ceilings indoors – decorative or protective.

Types of painted substrates – cement or cement-lime plasters, thin-coat mineral renders, gypsum plasters and top finishes, polymer top finishes, plasterboards, wallpapers, rough walls of concrete, bricks, blocks, hollow blocks.

Properties

Latex paint – forms coating highly resistant to repeated washing – much more durable than standard emulsion interior paints.
Highly resistant to dry scrubbing.
Vapour – permeable, Sd < 0.03 m – ensures water vapour permeability.
Snow-white after drying.
Thixotropic – easily spread upon walls and ceilings, does not drop of tools.
Paint coating keeps elastic.
Characterised with perfect coating.
Perfect for hydrodynamic spraying.

Technical data

ATLAS proFARBA paint is manufactured on the basis of acrylic binder with addition of high quality fillers and chemical agents. ATLAS proFARBA interior paint: maximum content of VOC in the product 29.9 g/l, allowable VOC content: 30 g/l.

Density	approx. 1.45 kg/dm^3
Viscosity	13,000-16,000cP Brookfield viscometer
Paint preparation, substrate, and ambient temperature during work and paint drying	from +5 °C to +25 °C
S_d value	< 0.03 m (for double painting) according to PN-EN ISO 7783:2012
Quality coating	II PN-89/C-81536)
Scrub resistance (after 28 days)	Class 4 (PN-EN 13300:2002)
Coat appearance	White, matt
Drying time until grade 3 (temp. 23 °C ± 2 °C, air relative humidity 55±5%)	2h PN-C-81519:1979
Next coat application	after min. 2 h*

* Depending on thermal and humidity conditions in a room.

Technical requirements

The product has been given the Hygiene Certificate by the National Institute of Hygiene and the Radiation Hygiene Certificate.

Painting

Substrate preparation

The substrate should be air-dry, free from cracks and layers which would impair the paint bonding, in particular dust, dirt, wax and grease. Thoroughly remove any old adhesion paints and other coatings of poor bonding to the substrate. Clean old emulsion paint coatings with water with addition of detergents and leave to dry. Minor defects (e.g. cracks or gaps) should be repaired and floated. ATLAS GIPS RAPID recommended for substrate surface repairs. Places infected with mould should be cleaned and protected with ATLAS MYKOS agent. Prime substrates of high absorptivity and absorbability or dusty ones with one of two priming emulsions (in each case the primer after drying should form matt surface):
- ATLAS UNI-GRUNT diluted with water in weight ratio 1:3 (emulsion : water),
- ATLAS OPTI-GRUNT.

On non-absorptive substrates, e.g. plasterboards or surfaces coated with emulsion paints, one can apply ATLAS BASE COAT PAINT without priming with priming emulsions. Prior to wallpapers painting one should check the quality of bond between the paper and the substrate. Painting poorly bonded wallpapers can cause formation of blisters. Plasters can be painted after full drying, not earlier than:
- cement and cement-lime plasters - after 3-4 weeks,
- gypsum plasters - after 2 weeks.

Paint preparation

The paint is delivered ready to use. It must not be mixed with other materials. Before use, mix well with low speed mixer with drill for paints in order to unify the consistency.

Paint dilution

For the first paint coating, so-called pre-coat, paint can be diluted with water in ratio: max. 0.5 l of water with 10 l of paint. Keep the same dilution ratio over the whole painted surface. Use undiluted paint for final painting.

Painting

Apply the paint upon prepared and stable substrate with thin and uniform coat. Paint can be applied with a roller, a brush or sprayed. It is recommended to use rollers made of microphase or polyacryl of 11 mm fiber length. Painting the ceilings should commence from the by-window zone and continued inwards. The paint should be applied at least two times. The first coat can be applied with ATLAS BASE COAT PAINT as well. The second coat may be applied when the previous coat fully dries (after min. 2 hours, depending on substrate, air temperature and relative humidity). Keep the same application direction for a particular coat. Technological breaks should be planned in advance, e.g. in the corners, etc. Apply the paint continuously and avoid breaks in application.

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Data for spray application with aggregate GRACO CED StMax II 595			
Nozzle	Filter	Pressure	Material preparation
PAA521	60 mesh	220 bar	undiluted
PAA521	60 mesh	220 bar	diluted with 5% of water

Coverage

Coverage: up to 14 m^2/ 1 l of paint with single painting of smooth surfaces. Actual coverage depends on the substrate absorptiveness.

Important additional information

- Use paint of the same production date on an individual surface.
- Air the room during painting and directly after until characteristic smell disappears.
- Painting surfaces differing in structure may cause difference in the paint shade.
- The tools must be cleaned with clean water directly after use, before the paint dries.
- Keep out of reach of children. Follow the instructions of the Safety Data Sheet. Unconditionally use respiratory, eyes and hands protective equipment when spraying.
- Transport and store the product in tightly sealed buckets, in dry conditions and positive temperatures (preferably on pallets). Protect against overheating. Shelf life in conditions as specified is 24 months from the production date shown on the packaging.

Packaging

Plastic buckets: 5 l, 10 l
Pallet: 440 l in 10 l buckets, 400 l in 5 l buckets

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-07-13

ATLAS BASE COAT PAINT

white acrylic interior paint

- well coating
- high yield
- for walls and ceilings
- matt, snow-white

Use

Base coat painting walls and ceilings indoors prior to application of top coat acrylic or latex paints.
Particularly recommended for painting plasterboard substrates or those of heterogeneous texture.
Recommended as base coat paint for renovation painting on latex paint substrates (matt and semi-gloss).
Painting wood and wood-based materials

Types of painted substrates – cement or cement-lime plasters, thin-coat mineral renders, gypsum plasters and top finishes, polymer top finishes, plasterboards, wallpapers, rough walls of concrete, bricks, blocks, hollow blocks, wood and wood-based materials.

Properties

Unifies the substrate absorptiveness – ensures uniform drying of top coat paints.
Improves bonding of top coat paints.
Reduces the cost of painting – effectively replaces the first coat of top coat paint.
Improves coating – limits the influence of substrate texture and colour on the final painting effect.
Elastic – transfers microcracks up to 100 µm.
Vapour – permeable – ensures water vapour permeability.
Perfect for hydrodynamic spraying.

Technical data

ATLAS BASE COAT PAINT is manufactured on the basis of acrylic binder with addition of high quality fillers and chemical agents. ATLAS BASE COAT PAINT: maximum content of VOC in the product 29.9 g/l, allowable VOC content: 30 g/l.

Density	approx. 1.45 kg/dm^3
Viscosity	6,000-9,000cP Brookfield viscometer
Paint preparation, substrate, and ambient temperature during work and paint drying	from +5 °C to +25 °C
Coat appearance	White, matt
Drying time until grade 3 (temp. 23 °C ± 2 °C, air relative humidity 55±5%)	2h PN-C-81519:1979
Next coat application	after min. 2 h*

* Depending on thermal and humidity conditions in a room.
The product meets the requirements of PN-C-81914 standard, Type I (resistant to wet scrubbing).

Technical requirements

The product has been given the Hygiene Certificate by the National Institute of Hygiene and the Radiation Hygiene Certificate.

Painting

Substrate preparation

The substrate should be air-dry, free from cracks and layers which would impair the paint bonding, in particular dust, dirt, wax and grease. Thoroughly remove any old adhesion paints and other coatings of poor bonding to the substrate. Clean old emulsion paint coatings with water with addition of detergents and leave to dry. Minor defects (e.g. cracks or gaps) should be repaired and floated. ATLAS GIPS RAPID recommended for substrate surface repairs. Places infected with mould should be cleaned and protected with ATLAS MYKOS agent. Prime substrates of high absorptivity and absorbability or dusty ones with one of two priming emulsions (in each case the primer after drying should form matt surface):
- ATLAS UNI-GRUNT diluted with water in weight ratio 1:3 (emulsion : water),
- ATLAS OPTI-GRUNT.

On non-absorptive substrates, e.g. plasterboards or surfaces coated with emulsion paints, one can apply ATLAS BASE COAT PAINT without priming with priming emulsions. Prior to wallpapers painting one should check the quality of bond between the paper and the substrate. Painting poorly bonded wallpapers can cause formation of blisters. Plasters can be painted after full drying, not earlier than:
- cement and cement-lime plasters - after 3-4 weeks,
- gypsum plasters - after 2 weeks.

Plasterboards can be painted when the jointing mass used between them dries.

Paint preparation

The paint is delivered ready to use. It must not be mixed with other materials. Before use, mix well with low speed mixer with drill for paints in order to unify the consistency.

Paint dilution

The paint can be diluted with water in ratio: max. 0.2 l of water with 10 l of paint. Keep the same dilution ratio over the whole painted surface.

Painting

Apply the paint upon prepared and stable substrate with thin and uniform coat. Paint can be applied with a roller, a brush or sprayed. Top coat paints, e.g. ATLAS ecoFARBA, ATLAS optiFARBA, ATLAS proFARBA can be applied after drying, i.e. after min. 2 hours.

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Data for spray application with aggregate GRACO CED StMax II 595			
Nozzle	Filter	Pressure	Material preparation
PAA517	60 mesh	220 bar	undiluted
PAA515	60 mesh	220 bar	diluted with 5% of water

Coverage

Coverage: up to 8 m^2/ 1 l of paint with single painting of smooth surfaces. Actual coverage depends on the substrate absorptiveness.

Important additional information

- If using painting tapes, remove them carefully and follow the manufacturer's guidelines. Prime gypsum top finish prior to painting tapes fixing.
- Air the room during painting and directly after until characteristic smell disappears.
- The tools must be cleaned with clean water directly after use, before the paint dries.
- Keep out of reach of children. Follow the instructions of the Safety Data Sheet. Unconditionally use respiratory, eyes and hands protective equipment when spraying.
- Keep in tightly sealed original and labeled containers. Keep in dry and cool places, protect against overheating (> 30 °C) and freezing - the product freezes and irreversibly loses its performance in temperature below 0 °C. Protect against direct sunshine. Incompatible materials: avoid contact with aluminum, copper and alloys of these metals. Shelf life in conditions as specified is 24 months from the production date shown on the packaging.

Packaging

Plastic buckets: 10 l
Pallet: 440 l in 10 l buckets

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-09-24

GYPSUM PRODUCTS

GYPSUM PRODUCTS

Gypsum in construction

• Appreciated by contractors

Both experienced contractors and individual users like gypsum products because of great ease of mix preparation, application and workability as well as relatively fast process of setting, which speeds up renovation works. Wide range of gypsum products allows execution of small and large scale projects with a single product, which is extremely significant, especially when durability of applied coats is concerned.

• Liked by investors

Investors decide to apply gypsum top finishes mainly because of aesthetic reasons. Wall with gypsum finish is perfectly white and smooth. It is impossible to reach this effect with other products, even fine aggregate cement plasters. The coat smoothness and whiteness allow further reduction of time and material costs during painting. Due to significant porosity, gypsum regulates climate in a room, absorbs excessive humidity or releases it into a room when air is dry. It is fully safe for people susceptible to allergy. Content of approx. 20% of water makes the coat inflammable. Moreover, gypsum is a great acoustic insulation. Being nice in touch, it gives rooms atmosphere of warmth and coziness.

GIPSAR line of products

It consists of two products:
- GIPSAR UNI – gypsum finishing coat
- PLUS GIPSAR – gypsum top finish

Gypsum finishing coat

Gypsum finishing coat forms top smoothing coat made of gypsum compound applied upon previously installed cement, cement-lime, gypsum or gypsum-lime plaster. Plaster must be even as gypsum finishing coat, although applied with two coats, is relatively thin (total coats thickness – up to 3-5 mm). After setting and hardening the coat is grinded with fine sand paper or special polishing mesh. Gypsum finishing coats are recommended for dry rooms, where wall smoothness is supposed to offer aesthetic result itself.

ATLAS GIPS line of products

It consists of five products:
- ATLAS GIPS RAPID – ready-to-use polymer top finish
- ATLAS GIPS OPTIMUS – white cement top finish
- ATLAS GIPS SOLARIS – hand-applied gypsum plaster
- ATLAS GIPS BONDER – gypsum adhesive
- ATLAS GIPS STONER – jointing compound for filling joints without tapes

TABLE 14.1

PRODUCT							
	GIPSAR UNI	PLUS GIPSAR	ATLAS GIPS OPTIMUS	ATLAS GIPS RAPID	ATLAS GIPS SOLARIS	ATLAS GIPS BONDER	ATLAS GIPS STONER
	White gypsum finishing coat	Gypsum top finish	Cement top finish	Ready-to-use polymer finishing coat	Hand-applied gypsum plaster	Gypsum adhesive	Jointing compound for filling joints without tapes
Reference document	PN-EN 13279-1:2009		PN-EN 998-1:2012	PN-EN 15824:2010	PN-EN 13279-1:2009	PN-EN 14496:2007	PN-EN 13963:2008
TECHNICAL DATA							
Binder	gypsum and polymer	gypsum and polymer	white cement	resin	gypsum	gypsum	gypsum
Mixing ratio water/dry mix [l/kg]	0.39-0.40	0.35-0.45	0.28-0.32	ready-to-use mass	approx. 0.60	approx. 0.50	approx. 0.50
Pot life [min]	90	60	120	whole shelf life	30	45	60
Bonding [N/mm^2]	≥ 0.5	≥ 0.5	≥ 0.5	≥ 0.3	≥ 0.1	≥ 0.06	≥ 0.25
Max. single coat thickness wall/ceiling [mm]	2/2	3/3	5/5	3/3	30/15	20/-	15/15
APPLICATION							
Manual	✓	✓	✓	✓	✓	✓	✓
Machine		✓		✓			
USE							
Finishing coats	✓	✓	✓	✓			
Rooms with constant high humidity			✓				
Plasters indoors					✓		
Plasterboards fixing						✓	
Plasterboards jointing							✓
Small gypsum elements fixing						✓	✓
Installation of wiring elements					✓	✓	
Manual grinding	✓	✓	✓	✓			
Machine grinding		✓	✓	✓			

GIPSAR UNI
white gypsum finishing coat

- reinforced with polymers
- optimum hardness
- perfect spreadability
- well coated with paints
- snow-white colour

DOUBLE BOND
GYPSUM + POLYMERS

Use

Application of gypsum finishing coats upon walls and ceilings.
Filling small gaps in walls and ceilings – can be used for surface repairs before gypsum top finish application.

Types of substrates – concrete, aerated concrete, cement-, cement-lime- and gypsum plasters.
Types of finishing coats – paint coats and wallpapers.

Properties

Double bond - two parallel processes - resin netting and gypsum crystalline net formation - reinforce uniformly whole top finish coat, improve its strength parameters and improve bonding to substrates.
Reinforced with polymers - addition of up-to-date polymers (redispersible powder resins) allows to apply top finish characterised by high bonding to substrates and strong, tight internal structure.
Enables more effective coating with paint – owing to enhancement with polymer additives, forms perfect substrate for modern paints.
Forms uniform, strong and smooth surface for painting and wallpapering.
Resistant to cracking resulting from contraction during setting.
High water retention – keeps appropriate amount of water in the mass, which is necessary for proper coat setting.
Snow-white top finish – enables effective coating with paints and reduces their consumption.

Technical data

GIPSAR UNI is manufactured as a dry mix of anhydrite powder, lime fillers and modifiers.

Bulk density (of dry mix)	approx. 1.06 kg/dm^3
Mass bulk density (after mixing)	approx. 1.43 kg/dm^3
Dry density (after setting)	approx. 1.42 kg/dm^3
Mixing ratio (water / dry mix)	0.39 ÷ 0.40 l / 1 kg 1.95 ÷ 2.00 l / 5 kg 3.90 ÷ 4.00 l / 10 kg 7.80 ÷ 8.00 l / 20 kg
Maximum single coat thickness	2 mm
Bonding	min. 0.5 MPa
Mass preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Maturing time	5 minutes
Pot life	min. 90 minutes

Technical requirements

GIPSAR UNI conforms to PN-EN 13279-1:2009 standard. EC Declaration of Performance No. 042/CPR.

CE	PN-EN 13279-1:2009 (EN 13279-1:2008)
Thin-coat gypsum plaster C6/20/2	for application of top finishes indoors, upon walls, partition walls, ceilings
Content of gypsum binder per $CaSO_4$	50%
Grain size: screening on sieve with square mesh side - 1500 µm	0%
Beginning of the setting	> 20 minutes
Flexural strength	> 1.0 N/mm^2
Compressive strength	> 2.0 N/mm^2
Reaction to fire - class	A1
Release/content of hazardous substances	See: Safety Data Sheet

The product has been given the Radiation Hygiene Certificate.

Top finish application

Substrate preparation
The substrate should be:
- **stable** – sufficiently rigid and sufficiently long stabilized. The assumed stabilization time for substrates is respectively:
  - new cement plasters made of ATLAS mortars - min. 1 week for each 1 cm of thickness,
  - concrete walls – min. 28 days,
- **dry,**
- **even –** maximum GIPSAR UNI single coat thickness is 2 mm,
- **clean -** free from layers which would impair the mass bonding, especially dust, dirt, lime, oil, grease, wax, residues of oil and emulsion paints; substrates infected by biological corrosion must be cleaned with ATLAS MYKOS agent,
- **primed**
  - with ATLAS UNI-GRUNT emulsion – in case of excessively absorptive substrates (gypsum plasters and prefabricated gypsum units do not require priming),
  - with ATLAS GRUNTO-PLAST mass – when substrate is of low absorptiveness or is coated with layers limiting bonding.

Moreover, any steel elements which may come in contact with top finish must be protected against corrosion.

Mass preparation
Pour the mortar from the bag into a clean container with the suitable amount of water (see Technical Data for ratio) and mix manually or mechanically (with a mixer with a drill for gypsum) until homogenous and free of lumps. Leave the mass to rest for 5 minutes and remix. So prepared mass must be used up within approx. 90 minutes.

Top finish application
Apply the mass uniformly with a smooth stainless steel float, successively smooth the finish surface. Apply mass upon walls with strips, start from floor and move towards ceiling, move the float upwards. In case of ceilings, apply mass in strips starting from window and moving inwards, move the float towards yourself.

Grinding
When dries, the mass can be grinded by hand with appropriate sand paper or polishing mesh. Any irregularities should be re-coated with thin mass layer and grinded.

Finishing works
Painting and wallpapering can start when top finish coat dries. Acrylic paints (e.g. ATLAS ecoFARBA) or latex paints (e.g. ATLAS optiFARBA or ATLAS proFARBA) can be used. Before painting, prime the top finish with primer recommended by the paint manufacturer, e.g. ATLAS BASE COAT PAINT. Before fixing the cladding, prime surface with ATLAS UNI-GRUNT emulsion.

Consumption

Average consumption is approx. 1.0 kg of mass/ 1 m^2 / 1 mm of coat thickness.

Important additional information

- Mass must be prepared in clean containers (residues of set gypsum reduce the time of setting of freshly mixed gypsum mass).
- Mass consistency must be thicker for intended gaps filling (in comparison to consistency for top finish application).
- Top finish must not be applied upon surfaces directly exposed to humidity.
- Do not apply gypsum top finish in bathrooms, laundries or other premises with relative air humidity exceeding 75% over extended periods of time.
- During setting, do not expose top finish to direct sunlight and draughts, provide proper room ventilation and airing.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with ATLAS SZOP agent.
- Contains cement. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The product should be transported and stored in tightly sealed bags, in dry conditions (preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 9 months from the production date shown on the packaging.

Packaging

Foil bags: 5, 10, 20 kg.
Pallet: 1,100 kg in 5 kg bags 1,100 kg in 10 kg bags 1,080 kg in 20 kg bags.

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication this product data sheet all previous ones become void.
Date of revision: 2015-06-08

PLUS GIPSAR

gypsum top finish

- reinforced with polymers
- maximum single coat thickness – 3 mm
- possibility of machine application
- for machine and manual grinding

Use

Application of gypsum top finishes upon walls and ceilings.
Filling small gaps in walls and ceilings – can be used for surface repairs before gypsum top finish application.

Types of substrates – concrete, aerated concrete, cement-, cement-lime- and gypsum plasters.
Types of finishing coats – paint coats and wallpapers.

Properties

Improved hardness – strength of gypsum intercrystalline bonds was improved with addition of modified polymers - redispersible powder resins - therefore PLUS GIPSAR forms uniform, firm and smooth surface for further painting and wallpapering.
Possibility of machine and manual grinding – after drying the mass can be processed with professional grinders with appropriate sanding discs. Due to improved set product hardness, there is no risk of irregular machine grinding. Top finish can also be processed manually, where slight irregularities can be removed by hand with appropriate sand paper or polishing mesh.
Forms strong and stable substrate – surface can be easily grinded and resulting dust does not block mesh or sand paper.
Possibility of spray application – accelerates coat application in comparison to traditional methods.
Very good workability – gypsum mass is plastic, does not form "bubbles", roll and break during application, keeps easy to smooth.
Very smooth surface – aesthetic, uniform and smooth, forms excellent surface for painting or wallpapering.
Perfect coating with paints – addition of polymers makes the top finish surface absorbable for paints, therefore facilitates and accelerates finishing works.
Resistant to cracking resulting from contraction during setting.

Technical data

PLUS GIPSAR is manufactured as a dry mix of synthetic gypsum, mineral fillers, modifiers and adjusters of time of setting.

Bulk density (of dry mix)	approx. 1.00 kg/dm^3
Mass bulk density (after mixing)	approx. 1.70 kg/dm^3
Mixing ratio (water / dry mix)	7.0 ÷ 9.0 l / 20 kg
Maximum single coat thickness	3 mm
Maximum top finish thickness	5 mm
Mass preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C relative air humidity up to 70%
Maturing time	5 minutes
Pot life	min. 1 hour

Technical requirements

PLUS GIPSAR conforms to PN-EN 13279-1:2009 standard. EC Declaration of Performance No. 195/CPR.

CE	PN-EN 13279-1:2009 (EN 13279-1:2008)
Finishing gypsum plaster C7/50/2	for application of top finishes indoors, upon walls and ceilings
Reaction to fire - class	A1
Airborne sound insulation	NPD
Thermal resistance	NPD
Release/content of hazardous substances	See: Safety Data Sheet

The product has been given the Hygienic Attest.

Application

Substrate preparation
The substrate should be:
- **stable** – sufficiently rigid and sufficiently long stabilized. The assumed stabilization time for substrates is respectively:
  - new cement plasters made of ATLAS mortars - min. 1 week for each 1 cm of thickness,
  - concrete walls – min. 28 days,
- **dry,**
- **even –** maximum PLUS GIPSAR single coat thickness is 3 mm, maximum top finish thickness – 5 mm,
- **clean** – free from layers which would impair the mass bonding, especially dust, dirt, lime, oil, grease, wax, residues of oil and emulsion paints; substrates infected by biological corrosion must be cleaned with ATLAS MYKOS agent,
- **primed**
  - with ATLAS UNI-GRUNT emulsion – in case of excessively absorptive substrates (gypsum plasters and prefabricated gypsum units do not require priming),
  - with ATLAS GRUNTO-PLAST mass – when substrate is of low absorptiveness or is coated with layers limiting bonding.

Moreover, any steel elements which may come in contact with top finish must be protected against corrosion.

Mass preparation
Pour the material from the bag into a container with water (see Technical Data for ratio), consider intended method of top finish application when adding water (mass for machine application should be prepared with maximum amount of water listed). Leave the mix for 5 minutes, so gypsum automatically soaks with water. Stir the mix manually or mechanically (using a mixer with a drill for gypsum) until homogenous and free of lumps. So prepared mass must be used up within approx. 1 hour.

Top finish application
Apply the mass manually or mechanically. Use a smooth stainless steel float for hand application, successively smooth the finish surface. Apply mass upon walls with strips, start from floor and move towards ceiling, move the float upwards. In case of ceilings, apply mass in strips starting from window and moving inwards, move the float towards yourself. In case of machine application the mass is sprayed. Lead the equipment lance 1-1.5 m from substrate, apply the mass in horizontal overlapping strips. Recommended nozzle – HDA651. In case of breaks over 1 hour long, the hopper and coils must be thoroughly cleaned and rinsed with clean water. Level top finish with a steel float immediately after spraying. For both types of application, thickness of a single coat should not exceed 3 mm.

Grinding
When dries, the mass can be grinded with professional grinders with appropriate sanding discs. Top finish can also be processed manually, where slight irregularities can be removed by hand with appropriate sand paper or polishing mesh. Any irregularities should be re-coated with thin mass layer (upon previously moistened substrate) and grinded.

Finishing works
Painting and wallpapering can start when top finish coat dries. Acrylic paints (e.g. ATLAS ecoFARBA) or latex paints (e.g. ATLAS optiFARBA or ATLAS proFARBA) can be used. Before painting, prime the top finish with primer recommended by the paint manufacturer, e.g. ATLAS BASE COAT PAINT.

Consumption

Average consumption is approx. 0.8 kg of mass/ 1 m^2 / 1 mm of coat thickness.

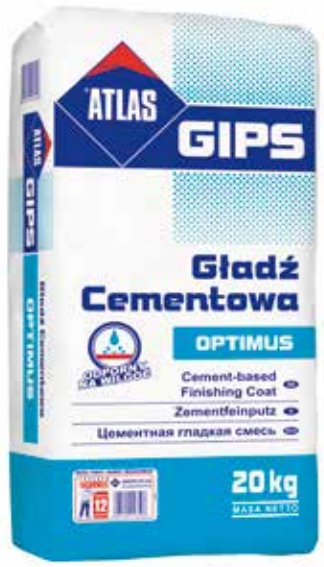
Important additional information

- Mass must be prepared in clean containers (residues of set gypsum reduce the time of setting of freshly mixed gypsum mass).
- Hygienic attest accepts the product for use not only in residential buildings, but also in public access, healthcare, educational and care buildings, e.g. hospitals, surgeries, nurseries, kindergartens, schools.
- Mass consistency must be thicker for intended gaps filling (in comparison to consistency for top finish application).
- Top finish must not be applied upon surfaces directly exposed to humidity.
- Do not apply gypsum top finish in bathrooms, laundries or other premises with relative air humidity exceeding 75% over extended periods of time.
- During setting, do not expose top finish to direct sunlight and draughts, provide proper room ventilation and airing.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with ATLAS SZOP agent.
- The product, because of its form (fine powder) can mechanically irritate eyes and respiratory system, even in short-term contact, for long-term exposure - can mechanically irritate skin.
- The product should be transported and stored in tightly sealed bags, in dry conditions (preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Non-compliance with the guidelines above may affect the properties of the product.

Packaging

Foil bags: 20 kg.
Pallet: 1,080 kg in 20 kg bags.

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication this product data sheet all previous ones become void.
Date of revision: 2016-05-06



ATLAS GIPS OPTIMUS

cement top finish

- for indoor and outdoor use
- resistant to damp
- resistant to mould and fungi
- can be processed wet
- snow-white
- coat thickness 1-5 mm

FOR WALLS AND CEILINGS · INDOORS AND OUTDOORS · EASY IN USE · FROST AND WATERPROOF · APPLY WITH FLOAT · 1-5 mm LAYER THICKNESS

Use

Recommended for application of top finishes upon walls and ceilings in rooms, where use of gypsum finishes is not advisable - in bathrooms, kitchens, laundries, etc.
Enables smoothing traditional and thin-coat external plasters and renders.

Types of substrates – cement and cement-lime plasters, concrete, impregnated plasterboards.

Properties

High strength – actual compressive strength 7.5 N/mm^2.
Smooths walls – fine aggregate (up to 0.1 mm) allows for smooth surface formation.
White colour – manufactured on basis of fine white cement type, perfectly replaces gypsum top finishes.
Resistant to micro-cracks – contains special microfibres, which strengthen its structure.
Resistant to damp – can be used in rooms with high humidity (bathrooms, pools, sauna).
Easy to apply – mixed mass is plastic, easy in use and forming.
Easy to paint – uniform, snow-white top finish colour facilitates coating with paints, reduces paint consumption and cost.

Technical data

ATLAS GIPS OPTIMUS is manufactured as a dry mix of white cement, improvers and quartz fillers of 0.1 mm maximum grain size.

Bulk density (of dry mix)	approx. 1.25 kg/dm^3
Mass bulk density (after mixing)	approx. 1.3 kg/dm^3
Dry density (after setting)	approx. 1.3 kg/dm^3
Mixing ratio (water/dry mix)	0.28 ÷ 0.32 l/1 kg 5.60 ÷ 6.40 l/20 kg
Min./max. top finish thickness	1 mm / 5 mm
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Maturing time	approx. 5 minutes
Pot life	approx. 2 hours
Open time	approx. 25 minutes

Technical requirements

ATLAS GIPS OPTIMUS conforms to PN-EN 998-1 standard. EC Declaration of Performance No. 142/CPR.

CE 0767	PN-EN 998-1:2012 (EN 998-1:2010)
Factory made, one coat plastering mortar (OC)	for outdoor use, on masonry walls, ceilings, posts, partition walls
Reaction to fire - class	A1
Water absorption – category	W1
Bonding after required freeze-thaw cycles	≥ 0.3 N/mm^2 - FP:B
Water vapour permeability coefficient (tabular value μ)	15/35 (EN 1745:2002 tab. A.12)
Thermal conductivity coefficient (average tabular value P=50%)	0.83 W/mK ($\lambda_{10, dry}$) (EN 1745:2002 tab. A.12)
Gross dry mortar density	≤ 1800 kg/m^3
Durability. Bonding after required freeze-thaw cycles	≥ 0.3 N/mm^2 - FP:B
Durability - water permeability after required freeze-thaw cycles	≤ 1 ml/cm^2 after 48 h
Release/content of hazardous substances	See: Safety Data Sheet

Top finish application

Substrate preparation
The substrate should be dry, stable, even and structurally sound, i.e. strong enough, free from layers which would impair mortar bonding, in particular dust, dirt, lime, oil, grease, wax, remains of anti-adhesion agents and paints. Hack off poorly bonded elements and remove loose pieces with a steel brush. If necessary, use ATLAS optiGRUNT priming emulsion to reduce substrate excessive absorption.

Mortar preparation
Pour the mortar from the bag into a clean container with the suitable amount of water (see Technical Data for ratio) and mix using a mixer with a drill for mortars until homogenous. Leave the mortar to rest for 5 minutes and remix. The mortar is ready to use after remixing and should be used up within approx. 2 hours.

Top finish application
Apply the mortar evenly with a steel float. Smooth the applied mass as plastering progresses. It is advisable to fill any large substrate defects before application of the finishing coat. Surface can be finished by light floating with a felt float or with sand paper after drying. Open time of the mass (between mortar application and floating) depends on substrate absorptivity, ambient temperature and mortar consistency.

Maintenance
During drying, ensure appropriate room ventilation and protect from drying too quickly, e.g. sprinkle with water.

Painting
Depending on location, top finish can be painted with any interior and façade paint. Prime top finish with ATLAS UNI-GRUNT or ATLAS optiGRUNT prior to application of acrylic paints (e.g. ATLAS ecoFARBA) or latex paints (e.g. ATLAS optiFARBA or ATLAS proFARBA).

Consumption

The average conusmption is approx. 1.5 kg of mix/ 1 m^2 / 1 mm of coat thickness.

Important additional information

- Use of inappropriate amount of mix water results in deterioration of strength parameters of the top finish.
- Tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with ATLAS SZOP agent.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

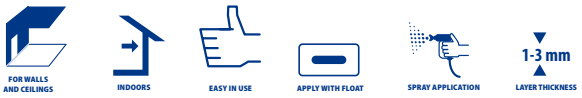
Paper bags: 20 kg
Pallet: 1,080 kg in 20 kg bags

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-02-10

ATLAS GIPS RAPID

ready-to-use polymer top finish

- ready-to-use
- maximum single coat thickness – 3 mm
- optimum hardness
- for machine and manual application
- snow-white



Use

Application of top finishes upon walls and ceilings indoors.
For machine and manual application.

Types of substrates – concrete, cement-, cement-lime- and gypsum plasters, plasterboards.
Types of finishing coats – paint coats and wallpapers.

Properties

Can be applied with very thin coats – therefore amount of applied material can be adjusted to substrate properties and actual consumption reduced.
Very fine grain size – very smooth surface, perfect for painting and wallpapering can be formed.
Excellent bonding – owing to appropriate content of polymers.
Flexible and crack-resistant – top finish is resistant to cracking during mass setting and drying, and in further operation.
Easy to paint – uniform, snow-white top finish is easily coated with paints and guarantees reduced paint consumption and lower cost of painting.
Convenient to use – material is ready-to-use, therefore any unused material can be left in bucket and used up within product shelf life, i.e. 12 months from the manufacturing date.
TIXOTROPIC EFFECT - thick in packaging, plasticized during application.

Technical data

ATLAS GIPS RAPID is manufactured as a ready-to-use mass based on resin binders, mineral fillers and modifying agents.

Maximum single coat thickness	3 mm
Mass preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C relative air humidity up to 70%
Drying time	approx. 6 hours (for coat 1 mm thick, in temperature +20°C and 50% air humidity)

Technical requirements

ATLAS GIPS RAPID conforms to PN-EN 15824:2010 standard. EC Declaration of Performance No. GIPS 109/CPR.

CE	PN-EN 15824:2010 (EN 15824:2009)
Dispersion internal plaster, dilutable with water (polymer top finish)	for indoor use, on ceilings and walls
Reaction to fire - class	C
Bonding to concrete	≥ 0.3 N/mm^2
Thermal conductivity coefficient (average tabular value P=50%)	1.28 W/mK ($\lambda_{10,dry}$)
Release/content of hazardous substances	See: Safety Data Sheet

Top finish application and substrate repairs

Substrate preparation

The substrate should be:

- **sufficiently sound,**
- **stabilized to air-dry state** – - the assumed stabilization time for substrates is respectively (in standard conditions, i.e. temperature approx. +20°C and humidity 55% - in other conditions the time of drying can extend):
  - new gypsum (e.g. ATLAS GIPS SOLARIS), cement and cement-lime plasters - min. 1 week for each 1 cm of thickness,
  - concrete walls – min. 28 days,
- **cleaned -** of any materials which would impair bonding of top coat, especially dust, dirt, lime, oil, fats, wax, residues of paint coats and anti-adhesion agents,
- **primed**
  - with ATLAS UNI-GRUNT emulsion – in case of excessively absorptive substrates,
  - with ATLAS GRUNTO-PLAST mass – when substrate is of low absorptiveness or is coated with layers limiting bonding.

Mass preparation

ATLAS GIPS RAPID is manufactured ready-to-use. It must not be mixed with other materials, thinned or thickened.

Top finish application

The mass is applied with a smooth stainless steel float firmly pressed towards substrate. Start application from ceilings, apply mass in strips starting from window and moving inwards, move the float towards yourself. Apply mass upon walls with strips, start from floor and move towards ceiling, move the float upwards. Subsequent coat can be applied when the previous one fully hardens. In case of machine application float the mass with a float, collect excessive material and put back into packaging. Grinding can commence when finish fully dries. Avoid contamination of material kept in packaging as it would affect its properties. Cover unused material with plastic foil and tightly seal the packaging.

Finishing works

On commencement of finishing works the top finish surface should be appropriately dry and dusted. Top finish can be coated with paints:

- acrylic paints, e.g. ATLAS ecoFARBA
- latex paints, e.g. ATLAS optiFARBA or ATLAS proFARBA

Painting and wallpapering should be preceded by substrate priming led according to paint or wallpaper manufacturer's guidelines.

Consumption

Average consumption is approx. 1.0 kg of mass/ 1 m^2.

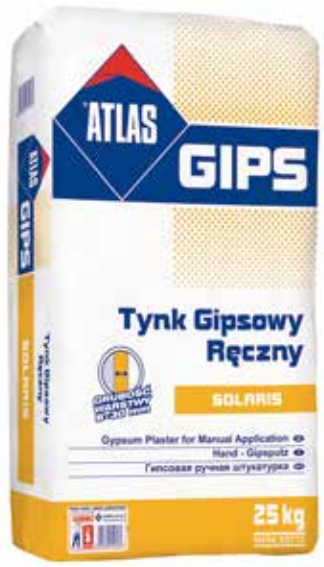
Important additional information

- Top finish must not be applied upon surfaces directly exposed to humidity.
- Do not apply top finish in rooms with relative air humidity exceeding 70% over extended periods of time.
- The tools must be cleaned with clean water directly after use.
- Follow the instructions of the Safety Data Sheet.
- The product should be transported and stored in tightly sealed containers, in dry conditions, in positive temperature (preferably on pallets). Protect against overheating (> 30 °C). Do not leave containers open. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Non-compliance with the guidelines above may affect the product properties.

Packaging

Plastic buckets: 2 kg, 8 kg, 18 kg, 28 kg
Pallet: 400 kg in 2 kg containers, 640 kg in 8 kg containers, 702 kg in 18 kg containers, 672 kg in 28 kg buckets

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication this product data sheet all previous ones become void.
Date of revision: 2014-03-13



ATLAS GIPS SOLARIS

hand-applied gypsum plaster

- upon walls and ceilings
- layer thickness – 8-30 mm
- optimum time of processing
- wide range of use
- high yield

Use

One-coat plaster – indoors, in rooms with normal air humidity, but also in kitchens and bathrooms, recommended for application upon walls and ceilings.
Renovation and repair works – reveals treatment during installation of windows, doors and window sills; filling larger gaps (up to 3 cm deep) and filling chases in walls and ceilings.

Types of substrates – concrete, aerated concrete, cement-, cement-lime- and gypsum plasters.
Types of finishing coats – gypsum top finishes, ceramic cladding, paint coats, wallpapers.

Properties

One-coat plaster – economical, easy and quick in use, does not require additional finishing, as formed surface is already even and very smooth.
Wide range of use – minimum plaster thickness - 8 mm, maximum plaster thickness on ceilings - 15 mm, on walls - 30 mm.
Optimum open time – 120 ± 15 minutes – enables easy plaster application and finishing.
High yield – significantly better than offered by traditional cement or cement-lime plasters.
Resistant to cracking caused by contraction during setting and drying.
Ensures favourable room microclimate – beneficially effects health and well-being of inhabitants.
Hand-applied – pot life adjusted to technology of manual application of gypsum plasters.

Technical data

ATLAS GIPS SOLARIS is manufactured as a dry mix of synthetic gypsum, mineral fillers and modifiers.

Bulk density (of dry mix)	approx. 0.80 kg/dm^3
Mass bulk density (after mixing)	approx. 0.95 kg/dm^3
Mixing ratio (water / dry mix)	approx. 0.6 l/ 1 kg approx. 15 l/ 25 kg
Min./max. plaster thickness on walls	8 mm/ 30 mm
Min./max. plaster thickness on ceilings	8 mm/ 15 mm
Bonding	≥ 0.3 N/mm^2
Mass preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C relative air humidity up to 70%
Pot life	120 ± 15 minutes
Open time	approx. 30 minutes

Technical requirements

ATLAS GIPS SOLARIS conforms to PN-EN 13279-1:2009 standard. EC Declaration of Performance No. V/25/CPR.

CE	PN-EN 13279-1:2009 (EN 13279-1:2008)
Hand applied gypsum plaster B1/20/2	for indoor use, upon walls and ceilings
Content of gypsum binder per $CaSO_4$	≥ 50%
Beginning of setting	> 20 min
Flexural strength	> 1.0 N/mm^2
Compressive strength	> 2.0 N/mm^2
Reaction to fire - class	A1
Bonding to substrate	≥ 0.1 N/mm^2 (breaking within substrate or breaking off substrate)
Release/content of hazardous substances	See: Safety Data Sheet

Plastering

Substrate preparation

The substrate should be:

- sufficiently sound,
- stabilized to air-dry state - the assumed stabilization time for concrete substrates is min. 28 days (in standard conditions, i.e. temperature approx. +20°C and humidity 55% - in other conditions the time of drying can extend),
- cleaned – of any materials which would impair bonding of plaster, especially dust, dirt, lime, oil, fats, wax, residues of paint coats and anti-adhesion agents,
- primed
  - with ATLAS optiGRUNT emulsion – in case of excessively absorptive substrates,
  - with ATLAS GRUNTO-PLAST mass – when substrate is of low absorptiveness or is coated with layers limiting bonding.

Moreover, any steel elements which may come in contact with top finish must be protected against corrosion.

Mass preparation

Pour the material from the bag into a container with water (see Technical Data for ratio), leave the mix for a few minutes, so gypsum automatically soaks with water. Stir the mix manually or mechanically (using a mixer with a drill for gypsum) until homogenous and free of lumps. So prepared mass must be used up within approx. 30 minutes.

Plastering

Plaster should be applied with one coat. Use plastering beads in order to keep plaster thickness, control material consumption and form perfectly even wall surface. Edges of window and door reveals as well as wall corners can be additionally strengthened with metal corner beads with mesh. Plaster is applied with a trowel. Application should start from ceiling side, in strips starting from window and moving inwards, keep thickness between 8 and 15 mm. On walls plaster is applied from floor towards ceiling, keep thickness between 8 and 30 mm. Applied material is initially smoothed with a "H-type" darby, fill any gaps if necessary. When plaster initially sets, its plane is formed with a feather edge. Appropriately set plaster should be misted and floated with a sponge float in order to "extract" bleed water onto the surface. Once it becomes matt, it should be uniformly spread upon the whole surface with a long float. **Note! Plasters planned to be covered with ceramic tiling should be floated "rough".**

Maintenance

During initial 24 hours since application, fresh gypsum plaster should be protected from direct sunlight and draughts. Later rooms should be kept well-ventilated. The time of drying of 15 mm thick plaster coat, in well-ventilated room in temperature above 15°C, is approx. 14 days.

Finishing works

Prior to finishing works, plaster surface should be sufficiently dry. Prime it with ATLAS optiGRUNT emulsion before application of ATLAS GIPS RAPID top finish.

Consumption

Average consumption is approx. 0.85 kg of mass/ 1 m^2 / 1 mm of coat thickness.

Important additional information

- Mass must be prepared in clean containers (residues of set gypsum reduce the time of setting of freshly mixed gypsum mass).
- Gypsum plaster must not be applied upon surfaces directly exposed to humidity.
- Do not apply gypsum plaster in laundries or other premises with relative air humidity exceeding 70% over extended periods of time.
- During setting, do not expose plaster to direct sunlight and draughts, provide proper room ventilation and airing.
- The tools must be cleaned with clean water directly after use.
- The product, because of its form (fine powder) can mechanically irritate eyes and respiratory system, even in short-term contact, for long-term exposure - can mechanically irritate skin. Follow the instructions of the Safety Data Sheet.
- The product should be transported and stored in tightly sealed bags, in dry conditions (preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 6 months from the production date shown on the packaging. Non-compliance with the guidelines above may affect the properties of the product.

Packaging

Paper bags: 25 kg.
Pallet: 700 kg in 25 kg bags.

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication this product data sheet all previous ones become void.
Date of revision: 2014-06-09

ATLAS GIPS STONER

jointing compound for filling joints without tapes

- jointing plasterboards without joint tapes
- flexible and resistant to cracking
- very good plasticity
- high bond strength
- layer thickness up to 15 mm

Use

Plasterboards jointing – with no need to use additional reinforcing tapes or non-woven fabric for boards with factory-cut edges.
Repairs of wall and ceiling surfaces – recommended for gypsum substrates, for local repairs of gypsum plasters, top finishes or plasterboards.

Types of substrates – plasterboards with factory-cut or on-site cut edges, gypsum plasters and top finishes.

Properties

Flexible – dry mix is specially modified with polymers and carefully adjusted amount of cellulose fibres. Fibres strengthen and condense structure of hardened gypsum, therefore improve its resistance to cracking.
Plastic – easy and convenient in use, both in case of plasterboards jointing and final surface smoothing and shaping.
Improved strength – ensures durable, appropriately strong and flexible bond between plasterboards edges.
Low shrinkage during setting – absence of additional internal stress in gypsum coat guarantees greater stability of bond (with no effect of applied mass retention).

Technical data

ATLAS GIPS STONER is manufactured as a dry mix of alpha gypsum, mineral fillers and modifiers.

Bulk density (of dry mix)	approx. 0.90 kg/dm^3
Mass bulk density (after mixing)	approx. 0.90 kg/dm^3
Dry density (after setting)	approx. 1.20 kg/dm^3
Mixing ratio (water / dry mix)	approx. 0.5 l/ 1 kg approx. 5.0 l/ 10 kg approx. 10.0 l/ 20 kg
Min./max. coat thickness	2 mm/ 15 mm
Flexural strength	≥ 3.0 N/mm^2
Compressive strength	≥ 6.0 N/mm^2
Mass preparation temperature, substrate and ambient temperature during work	from +10°C to +25°C relative air humidity up to 70%
Pot life	approx. 60 minutes

Technical requirements

ATLAS GIPS STONER conforms to PN-EN 13963:2008 standard. EC Declaration of Performance No. V/22/CPR.

CE	PN-EN 13963:2008 (EN 13963:2005 + AC:2006)
Filling mass for plasterboard jointing. For jointing without tapes (4B EN 13963). For manual application. Standard time of setting.	for indoor use
Reaction to fire - class	A1
Time of setting: - beginning - end	 ≥ 60 minutes ≥ 180 minutes
Presence of cracking in the zone of 150 mm from the thin wedge edge	no
Grain size: - screening on a sieve with square mesh side 200 µm - screening on a sieve with square mesh side 315 µm	 ≤ 1 % 0
Bonding to substrate	≥ 0.25 N/mm^2
Flexural strength	> 260 N
Release/content of hazardous substances	See: Safety Data Sheet

Plasterboards jointing

Substrate preparation

Requirements for plasterboard construction

Plasterboards should be:

- stable and sufficiently rigidly fixed to substrate or framing. It is advisable to carry out plasterboard jointing after application of any wet materials, i.e. at constant ambient humidity and temperature,
- fixed with approx. 2 mm gap left between adjoining boards,
- expansion joint between plasterboards and building construction elements should be executed as a control joint.

Requirements for plasterboard edges

- on-site cut edges should be bevelled with a knife or a plane at proper angles,
- cleaned of dust and other materials which would impair bonding,
- excessively absorptive substrates should be primed with ATLAS optiGRUNT.

Note. Priming is essential before jointing plasterboards with on-site bevelled edges. Moreover, any steel elements which may come in contact with compound must be protected against corrosion.

Mass preparation

Pour the material from the bag into a container with water (see Technical Data for ratio), leave the mix for 3-5 minutes, so gypsum automatically soaks with water. Stir the mix manually or mechanically (using a mixer with a drill for gypsum) for 1-2 minutes. So prepared mass must be used up within approx. 60 minutes.

Jointing without tapes

It is advisable to carry out application in two phases. In the first one compound is applied directly into gap between adjoining boards, so it is fully filled deep to the bottom of joint. Collect excessive compound and float it smoothly upon whole joint length. So filled joints are left for gypsum surface hardening. In the second phase freshly mixed compound is applied upon joint and spread until even and smooth surface is formed. If needed, sand any unevenness after drying.

Jointing with tapes

Apply compound directly into gap between adjoining boards, so it is fully filled deep to the bottom of joint. Press reinforcing tape (paper or adhesive one) or strip of non-woven fabric into freshly applied compound, so it bonds substrate without any crinkles. Coat tape thinly with gypsum compound and leave to harden. When gypsum hardens, second wider coat is applied. For on-site cut plasterboards, in order to flush board surface properly, the second coat should be min. 40 mm wide. Any unevenness should be removed with fine sandpaper when compound dries.

It is advisable to avoid direct sunlight, draughts, excessive room heating or cooling and to ensure sufficient room ventilation during joint drying.

Consumption

Average consumption is approx. 0.50 kg for 1 rm of plasterboard joint. Actual consumption depends on plasterboard thickness and method of board edge cutting.

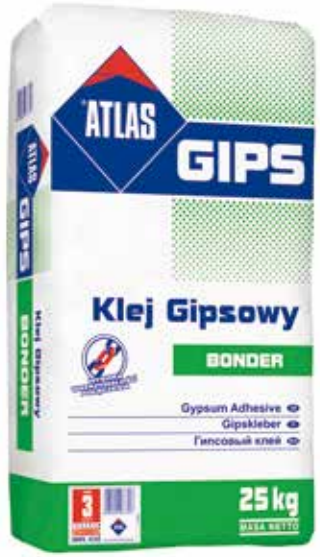
Important additional information

- In case of on-site cut boards, fixed with one layer or those installed in places, where operation conditions create possibility of high stress (e.g. in attics), it is recommended to strengthen joints with fibreglass tape, paper tape or non-woven fabric.
- Mass must be prepared in clean containers (residues of set gypsum reduce the time of setting of freshly mixed gypsum mass).
- Plasterboards must not be fixed upon surfaces directly exposed to humidity.
- Any steel elements which may come in contact with gypsum must be protected against corrosion.
- Use tools made of stainless steel, clean with water directly after use.
- Avoid contact with skin and eyes. In case of contact with eyes, contact a doctor. Follow the instructions of the Safety Data Sheet.
- The product should be transported and stored in tightly sealed bags, in dry conditions (preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Non-compliance with the guidelines above may affect the properties of the product.

Packaging

Paper bags: 10 kg.
Pallet: 1,000 kg in 10 kg bags.

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication this product data sheet all previous ones become void.
Date of revision: 2014-05-26



ATLAS GIPS BONDER

gypsum adhesive

- very high bonding to substrates and plasterboards
- very good plasticity during board fixing
- optimum pot life
- high bond strength
- layer thickness 5-20 mm

Use

Fixing plasterboards – when finishing interior walls, during repair works or finishing newly constructed rooms.
Fixing decorative moldings and other gypsum ornaments.
Fixing rigid thermal or acoustic insulation composite boards.
Filling gaps in mineral substrates, up to 20 mm deep.

Types of substrates – walls of bricks, blocks, hollow blocks and other similar ceramic or silicate elements, concrete and aerated concrete, cement and cement-lime plasters.

Properties

Very good plasticity – adhesive is easy to apply, changes shape easily during board positioning and pressing, adjusts to the substrate unevenness.
Optimum pot life – extended time of setting in order to facilitate application of adhesive and board positioning and fixing.
High strength – ensures durable and strong bond between plasterboards and substrate.
Low shrinkage after setting – adhesive layer is free from internal cracks and deformation after setting, which guarantees good bond stability.

Technical data

ATLAS GIPS BONDER is manufactured as a dry mix of gypsum, mineral fillers and modifiers.

Bulk density (of dry mix)	approx. 1.10 kg/dm^3
Mass bulk density (after mixing)	approx. 1.56 kg/dm^3
Dry density (after setting)	approx. 1.03 kg/dm^3
Mixing ratio (water / dry mix)	approx. 0.5 l/ 1 kg approx. 12.5 l/ 25 kg
Min./max. layer thickness	5 mm/ 20 mm
Flexural strength	min. 2.5 MPa
Compressive strength	min. 6.0 MPa
Mass preparation temperature, substrate and ambient temperature during work	from +5°C to +30°C
Pot life	approx. 45 minutes
Open time	approx. 15 minutes

Technical requirements

ATLAS GIPS BONDER conforms to PN-EN 14496:2007 standard. EC Declaration of Performance No. V/18/CPR.

CE	PN-EN 13963:2008 (EN 13963:2005 + AC:2006)
Gypsum adhesive for thermal and acoustic insulation composite boards and plasterboards.	for indoor use
Reaction to fire - class	A1
Content of gypsum binder per $CaSO_4$	≥ 30%
Pot life	≥ 45 minutes
Bonding	≥ 0.06 MPa
Release/content of hazardous substances	See: Safety Data Sheet

Boards fixing

Substrate preparation
Substrate should be:
- **stable** - sufficiently sound,
- **stabilized to air-dry state** - the assumed stabilization time for concrete substrates is min. 28 days (in standard conditions, i.e. temperature approx. +20°C and humidity 55% - in other conditions the time of drying can extend),
- **cleaned** – of any materials which would impair bonding of adhesive, especially dust, dirt, lime, oil, fats, wax, residues of paint coats and anti-adhesion agents,
- **primed**
  - with ATLAS optiGRUNT emulsion – in case of excessively absorptive substrates,
  - with ATLAS GRUNTO-PLAST mass – when substrate is of low absorptiveness or is coated with layers limiting bonding.

Moreover, any steel elements which may come in contact with top finish must be protected against corrosion.

Mass preparation
Pour the material from the bag into a container with water (see Technical Data for ratio), mix manually or mechanically (using a mixer with a drill for gypsum) until homogenous and free of lumps. Adhesive must be used up within approx. 45 minutes.

Boards fixing
Method of adhesive application and plasterboard fixing depends on surface evenness.
Even substrates (irregularities up to 4 mm): place board horizontally on floor, face down, apply adhesive with a notched trowel (notch size 8 - 10 mm), lift the board and press it against wall.
Uneven substrates (unevenness up to 15 mm): place board horizontally on floor, face down, apply adhesive with a trowel or a spatula, with dabs approx. 10 cm in diameter and up to 20 mm thick, spaced 30 – 40 cm; additionally spread a few dabs along board edges. Lift the board and press against wall.
Uneven substrates (unevenness above 15 mm): fix with dabs of adhesive vertical and horizontal strips of cut plasterboard, approx. 10 cm wide, spaced approx. 60 cm. The strips should define single plane. Fix main plasterboards upon formed structure.
Caution! Regardless the method of fixing, free gaps should be left between boards and floor (approx. 10 mm), between boards and ceiling (approx. 5 mm) and between adjoining boards (approx. 2 mm). Boards can be fixed and positioned within approx. 10-15 minutes since adhesive application (depending on substrate absorptiveness and ambient temperature). Ventilate the room, avoiding draughts and direct sunlight during adhesive drying.

Consumption

Average consumption is approx. 2.5 – 5.0 kg / 1 m^2 of plasterboard. Actual consumption depends on substrate evenness and method of fixing.

Important additional information

- Adhesive must be prepared in clean containers (residues of set gypsum reduce the time of setting of freshly mixed gypsum mass).
- Adhesive should not be used to fix boards upon ceilings (it is advisable to fix them to framing).
- Plasterboards must not be fixed upon surfaces directly exposed to humidity.
- Clean the tools with water directly after use.
- Avoid contact with skin and eyes. In case of contact with eyes, contact a doctor. Follow the instructions of the Safety Data Sheet.
- The product should be transported and stored in tightly sealed bags, in dry conditions (preferably on pallets). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Non-compliance with the guidelines above may affect the properties of the product.

Packaging

Paper bags: 25 kg.
Pallet: 1,050 kg in 25 kg bags.

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication this product data sheet all previous ones become void.
Date of revision: 2014-04-03

ATLAS M-system 3G

anchors for fixing boards to walls, ceilings and under roofs

- made of 120 PP polypropylene
- stable fixing of plasterboards to walls, ceilings and slopes
- easy-to-install point fixing
- quick progress of installation
- smooth adjustment of distance and inclination angle
- do not require substrate levelling or hacking off
- collision-free distribution of installations under plasterboard lining

Properties

Easy to install – owing to point fixing the application (installation of disc anchors and lining boards) can be done by one person.
Quick progress of work – fixing full-size boards is limited to two stages: drilling holes where the anchors will be inserted and screwing plasterboards to the discs with steel screws.
Smooth adjustment of space between boards and substrate as well as inclination angle of the lining – the distance between plasterboards and substrate can be adjusted at will, regardless the wall geometry or the plasterwork, within the range of 10-200 mm, and – in case of ceilings – with extensions even up to 500 mm.
No requirements concerning the preparation of substrate - no levelling, hacking off cracked plasterwork, priming, etc. is necessary – plasterboards can be accurately fixed upon very uneven or cracked plasterwork as well as upon inclined walls, etc.
Possibility of correcting the wall geometry in case of not right-angled concave and convex corners – the anchors can be used additionally for plasterboards bonded to substrates of major irregularities (> 20 mm). They can then be fixed locally in the most uneven places instead of bonding the boards with adhesive.
Collision-free distribution of electrical installations, water and sewage pipes as well as ventilation shafts under the plasterboard lining – in case of existing pipes or cables, the anchors ensure quick fixing of plasterboards and keeping necessary stability.
ATLAS M-system 3G can be combined with:
- traditional technologies, such as ceilings coated with gypsum plasters,
- elements of two or more layer ceilings fixed with 120 PP anchors,
- plasterboards fixed to frames.

Reduced risk of cracks – point fixing compensates tensions of individual boards already during the installation. Once plastered, the boards form rigid structure, so that no further tensions can occur between them and no cracks would appear at the seams. The structure is separated from the cladding of the adjoining walls and ceiling by expansion joints and therefore keeps space for further deformations.
Quick installation of plasterboard casings – partially lowered ceilings, casings upon walls, etc. can be quickly installed in the relevant zones of walls and ceilings next to previously plastered elements in order to complete the interior finishing.
Possibility of reduction of space between the lining and the substrate down to 1 cm – in order to minimize the loss of space in a room.
Easy and safe to transport and storage – system elements are small and can be transported with passenger cars, which is not possible in case of solutions with frames. System elements do not take up much storage space and can be stored on limited areas outdoor or in a car.

Use

The ATLAS M-system 3G disc anchors are used for:
- fixing plasterboards, boards made of wood-based materials, cement fibre boards, ALUCOBOND-type boards, etc. to walls, ceilings and inclined attic walls,
- installation of casing of ventilation and installation shafts, suspended ceilings of different heights etc.

The system can be used in newly constructed buildings as well as for renovation works – in particular for the conversion of lofts and attics for operational use or for the reconstruction of utility rooms for other purposes.
The system is recommended for fixing ATLAS BUILDING BOARDS used for any types of casings, supplements, etc. – the boards can be cut and – together with the M-system 3G anchors – used to form oval or unusually shaped casings. This considerably simplifies the installation and saves time compared to traditional solutions with frames.
ATLAS M-system 3G anchors with KT 3G 120 PP polypropylene mounting disc are suitable for indoor and outdoor use, for the following types of wall, ceiling and attic lining boards:
- plasterboards in accordance to the standard PN-EN 520-A1:2012, thickness of 12.5- 25.0 mm (for indoor use only),
- wood-based boards in accordance to the standard PN-EN 13986-A1:2015, thickness of 12.0-25.0 mm,
- cement fibre boards of category A, B, C or D in accordance to the standard PN-EN 12467:2013, thickness of 8.0-25.0 mm,
- ALUCOBOND boards in accordance to the ITB Technical Approval no. AT-15-4058/2010, thickness of 4.0 or 6.0 mm.

The system comprises the following components (table 1):
- 120 PP polypropylene mounting discs with fasteners (screws) with metric threads M6/M8 or wood threads of diameter of 6.5/8.5 mm and length of 100-250 mm (table 2),
- plastic expansion sleeves of diameters of 8-12 mm,
- threaded extension rods for ceilings with metric thread M6/M8,
- steel screws for fixing the boards to the mounting discs of diameter of 3,5 mm.

Table 1. Components of the ATLAS M-system 3G light lining system

Table 1 shows examples of use of ATLAS M-system 3G anchors, with KT 3G 120 PP polypropylene mounting disc with different types of substrates and corresponding expansion sleeves, extension rods and fixing screws depending on the application type.

Type of base	Type of anchor:	Type of fixing screw	Length of fixing screw [mm]	Diameter and depth of the hole for the sleeve	Expansion sleeves	Threaded extension rod	Screws for fixing the boards to the discs
standard concrete, aerated concrete, hollow bricks and blocks, silicate bricks	120 PP polypropylene mounting disc	3GL M8/M6	L100 L150 L200 L250	ø 8 mm L>70 mm	L40 ø8 MS,	3GL PLUS M6	ø 3.5 x 35 mm
			L100 L150 L200 L250	ø 10 mm L>80 mm	L50 ø10 BX, L50 ø10 SX, 3G L50 ø10 FA	-	ø 3.5 x 35 mm
		3GL M8/M8	L110 L160 L210 L260	ø10 mm L>80 mm	L50 ø10 MS	3GL PLUS M8	ø 3.5 x 35 mm
			L110 L160 L210 L260	ø 12 mm L>90 mm	L60 ø12 BX, L60 ø12 SX, 3G L60 ø12 FA	-	ø 3.5 x 35 mm
		3GL M8/ø 6,5	L100 L150 L200 L250	ø8 mm L>70 mm	L40 ø8 MS,	-	ø 3.5 x 35 mm
			L100 L150 L200 L250	10 m L>80 mm	L50 ø10 BX, L50 ø10 SX, 3G L50 ø10 FA	-	ø 3.5 x 35 mm
		3GL M8/ø 8,5	L110 L160 L210 L260	ø 10 mm L>80 mm	L50 ø10 MS	-	ø 3.5 x 35 mm
			L110 L160 L210, L260	ø 12 mm L>90 mm	L60 ø12 BX, L60 ø12 SX, 3G L60 ø12 FA	-	ø 3.5 x 35 mm
timber or wood-based boards		3GL M8/M6	L100 L150 L200 L250	ø 8 mm L>70 mm	metal sleeve for fixing in wood: M6 L24	3GL PLUS M6	ø 3.5 x 35 mm
		3GL M8/M8	L110 L160 L210 L260	ø 10mm L> 80 mm	metal sleeve for fixing in wood: M8 L24	3GL PLUS M8	ø 3.5 x 35 mm
		3GL M8/ø 6,5	L100 L150 L200 L250	direct fixing in base ø 5mm and L > 25 mm		-	ø 3.5 x 35 mm
		3GL M8/ø 8,5	L110 L160 L210 L260	direct fixing in base ø 7 mm and L > 25 mm		-	ø 3.5 x 35 mm

For flat or rounded structures or casings and fittings, e.g. in swimming pools, SPA buildings and balneotechnical facilities, etc. flat or cut building boards can also be fixed to the substrate with ATLAS M-system 3G anchors.

Wall and ceiling lining boards should be fixed to the KT 3G 120 PP mounting disc with min. four steel, corrosion-protected screws of ø3,5 x 35 mm in accordance to the standard PN-EN 14566-A1:2012. In view of the corrosive environment, ATLAS M-system 3G anchors must be used in accordance to the requirements of the standards PN-EN ISO 9223:2012 and PN-EN ISO 2081:2011. If the distance between plasterboards and substrate is set minimum (< 10 mm), the lining boards should be fixed with shorter steel screws, e.g. 3,5 x 25 mm.

In case of outdoor installation, we recommend to use anchors, which standard carbon steel elements are protected against corrosion by electrolytic zinc coating of thickness of minimum 12 µm, meeting the requirements of the standard PN-EN ISO 4042:2001-Ap1:2004 or PN-EN ISO 2081:2011, or with galvanized zinc coating of minimum 275 g/m2 and thickness of minimum 19 µm, meeting the requirements of the standard PN-EN 10346:2015.
In case of indoor installation, one can use anchors, which standard carbon steel elements are protected against corrosion with an electrolytic zinc coating of thickness of minimum 5 µm, meeting the requirements of the standard PN-EN ISO 4042:2001+Ap1:2004 or PN-EN ISO 2081:2011, or with galvanized zinc coating of minimum 100 g/m2 and thickness of minimum 7 µm, meeting the requirements of the standard PN-EN 10346:2015.

ATLAS M-system 3G 120 PP anchors set in the substrate **with plastic expansion sleeves:** L40 ø8 MS, L50 ø10 BX, L50 ø10 SX, 3G L50 ø10 FA, L50 ø10 MS, L60 ø12 BX, L60 ø12 SX, 3G L60 ø12 FA sleeves can be used for substrates made of:
- reinforced or unreinforced standard concrete C20/25-C50/60 in accordance to the standard PN-EN 206:2014,
- autoclaved **aerated concrete** elements of average compressive strength of minimum 6 N/mm2 (compressive strength class minimum 6) in accordance to the standard PN-EN 771-4+A1:2015,
- full **ceramic bricks** of nominal compressive strength of minimum 15 N/mm2 (minimum class 15) in accordance to the standard PN-EN 771-1+A1:2015,
- full **silicate bricks** of nominal compressive strength of minimum 20 N/mm2 (minimum class 20) in accordance to the standard PN-EN 771-2+A1:2015,
- **hollow ceramic bricks** (e.g. Porotherm) of nominal compressive strength of minimum 15 N/mm2 (minimum class 15) in accordance to the standard PN-EN 771-1+A1:2015, with partition thickness of minimum 12 mm.

In case of higher fire protection requirements, **metal expansion sleeves** have to be used instead of plastic ones.

ATLAS M-system 3G anchors set in the substrate with: M6 L24 or M8 L24 screws for direct fixing **in wood or wood-based boards** can be used for the following substrates:
- P5 chipboard in accordance to the standards PN-EN 312:2011 and PN-EN 13986+A1:2015, thickness of minimum 24 mm,
- OSB/3 board in accordance to the standards PN-EN 300:2007 and PN-EN 13986+A1:2015, thickness of minimum 24 mm,
- construction timber of resistance class of minimum C24 in accordance to the standard PN-EN 338:2016, thickness of minimum 25 mm.

3GL M8/ø6,5 or M8/ø8,5 are used for setting anchors in the substrate made of construction timber of resistance class of minimum C24 in accordance to the standard PN-EN 338:2016, minimum thickness of 25 mm.

In case of a distance > 20 cm between the boards and the ceiling, an extension of the type 3GL PLUS M6/M8 has to be used, with which the boards can be installed at a distance of up to 55 cm.

Table 2. Adjustment range of the distance between boards and substrate [mm]*.

Type of casing:	L100	L150	L200	L250	Extension element 3GL PLUS M6 or M8
wall	10-50	50-100	100-150	-	-
ceiling	10-50	50-100	100-150	150-200	Depending on the type of fixing screw and the screw-in depth: 300-500 mm (only for screws with metric thread), e.g. L100 – length 500 mm, L250 – 300 mm.**

*for min. fixing length of 50 mm
**the max. distance between casing board and ceiling is 550 mm.

The calculated load bearing of connections installed with ATLAS M-system 3G anchors should be indicated in the technical design, by taking into consideration the resistance properties of anchors specified in tables 3-6. Relevant anchors must be applied in accordance to the technical design prepared individually for a given object, by taking into consideration the information of the manufacturer on the application technology.

Technical data

Plastic ATLAS M-system 3G anchors consist of a perforated polypropylene disc of external diameter of ø120 mm, flexibly fixed to a steel screw with:
- metric threads M6/M8 (fixing elements 3GL M8/M6 and 3GL M8/M8)
- wood threads of external diameters of ø 6.5/8.5 mm (fixing elements 3GL M8/ø6.5 and 3GL M8/ø8.5).

Owing to flexible connection, the inclination level of the disc can be modified within the range of: +/- 27° over the entire circumference.
System supplements:
a) expansion sleeves for installing the following types of disc anchors:
- L50 ø10 BX, L50 ø10 SX, 3G L50 ø10 FA, made of plastic, of external diameter of ø 10 mm and length of L=50 mm or L40 ø8 MS and length of L=40 mm, compatible with fixing screws 3GL M8/ø 6.5 or 3GL M8/M6 or additionally with threaded extension rod 3GL PLUS M6,
- L50 ø10 MS, plastic, of external diameter of ø 10 mm and length of L=50 mm as well as L60 ø12 BX, L60 ø12 SX, 3G L60 ø12 FA of external diameter of ø 12 mm and length of L = 60 mm, compatible with fixing screws 3GL M8/ø8,5 or 3GL M8/M8, or with additional threaded extension rod 3GL PLUS M8,
- type M6 L24 or M8 L24 sleeves for wood or wood-based boards compatible with fixing screws 3GL M8/M6 and 3GL M8/M8,

b) threaded **extension rods** M6 or M8 (3GL PLUS M6 or 3GL M8) used for fixing ceiling lining used in addition to 3GL M8/M6 and 3GL M8/M8 screws),
c) **steel screws** ø3,5 x 35 mm for fixing the lining to the discs.
Fixing screws with metric thread (3GL M8/M6 and 3GL M8/M8) as well as with wood thread (3GL M8/ø6.5 and 3GL M8/ø8.5) are available with the following lengths: L100, L150, L200 and L250 mm.

The minimum anchoring depth in mineral and ceramic substrates is 50 mm and in wooden or wood-based substrates - 24 mm.

Table 3. Characteristic pull-out resistance of PP anchors with lining.

Temperature [°C]	Characteristic resistance [N]				
	Type of cladding				
	Plaster-board	Wood-based board	FERMACELL board	Cement fibreboard	ALUCOBOND board
+ 23 °C	550	600	500	500	650
+ 80 °C	-	250	250	250	250
- 20 °C	-	600	850	600	800

Table 4. Maximum bending moments for PP-type discs [Nm].

Substrate/ mounting methods	Maximum bending moments for PP-type discs PP [Nm]		
	temp. +23°C	temp. +80°C	temp. -20°C
timber C24, direct fixing, ø 6.5 mm	10.5	10.0	11.5
timber C24, direct fixing ø 8.5 mm	15.0	14.0	23
timber C24, fixing with anchor for wood M6	6.5	6.5	6.5
wood-based board/ HPL chipboard, fixing with anchor for wood M6	4.5	4.5	4.5
timber C24, fixing with anchor for wood M8	19.5	19.0	19.5
wood-based OSB board/ HPL chipboard, fixing with anchor for wood M8	20.0	19.0	20.0
PU laminate board, fixing plate M6	11.5	11.5	11.5
PU laminate board, fixing plate M8	19.5	19.5	19.5
Brick wall, fixing element M6 (ø 6.5)	10.0	10.0	10.0
Brick wall, fixing element M8 (ø 8.5)	27.0	25.0	25.0

Table 5. Characteristic shearing resistance of PP anchors [N].

Temperature [°C]	Characteristic shearing resistance of PP anchors [N]	
	Fixing element	
	M6 or (ø 6,5)	M8 or (ø 8,5)
+ 23 °C	1700	2300
+ 80 °C	1100	1000
- 20 °C	2400	3000

Table 6. Resistance to transverse load for the wall systems for the PP-type disc.

Fixing element/ distance L_{max}	Mounting	Substrate	Maximum loading force [N]
ø 6,5/Lmax = 140 mm	direct	C24-classtimber	2600
ø 8,5/Lmax = 140 mm	direct	C24-classtimber	8500
M6/Lmax = 140 mm	Anchor for wood M6	C24-classtimber	2300
M6/Lmax = 140 mm	Anchor for wood M6	wood-based board	2300
M8/Lmax = 140 mm	Anchor for wood M8	C24-class timber	5000
M8/Lmax = 140 mm	Anchor for wood M8	wood-based board	5000
M6/Lmax = 114 mm	Fixing plate M6	laminate board	4500
M8/Lmax = 124 mm	Fixing plate M6	laminate board	5500
M6 or ø 6,5/Lmax = 150 mm	plastic sleeve	brick wall	2600
M8 or ø 8,5/Lmax = 150 mm	plastic sleeve	brick wall	5000

Technical requirements

The product has been given the ITB Technical no. AT-15-9691/2016, Certificate of Conformity no. ITB-0724/Z, Domestic Declaration of Conformity M-system 3G of 2.09.2016.

Installation of the anchors

Table 7

Spacing of the anchors [cm]	Required quantity [pieces/m²]	Recommended use
60 x 60	4	double plasterboard lining
60 x 50	5	single plasterboard lining (dry rooms)
60 x 40	6	single plasterboard lining (wet rooms)

Installation of mounting discs under casing – walls made of concrete, bricks, blocks, perforated bricks, massive timber and wood-based boards.

Necessary typical tools: screw gun, drill with ø10/12 mm drillbits of length of min. 120 mm, cross laser marker, spirit level, ruler, compasses, plasterboard cutter, metal trowel, scraper, etc.

Step by step work order.

1. Assembly of disc and steel pin.
Screw the disc to the fixing screw with a hex key.

2. Determination of quantity and anchors spacing.
- In case of plasterboard lining in accordance to Table 7. Along the shorter side of plasterboard the anchors should be placed at intervals of 60 cm, so that the boards are supported at these side at three points.
- In case of lining made of other materials (e.g. OSB boards, cement fibre boards, etc.), the spacing of anchors has to be determined in accordance to the type of lining, the type of room, the weight of the material and the specified loads. In any case, the maximum distance between anchors should not exceed 60 x 60 cm, the minimum spacing is 40 x 40 cm.

3. Division of boarding surface into individual boards.
Draw the contours of boards on the wall.

4. Outlining the anchors location.
With the help of a spirit level or a laser marker, draw a horizontal line on the wall at a height of 40, 50 or 60 cm from the floor, in accordance to the required spacing.

5. Marking the fixing point for the first anchor.
This point is located at intersection of the vertical line (defined in step 3) and the horizontal line (defined in step 4).

6. Marking the middle anchor locations (in the middle of the board) and the joint anchor locations (along the adjoining edges of two boards).
Use a compasses to do this in order to ensure the required spacing. Start from the point defined in step 5.

7. Marking the locations of the outermost anchors (along the edges of walls, floor and ceiling).
Draw lines on the substrate along these edges, at a distance of 7 cm from the edges. The outermost anchors will be placed on these lines in accordance to the required spacing.

8. 8. Drilling the holes.
a. If the anchors are to be screwed in mineral substrate, e.g. concrete, bricks or perforated ceramic bricks, holes have to be drilled in the marked points with a ø 10/12 mm drill bit to the depth of min. 50 mm (see Table 1). The depth of the hole is dependent on the length of the anchor and the required distance of the board from the wall. Example: for an L100 anchor and required distance of 20 mm, the hole should be 80 mm (100 mm – 20 mm = 80 mm) deep. In order to ensure the possibility of final adjustment of the location of the anchor, we recommend to drill the holes 30-50 mm deeper, depending on the unevenness of wall. Insert the plastic fixing sleeves into the holes.
b. If the anchors are to be installed in massive timber, the drill holes have to keep a diameter of ø 4 or 6 mm (in accordance to the diameter of the fixing screw of ø 6.5 or ø 8.5 mm) and depth of min. 50 mm (see table 1).
c. For the installation of the anchors in wood-based boards, the drill holes have to keep a diameter of ø 6 or 8 mm (corresponding to the expansion sleeves for wood M6 L24 or M8 L24) over the entire thickness of the board (see table 1).

9. Screwing-in the anchors.
Use a laser marker in order to mark the vertical plane for the wall lining, the so-called curtain. The distance of the curtain from the wall should be a few centimetres greater than the planned final distance of the lining boards from the wall. Screw in the first anchor at its defined location. Mark the line indicating the curtain on the housing of the screw gun. Then screw in the anchors one after the other until the laser marker line coincides with the line on the screw gun housing.

10. Control of the plane.
Check the accuracy of the plane of the anchors with a min. 2 m long straight edge vertically, horizontally and diagonally. In case of deviations, correct the screw-in depth of the anchors. Set the discs and anchors precisely in one plane.

11. Installation of the lining.
Start by screwing the first board to the middle section of the wall. The board should be installed on plasterboard supports. The board must not adjoin the edges of wall, ceiling or floor. It must also not lie directly on the substrate which it is fixed to. Fix each disc with 4 screws included in the set. On the middle and outer discs, the screws should form a cross. On the joint discs (at the adjoining edges of boards), the screws should be parallel to the edges of boards, two screws in each board.

12. Processing the boards.
Fill the joints between the boards with gypsum filling compound ATLAS GIPS STONER and reinforce it with paper, interfacing or tuff tape. Secure outer corners with perforated aluminium angle trims and gypsum filler PLUS GIPSAR. In the inner corners the boards can be adjoined in traditional manner. The use of sliding connections is permissible.

Installation of anchors under flat ceilings lining on monolithic, prefabricated or densely ribbed ceilings.

Necessary typical tools: screw gun, drill, cross laser marker, spirit level, ruler, compasses, board cutter, metal trowel, scraper, etc.

Step by step work order.

1. Assembly of disc with steel pin.
Screw the disc to the fixing screw with a hex key.

2. Determination of quantity and anchors spacing.
- In case of plasterboard lining in accordance to Table 7. Along the shorter side of plasterboard the anchors should be placed at intervals of 60 cm, so that the boards are supported at these side at three points.
- In case of lining made of other materials (e.g. OSB boards, cement fibre boards, etc.), the spacing of anchors has to be determined in accordance to the type of lining, the type of room, the weight of the material and the specified loads. In any case, the maximum distance between anchors should not exceed 60 x 60 cm, the minimum spacing is 40 x 40 cm.

3. Division of boarding surface into individual boards.
Outline the edges of boards on the ceiling.

4. Drawing the lines on which the anchors are to be installed.
With the help of a spirit level or a laser marker, draw a line on the ceiling parallel to the plane of the longest wall (perpendicular to the edges of boards) at a distance of 40, 50 or 60 cm, in accordance to the required spacing of the anchors.

5. Marking the fixing point for the first anchor.
This point is located at intersection of the line defined in step 3 and the line defined in step 4.

6. Marking the middle anchors location (in the middle of the board) and the joint anchors (along the adjoining edges of two boards).
Use a compasses to do this in order to ensure the required spacing. Start from the point defined in step 5.

7. Marking the locations of the outermost anchors (along the edges of ceiling).
Draw lines on the ceiling along the walls, at a distance of 7 cm from the walls. The outermost anchors will be placed on these lines in accordance to the required spacing.

8. Drilling the holes.
Drill holes at the marked points with a ø 8 mm drill bit to a depth of min. 50 mm (see Table 1). The depth of the hole depends on the length of the anchor and the required distance of the board from the ceiling. Example: for an L100 anchor and a required distance of 20 mm, the hole should be 80 mm (100 mm – 20 mm = 80 mm) deep. Insert the plastic fixing sleeves into the holes.

9. Screwing-in the anchors.
For lining a ceiling, install the laser marker so that it marks the horizontal plane, the so-called curtain. The distance of the curtain from the ceiling should be a few centimetres greater than the planned final distance of the lining boards from the ceiling. Screw in the first anchor at the defined point. Mark a line indicating the curtain on the housing of the screw gun. Screw in the anchors one by one until the line of the laser marker coincides with the line on the screw gun housing. If the distance between the lining boards and the ceiling must be greater, extend the fixing elements 3GL M8/M6 or 3 GL M8/M8 with the extension elements 3 GL PLUS M6 or 3 GL PLUS M8 consisting of a metric bolt and a metric fixing element M6 or M8 by means of connecting nut secured on both sides with lock nuts M6 or M8. Screw in the anchors one by one until the line of the laser marker coincides with the line on the screw gun housing**.**

10. Control of the plane.
Check the accuracy of the plane of the anchors with a min. 2 m long straight edge in all directions. In case of deviations, correct the screw-in depth of the anchors. Set the discs and anchors precisely in one plane.

11. Installation of the lining.
Install the first board. The board must not adjoin the edges of walls. It must also not lie directly on the substrate which it is fixed to. Fix each disc with 4 screws included in the set. On the middle and outermost discs the screws should form a cross. On joint discs (at the adjoining edges of boards), the screws should be parallel to the edges of boards, two on each board.

12. Processing the boards.
Fill the joints between boards with gypsum filling compound ATLAS GIPS STONER and reinforce it with paper, interfacing or tuff tape. In the inner corners the boards can be adjoined in traditional manner. The use of sliding connections is permissible.

Installation of anchors under lining of multi-layer ceilings on monolithic, prefabricated or densely ribbed ceilings.

Necessary typical tools: screw gun, drill, cross laser marker, spirit level, ruler, compasses, board cutter, metal trowel, scraper, etc.

Step by step work order.

1. Assembly of disc with steel pin.
Screw the disc to the fixing screw with a hex key.

2. Determination of quantity and anchors spacing.
- In case of plasterboard lining in accordance to Table 7. Along the shorter side of plasterboard the anchors should be placed at intervals of 60 cm, so that the boards are supported at these side at three points.
- In case of lining made of other materials (e.g. OSB boards, cement fibre boards, etc.), the spacing of anchors has to be determined in accordance to the type of cladding, the type of room, the weight of the material and the specified loads. In any case, the maximum distance between the anchors should not exceed 60 x 60 cm, the minimum spacing is 40 x 40 cm.

3. Division of boarding surface into individual boards.
Outline the edges of boards on the ceiling.

4. Drawing the lines on which the anchors are to be installed.
With the help of a spirit level or a laser marker, draw a line on the ceiling parallel to the plane of the longest wall (perpendicular to the edges of boards) at a distance of 40, 50 or 60 cm, in accordance to the required spacing of the anchors.

5. Marking the fixing point for the first anchor.
This point is located at intersection of the line defined in step 3 and the line defined in step 4.

6. Marking the middle anchors location (in the middle of the board) and the joint anchors (along the adjoining edges of two boards).
Use a compasses to do this in order to ensure the required spacing. Start from the point defined in step 5.

7. Marking the locations of the outermost anchors (along the edges of ceiling).
Draw lines on the ceiling along the walls, at a distance of 7 cm from the walls. The outermost anchors will be placed on these lines in accordance to the required spacing.

8. Drilling the holes.
Drill holes at the marked points with a ø 8 mm drill bit to a depth of min. 50 mm (see Table 1). The depth of the hole depends on the length of the anchor and on the required distance of the board from the ceiling. Example: for a L100 anchor and a required distance of 20 mm, the hole should be 80 mm (100 mm – 20 mm) deep. Insert the plastic fixing sleeves into the holes.

9. Screwing-in the anchors.
For lining a ceiling, install the laser marker so that it marks the horizontal plane, the so-called curtain. The distance of the curtain from the ceiling should be a few centimetres greater than the planned final distance of the lining boards from the ceiling. Screw in the first anchor at the defined point. Mark a line indicating the curtain on the housing of the screw gun. Screw in the anchors one by one until the line of the laser marker coincides with the line on the screw gun housing. If the distance between the lining boards and the ceiling must be greater, extend the fixing elements 3GL M8/M6 or 3 GL M8/M8 with the extension elements 3 GL PLUS M6 or 3 GL PLUS M8 consisting of a metric bolt and a metric fixing element M6 or M8 by means of connecting nut secured on both sides with lock nuts M6 or M8. Screw in the anchors one by one until the line of the laser marker coincides with the line on the screw gun housing.

10. Control of the plane.
Check the accuracy of the plane of the anchors with a min. 2 m long straight edge in all directions. In case of deviations, correct the screw-in depth of the anchors. Set the discs and anchors precisely in one plane.

11. Installation of the lining.
Install the first board. The board must not adjoin the edges of walls. It must also not lie directly on the substrate which it is fixed to. Fix each disc with the 4 screws included in the set. On the middle and outermost discs the screws should form a cross. On joint discs (at the adjoining edges of boards), the screws should be parallel to the edges of boards, two on each board.

12. Processing the boards.
Fill the joints between the boards with gypsum filling compound ATLAS GIPS STONER and reinforce it with paper, interfacing or tuff tape. In the inner corners the boards can be adjoined in the traditional manner. The use of sliding connections is permissible.

Note:
- For multi-layer ceilings connecting elements of different lengths L100-L250 or extension elements should be used
- Any curves should be made of building boards. The elements can be joined on the floor, initially coated and then lifted and fixed to the 120 PP anchor disc with screws.

Coverage

The coverage of 120 PP disc anchors depending on the type of lining and the type or room are listed in the Table 7. Deviations from the quantities indicated in the table can, e.g. result from using board fragments to complete the lining.

Packaging

Foil bag containing:
- 21 120 PP polypropylene mounting discs
- 21 fixings (screws) with metric thread or wood thread - depending on the type of substrate (Table 1)
- 84 steel screws ø 3,5 x 35 mm for fixing the boards,
- 21 plastic expansion sleeves..

Important additional information

Each packaging contains assembly manual.
Supplementary products:
- gypsum filling compound ATLAS GIPS STONER for filling the joints between plasterboards,
- paper, interfacing or tuff reinforcement tape,
- finishing gypsum GIPSAR PLUS,
- primer ATLAS UNI-GRUNT,
- interior paints: ATLAS optiFARBA and ATLAS proFARBA..

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Before commencement of installation, read the fixing guidelines listed in the assembly manual and the product data sheet very carefully. The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-10-04

PROTECTIVE, WASHING AND MODIFYING AGENTS

PROTECTIVE, WASHING AND MODIFYING AGENTS

Impregnants

Impregnation of construction elements protects them against harmful influence of environment or soiling resulting from everyday use. Any porous surfaces, made of masonry mortars (plasters, finishing coats, grouts, etc.), as well as other elements with structure permeable for the protective agent (e.g. stone tiles, bricks, cellular concrete blocks, ceramic hollow blocks, etc.) can be impregnated.

ATLAS impregnants:
- SILSTOP – silicone hydrophobic agent
- DELFIN – agent protecting against soiling
- BEJCA – agent protecting mineral renders imitating natural wood

Surface cleaning

Construction is inseparably connected with risk of soiling any surrounding surfaces. The source of dirt can be cement, anhydrite and gypsum mortars as well as paints and priming emulsions. Unfortunately, surfaces which are not cleaned quick enough from residues of tile adhesive, grout or primer, can be permanently damaged.

• ATLAS washing agents:
- SZOP
- SZOP 2000

Due to different chemical composition of various construction materials, there is no single general-use agent removing any stains. Washing agents, ATLAS SZOP and ATLAS SZOP 2000, help to remove almost any stains resulting from use of building mortars, paints and priming emulsions. Only stains of silicate paints and primers can be found irremovable.

Biological corrosion

Biological corrosion is understood as degrading activity of living organisms: fungi, lichens, bryophyte, insects and bacteria. It destroys construction elements both indoors and outdoors. Particular microclimate prevailing in many places offers ideal conditions for settlement, growth and proliferation of various microorganisms. Indoors, it is most often present in poorly ventilated rooms, e.g. bathrooms and on internal wall surfaces where thermal bridging occurs. Outdoors, it is met most often in the form of algae on the façades of buildings located in shady places, close to clusters of greenery or water reservoirs. Effective and easy biological corrosion removal is available with use of ATLAS MYKOS.
Treatment of fungi-ridden surface consists of 4 stages:
1. Identification of type and size of contamination.
2. Removal of dampness source.
3. Removal of contamination with MYKOS agent.
4. Protecting the surface against re-contamination – painting with ATLAS SILSTOP impregnant or with ATLAS SALTA paint.

Modifying agents

Modification of construction compounds aims to:
- change properties within designed range of use – ATLAS ESKIMO
- change of use – ATLAS ELASTIC EMULSION

Elastifying agents
They improve elasticity of ready-to-use building mortars. ATLAS ELASTIC EMULSION can be added to:
- ELASTIFIED ADHESIVE MORTAR ATLAS
- ATLAS MIG 2
- ATLAS WIDE GROUT

Owing to addition of ELASTIC EMULSION these products can be used upon substrates exposed to deformation, e.g. terraces, façades, fireplaces, floors with heating systems, plasterboards, etc. ATLAS ELASTIC EMULSION can also be used during preparation of contact coat prior to application of flooring materials – ATLAS TEN-10, ATLAS POSTAR 20, ATLAS POSTAR 40 and ATLAS POSTAR 80.

Setting accelerator
Agents of this type enable application in unfavourable atmospheric conditions. ATLAS ESKIMO enables application of dispersion renders and paints in low temperature (0°C - 10°C) and high humidity (above 80%).
It can be used with:
• ATLAS ACRYLIC renders
• ATLAS SILICONE renders

TABLE 15.1

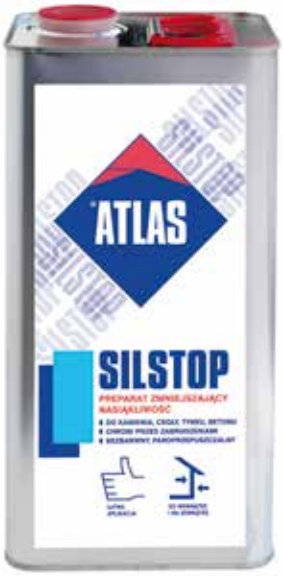
- ATLAS DEKO M mosaic renders
- ATLAS SALTA E acrylic paint
- ATLAS SALTA silicone paint

Product		
	ATLAS SILSTOP	ATLAS DELFIN
TYPE OF IMPREGNATED SURFACE		
Absorptive ceramic tiles	•	✓
Absorptive stone	✓	✓
Grouts	•	✓
Construction ceramics	✓	•
Cellular concrete	✓	
Silicate elements	✓	
Mineral and acrylic renders	✓	

✓ particularly recommended
• can be used

Product			
	ATLAS SZOP	ATLAS SZOP 2000	ATLAS MYKOS
TYPE OF CLEANED DIRT			
Cement	✓		
Lime	✓		
Gypsum	✓		
Mineral deposits from water	✓		
Rust	✓		
Acrylic priming emulsions		✓	
Dispersion renders and paints		✓	
Acrylic impregnants		✓	
Algae			✓
Fungi			✓
TYPE OF CLEANED SURFACE			
Glazed tiles and terracotta	✓	✓	
Clinker and gres-porcelain	✓	✓	
Stone	✓	✓	
Plastic	✓	✓	
Glass		✓	
Chrome plated	✓		
Steel	✓	✓	
Mineral renders		✓	✓
Concrete elements		✓	✓
Grouts		✓	✓

✓ particularly recommended
• can be used



ATLAS SILSTOP
absorptivity reducer

- for stone, brick, render, concrete
- protects against contamination
- resistant to weather conditions
- colourless
- water vapour permeable

Use

Protects construction partitions exposed to rainfall – especially roofs covered with cement roof tiles and façades coated with mineral renders.
Protects against structural contamination – protected surface does not attract and absorb pollution.
Enables surface self-cleaning of façades – precipitation water flows freely down the impregnated surface, cleaning it from dirt, dust, spores and other minor contaminants.

Types of substrates – plasters, renders, concrete, blocks made of cellular and aerated concrete, silicates, stone and ceramic walls (e.g. brick walls); can also be used for hydrophobization of mineral and acrylic thin-coat renders as well as strongly bonded façade paint coats, additionally exposing their colour.

Properties

Hydrophobic action – reacts with air components and water present in the pores of protected materials, therefore reduces its absorptivity and protects construction elements against excessive water soaking.
Does not limit water vapour permeability – seals against water with no reduction of free transfer of water vapour. Solution penetrates deep into the material and provides high level of water vapour permeability at the same time.
Deeply penetrating – based on organic solvents formula, penetrates deep into the structure of material.
High resistance to external conditions – alkali, acid rains, UV radiation, aggressive urban environment.
Colourless – does not affect the colour of substrate after drying.

Technical data

ATLAS SILSTOP is a colourless solution of silicone dispersion in organic solvent. The priming paint of setting characteristics: maximum content of VOC in the product 627.28 g/l, maximum allowable content of VOC 750 g/l.

Density	approx. 0.8 g/cm^3
Substrate and ambient temperature during work	from +5°C to 25°C
Flash point	+59 °C

Technical requirements

Impregnant is not classified as a construction product.

Impregnation

Substrate preparation
The substrate should be dry, strong and free from dust, dirt, oil, grease and wax.
Liquid preparation
ATLAS SILSTOP is manufactured as a ready-to-use product for direct application. It must not be mixed with other materials, diluted or thickened.
Impregnation
Apply undiluted product evenly upon the substrate, using a brush or a roller. The next coat (in case of more absorptive substrates) or painting, e.g. with ATLAS SALTA silicone paint, can start when the first coat of preparation dries, i.e. after approx. 6 hours.

Consumption

The average consumption of impregnant is 0.1 ÷ 0.3 l for 1 m^2. The actual consumption depends on the substrate type and absorptiveness.

Important additional information

- Do not use on substrates containing materials not resistant to organic solvent within the depth of penetration of the preparation, e.g. expanded polystyrene under base coat in thermal insulation systems.
- During application and directly after, air the rooms until characteristic smell disappears. Do not leave containers open.
- Wash the tools with clean water with detergent directly after use.
- The preparation must be transported and stored in tightly sealed original packaging, in dry conditions and temperature from +5°C up to +25°C. Protect against overheating (above +30 °C). During storage observe OHS regulations like for solvent-based paints and keep storage conditions like for flammable materials. Flammable liquid and vapours. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Store in a well ventilated place. Shelf life in conditions as specified is 12 months from the production date shown on the packaging.
- Contains trimethoxyethylsilane. May be fatal if swallowed and enters airways. May cause an allergic skin re action. Repeated exposure may cause skin dryness or cracking. Do not breathe spray. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN: Wash with plenty of water with soap. IF SWALLOWED: Immediately call a POISON CENTER/doctor. Follow the instructions of the Safety Data Sheet.

Packaging

Metal containers: 1 l, 5 l.

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-11-21

ATLAS DELFIN
impregnant for tiles and grouts

- protects tiles and grouts against stains and dirt
- for non-glazed and stone tiles
- forms protective coat
- gives delicate gloss to tiles
- refreshes the surface colour

Use

Protects against typical contamination resulting from usage – oils, coffee, tea and water.
Protects porous surfaces – susceptible to structural contamination.
Facilitates keeping cleanliness – owing to high penetration ability, it permeates the outer layer of tiles and grouts, forming durable protective coat on their surfaces.
Adds delicate gloss to non-glazed tiles.
Recovers fresh appearance of old, matte cladding.

Types of protected substrates – cement grouts, highly absorptive tiles (non--glazed ceramic, stone and cement).

Properties

Colourless – highlights the colour of substrate after drying.
Resistant to typical cleaning agents – is not washed off during maintenance of cladding.

Technical data

ATLAS DELFIN is manufactured on the basis of acrylic dispersion. Varnish for painting internal or external finishing elements: maximum content of VOC in the product 5.46 g/l, maximum allowable content of VOC 130 g/l.

Emulsion density	approx. 1.2 g/cm^3
Substrate and ambient temperature	from +5°C to +25°C
Floor access	after 24 h

Technical requirements

Impregnant is not classified as construction material. The product has been given the Hygienic Certificate by the National Institute of Hygiene.

Impregnation

Substrate preparation
The substrate should be dry, free from dust, dirt, oil, grease and wax.
Impregnant preparation
ATLAS DELFIN is manufactured as a ready-to-use product for direct use. It must not be mixed with other materials, diluted or thickened.
Impregnation
Apply undiluted ATLAS DELFIN upon the substrate, using a brush or a sponge, with thin uniform coat. Don't leave puddles! In case of more absorptive substrates, apply another coat crosswise to the first one after approx. 30 minutes of drying. Floor can be used not earlier than 24 hours since the application of the emulsion. Grouts can be impregnated after hardening - apply the liquid with a thin brush 2 weeks since their application.

Consumption

The average consumption is 1 kg of emulsion for approx. 15 ÷ 20 m^2. The actual consumption depends on the substrate absorptiveness and cladding type.

Important additional information

- It is advisable to consult the tiles manufacturer before using ATLAS DELFIN for protection of freshly installed ceramic cladding.
- Wash the tools with clean water directly after use. Remove residues of ATLAS DELFIN with ATLAS SZOP 2000.
- Keep out of reach of children. Follow the instructions of the Safety Data Sheet.
- Keep in tightly sealed original and labeled containers. Keep in dry and cool places, protect against overheating (> 30 °C) and freezing - the product freezes and irreversibly loses its performance in temperature below 0 °C. Protect against direct sunshine. Shelf life in conditions as specified is 12 months from the production date shown on the packaging.

Packaging

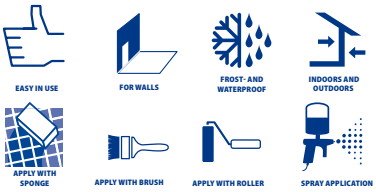
Plastic bottles 0.25 kg, plastic drums: 1 kg, 5 kg
Pallet: 300 kg in 0.25 kg bottles, 576 kg in 1 kg drums, 540 kg in 5 kg drums.

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-02-15

ATLAS BEJCA

impregnator for mineral render imitating natural wood texture ATLAS CERMIT WN

- highly resistant to atmospheric conditions
- resistant to soiling
- outstanding coat elasticity
- colour durability
- wide range of colours of natural wood



Use

Application of thin, colourful protective coat on decorative renders imitating wood texture ATLAS CERMIT WN – product is a component of external wall insulation systems ATLAS ETICS and ATLAS ROKER; can also be used on concrete substrates, mineral renders of any type (smooth, textured, etc.), gypsum plasters and finishes, plasterboards, etc.

Properties

Coat elasticity and high resistance to atmospheric conditions – owing to rich content of polymer dispersions.
Strongly hydrophobic, resistant to soiling – content of special silicone resins allows for significant reduction of coating absorptiveness, therefore reduces dust and dirt deposition, particularly in the render scores.
Durable and stable colours – specially selected semi-transparent pigments of high resistance to UV radiation, supplemented with minor addition of inorganic pigments assure long term colour stability.
Available in 10 colours of natural wood – colour range designed according to preferences of users from various European countries.

Technical data

ATLAS BEJCA is manufactured on the basis of mix of dispersion of low molecular weight polymers and silicone resins.

Density	1.02 g/cm^3
Impregnator preparation, substrate and ambient temperature during work, air relative humidity	from +5 °C to +25 °C, humidity < 80%
Drying time	approx. 30 minutes
Water absorptiveness after 24 h	≤ 200 g/m^2, with mineral render ATLAS CERMIT WN
Early resistance to rain	after approx. 24 h
Coat scrub resistance	above 5000 moves, acc. to PN-C/81913
Relative diffusion resistance	≤ 1.0 m
Impact resistance	Category II - with mineral render ATLAS CERMIT WN, standard MW, base coat ATLAS ROKER W-20. Other – category III
Reaction to fire	fire retardant with mineral render ATLAS CERMIT WN

Technical requirements

The product is listed in the following approvals for thermal insulation systems:

System name	Technical Approval No.	Certificate No.
ATLAS ETICS	AT-15-9090/2014	FPC-ITB-0562/Z
ATLAS ROKER	AT-15-2930/2012	FPC-ITB-0436/Z

The product has been given the Radiation Hygiene Certificate.

Application

Substrate preparation
Impregnator ATLAS BEJCA should be used on dry and sound, clean substrates:
- decorative mineral renders ATLAS CERMIT WN – after min. 3 days* since application,
- thin-coat mineral renders ATLAS CERMIT SN and DR - after min. 3 days* since application,
- traditional plasters made of ATLAS PLASTERING MIX, cement and cement-lime plasters - after min. 14 days* since application, structural moisture content < 2%,
- concrete - after min. 3 months* since application, structural moisture content < 2%,
- gypsum plasters and finishes, moldings, plasterboards – structural moisture content < 2%.

Any substrates coated with ATLAS BEJCA impregnator should be permanently damp proofed.
*) Note: for setting conditions: temperature+20°C, air humidity 50%

Impregnator preparation
Impregnator is delivered ready-to-use. It must not be mixed with other materials. Mix well before use in order to unify the consistency, best with a low speed mixer with a drill. Repeat mixing during application, if needed.

Impregnator application
Impregnator can be applied with one or two coats. Use clean tools and containers only. ATLAS BEJCA should be applied upon substrate with a brush, a roller or a sponge. Coat ATLAS CERMIT WN along the pressed "wood rings". In case of spray application, protect neighbouring elements, windows and doors. Apply the impregnator with uniform, thin coat, avoid patches and unpainted points. Coat any render scores thoroughly. Do not leave unpainted points. Time of drying - approx. 30-120 minutes, depending on substrate type, air temperature and relative humidity. In high humidity and temperature close to +5°C the setting time can extend.

Consumption

Average consumption - approx. 0.1-0.15 kg/1 m^2/coat. The actual consumption can be established on basis of sample application upon particular substrate.

Important additional information

- In order to avoid differences in colour shades an individual surface should be coated with impregnator of the same manufacturing date.
- Tools must be cleaned with clean water directly after use.
- Due to high sun radiation absorption, dark, intensive colours of renders (HBW < 20) are recommended on limited façade surfaces.
- Do not use the product on horizontal surfaces exposed to direct water and snow action as well as damp resulting from capillary action.
- Protect the painted surface both during application and approx. 24 hours after against direct sunlight. Use scaffolding covers. Protect painted surface against dust and precipitation until the impregnator dries.
- Keep in tightly sealed original and labeled containers. Keep in dry and cool places, protect against overheating (> 30 °C) and freezing - the product freezes and irreversibly loses its performance in temperature below 0 °C. Protect against direct sunshine. Incompatible materials: avoid contact with aluminum, copper and alloys of these metals. Shelf life in conditions as specified is 12 months from the production date shown on the packaging.

Packaging

Plastic bucket: 4 l

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-09-14

ATLAS ANTI-ADHESION AGENT

anti-adhesion agent for wood textured silicone molds

- easy and safe in use
- colourless
- does not leave stains on substrate

Use

Prevents mineral render ATLAS CERMIT WN from bonding silicone molds in the technology of application of renders imitating wood – effectively accelerates pace of work and ensures problem-free pattern formation.

Types of substrates – agent can be used on almost any construction substrates, especially mineral ones, e.g. concrete, cement and cement-lime plasters, cement screeds, grouts. **Note**. Use of agent upon surfaces other than mineral should be preceded by test application on a surface piece.

Properties

Safe in use – does not contain sulfur and aromatics, therefore is odour-free and safe in use.
Colourless – does not leave stains on substrate, accordant with ATLAS BEJCA impregnator.
Easy in use – does not require special tools, offers perfect working properties.
Facilitates render shaping and work with silicone mold.

Technical data

ANTI-ADHESION AGENT is manufactured on the basis of mix of hydrotreated paraffinic oils.

Relative density	0.855 g/cm^3
Substrate and ambient temperature during work	from +5°C to +25°C

Application

Agent preparation
ATLAS ANTI-ADHESION agent is manufactured as a ready-to-use product for direct use. It must not be mixed with other materials. Shake before use in order to unify the consistency.
Application
Apply ATLAS ANTI-ADHESION agent upon silicone mold patterned side with a brush, along the mold axis. Apply the agent thoroughly with uniform coat. Remove the render residues from the mold after each pattern pressing and apply new thin coat of anti-adhesion agent.

Consumption

On average, approx. 50 ml for a single mold coating.

Important additional information

- May be fatal if swallowed and enters airways. Wear protective gloves/protective clothing, eye protection and face protection. IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do not induce vomiting. Keep container tightly closed. Dispose of contents/ container to appropriately labeled containers designed for selective waste treatment, emptied by an authorized company. Follow the instructions of the Safety Data Sheet.
- Keep in cool, dry, well ventilated room in appropriately labelled and tightly sealed original packaging. Protect against direct sunshine, heat sources, hot surfaces, open flame. Temperature of storage: from +5°C up to +25°C. Protect against freezing. Shelf life in conditions as specified is 12 months from the production date shown on the packaging.

Packaging

Plastic drums: 5 kg

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-09-15

ATLAS SZOP

concentrated cement and lime residues remover

- for surfaces resistant to acids, ceramic, stone, chrome plated, varnished, stainless steel and plastic
- removes rust and water stains
- concentrate, can be diluted

Use

Removes cement, lime and gypsum residues – contains inorganic acid, recommended for cleaning surfaces after construction works where mineral mortars were used.
Removes dirt resulting from usage – dirt, sedimentation and stains caused by minerals contained in water, rust, etc.

Types of cleaned surfaces – ceramic (glazed, terracotta, porcelain-gres, clinker) and stone tiles, washing facilities, chrome-plated and varnished, stainless steel and plastic surfaces.

Properties

Can be diluted depending on the degree and type of contamination. Examples:

Thick, old residues of adhesives, grouts, plastering mortars, etc.	undiluted
Tarnish of adhesives, grouts, plastering mortars, etc.	1:3 to 1:5
Dirt and lime	1:5 to 1:10
Rust and tap water stains	1:10 to 1:15

Technical data

ATLAS SZOP contains inorganic acid.

Technical requirements

Cleaning agent is not classified as construction material. The product has been given the Hygienic Evaluation by the National Institute of Hygiene.

Cleaning

Places contaminated with products containing cement or lime should be slightly soaked with water. Use a brush or a sponge for the agent application and further cleaning. Depending on substrate properties, intensity and type of contamination, the agent can be used undiluted or as a water solution (see table). Strongly contaminated places should be soaked with undiluted agent and left soaked for a few minutes, so the agent starts to work. Remove contamination then. Pay special attention when working on surfaces where mortars containing cement or lime are present, e.g. ceramic cladding with joints filled with cement grout. In such cases, the application of improperly diluted agent can lead to accidental mortar washing off or its discolouration. In each case, wash the cleaned surface thoroughly with clean water or water solution of slight alkaline reaction. Absorptive surfaces can be protected against contamination with ATLAS DELFIN agent.

Consumption

The consumption depends on the degree and type of contamination.

Important additional information

- When cleaning absorptive surfaces (porous ones), which let dirt penetrate the material structure, one may find difficult to remove contamination.
- Wash the tools with clean water directly after each use.
- Causes skin irritation. Causes serious eye irritation. If medical advice is needed, have product container or label at hand. Keep out of reach of children. Read label before use. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. If skin irritation occurs: Get medical advice/attention. If eye irritation persists get medical advice/attention. Take off contaminated clothing. Store locked up.. Follow the instructions of the Safety Data Sheet.
- The agent must be transported and stored in tightly sealed packaging, in dry conditions and positive temperature. Protect against overheating. The emulsion shelf life is 12 months from the production date shown on the packaging.

Packaging

Plastic drums: 1 kg
Pallet: 576 kg in 1 kg drums.

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-01-10

ATLAS SZOP 2000

concentrated polymer dispersion residues remover

- removes residues of priming emulsions, paints and dispersion renders
- for ceramic, stone, clinker, chrome plated, varnished, stainless steel and plastic surfaces

Use

Removes residues of dispersions – priming emulsions (e.g. ATLAS UNI-GRUNT), protective agents (e.g. ATLAS DELFIN), emulsion paints, dispersion renders.

Types of cleaned surfaces – ceramic (glazed, terracotta, porcelain-gres, clinker) and stone tiles, washing facilities, chrome-plated and varnished, stainless steel and plastic surfaces.

Properties

Fast and effective – contains non-ionic surfactants, solvents and alkaline agents, dissolves dispersions quickly.
Can be diluted – depending on the degree of contamination, can be diluted with water (max. ratio 1:5).

Technical data

ATLAS SZOP 2000 contains non-ionic surfactants, solvents and alkaline agents.

Density	approx. 1.0 g/cm^3
Substrate and ambient temperature during work	from +5°C to +25°C

Technical requirements

Cleaning agent is not classified as construction material.

Cleaning

Depending on the degree of contamination - dilute ATLAS SZOP 2000 with water (max. ratio 1:5) and spread upon the surface. Strongly contaminated places should be soaked with undiluted agent. In either case leave soaked contamination for 15 minutes, so the agent starts to work, and remove the residues with a scrubbing brush then. Repeat the process, if necessary. Wash the whole surface thoroughly with water after cleaning.

Consumption

The consumption depends on the degree and type of contamination.

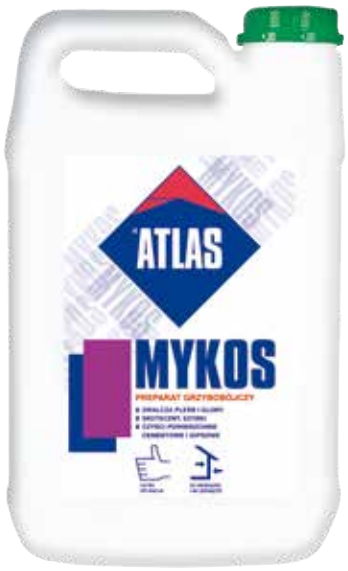
Important additional information

- The agent is not recommended for cleaning wooden surfaces and window panes. If in doubt conduct an application test before the main application of the agent.
- Wash the tools with clean water directly after use.
- Causes skin irritation. Causes serious eye irritation. Keep out of reach of children. Wear protective gloves/protective clothing/eye protection/face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. . IF ON SKIN: Wash with plenty of water with soap. If eye irritation persists get medical advice/attention. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing. Follow the instructions of the Safety Data Sheet.
- The agent must be transported and stored in tightly sealed packaging, in dry conditions and positive temperature. Protect against overheating. The emulsion shelf life is 12 months from the production date shown on the packaging.

Packaging

Plastic drums: 1 kg
Pallet: 576 kg in 1 kg drums.

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-01-10



ATLAS MYKOS
fungicide

- effective, quick and easy in use
- fights mould and algae
- for cleaning cement and gypsum surfaces
- for bathrooms and kitchens
- for façades and terraces

Use

Quick and effective removal of biological corrosion – organic origin tarnish, i.e. fungi, mould, lichens, algae and moss. Effective against Basidiomycota fungi and mould: Aspergillus Niger, Aspergillus terrus, Paecilomyces variotti, Penicillium funiculosum, Penicillium ochrochloron, Scopulariopis brevicaulis, Trichoderma viride.
Protects construction elements from damage – biological corrosion develops in places particularly exposed to damp, destroys the protective coat of construction elements and exposes their structure to adverse atmospheric factors. Façades (insulated and not insulated), walls and floors on terraces, laundries, cellars, bathrooms, etc. are particularly susceptible to infection.
Restores aesthetic appearance of finishing coats – biological corrosion occurring in the form of black, brown or green tarnish is effectively removed and original appearance of infected surface restored.

Types of substrates – agent can be used on almost any construction substrates, especially mineral ones, e.g. concrete, cement and cement-lime plasters, cement screeds, grouts. **Note**. Use of agent upon surfaces other than mineral should be preceded by test application on a surface piece.

Properties

Penetrates the structure of mineral substrates – the agent is able to penetrate the mineral bed to the depth of a few millimeters and therefore destroys microorganism in various stage of development more effectively.
Can be applied without professional assistance – the application of agent does not require any special qualifications and users can perform the cleaning themselves, with the use of typical painting tools, accessories for surface cleaning and protective measures.

Technical requirements

The product has been given the biocide marketing authorization No. 3258/07 and Hygiene Certificate No. KH/B/0475/06/2012 issued by the National Institute of Hygiene.
Avoid discharge into the environment. Active compound – Benzyl- C12- 18-alkyldimethylammoniumchloride = 0.5 g/100 g – C, Substances classified as hazardous: Ethanol 0.05 – 0.25% – F. Effective dosage: Basidiomycota – 394 g/m^2, mould – 410 g/m^2.
In case of intoxication or allergy to the product, if the injured person is unconscious or in convulsions, do not administer liquids and do not induce vomiting. Evacuate injured person from the place of application of agent and contact a doctor or a toxicology center. Follow the instructions of the Safety Data Sheet.
Waste handling. Remains or spilled product must be removed according to the Ministry of Environment Regulation of 27 September 2001, on waste catalogue (Polish Journal of Laws No. 112 item 1206) and Law on waste of 14 December 2012 (Polish Journal of Laws No. 2013 item 21), and Ministry of Environment Regulation on specimens of documents used for the purposes of waste registration of 8 December 2010 (Polish Journal of Laws No. 249 item 1673). Check and follow local regulations on the waste handling.

Mode of disposal: D2 storage in bulk in open storage places in tight containers. **Packaging waste:** 15 01 02, plastic containers. Product can be considered a waste when it is totally unsuitable for use. The waste product is transported to the place indicated by the environment protection services for utilization. Empty containers must be stored in a designated place until the appropriate transport batch is collected. Deliver collected containers to the company operating in recycling or neutralization.
Do not let the product enter the sewage system, surface and ground waters, protect drains. If possible, stop leakage (stop the liquid inflow, seal, place damaged container in a replacement container). Cover the released product with absorbable materials, e.g. sand and collect into properly marked and tightly closed waste container. Dispose of collected waste according to the regulations in force. In case of release of large amounts of the product or contamination of the environment, inform appropriate authorities and chemical rescue services.

Cleaning

Substrate drying and protecting
Inspect the substrate, find the sources of damp and remove them. If necessary, replace flashings, gutters, roof covering and apply new foundations waterproofing, soil draining, etc. If the substrate is significantly damp, hack off its topmost layer going at least 80 cm outside the damp area, clean with a steel brush and leave to dry. Vacuum the surface when dries. Remove damp from construction partitions and rooms using air driers and heaters or by improving the ventilation system. Employ professionals for this operations. Protect the cleaned places against precipitation and excessive liquid drying, which might take place at points exposed to sunlight.

Tarnish removal
Clean the infected surface from tarnish before the application of fungicide. The technology of cleaning (manual or machine – with pressure washer) must be selected individually. The choice is determined by location of surface and degree of infection. In case of very strong tarnish, machine removal is necessary. If the infection is light, tarnish can be removed with water and a brush and dusted with a vacuum cleaner. Technical details, like jet type and water pressure of machine cleaning, or brush hair hardness for manual removal, must be chosen according to intensity of contamination and substrate strength. When cleaning, be prepared for the risk of loose substrate parts to fall off. If, for example, render is weak and its replacement is not planned, or when the cleaned surface is relatively small, e.g. grouts, the tarnish can be removed manually with brushes with appropriately hard hair. The pressure washer with flat water stream jet can be used when the tarnish is removed from a façade and renders are strongly bonded to the substrate, so there is no risk of damage. The maximum pressure must not exceed 150 bar. When a façade is extremely greasy, which impedes the penetration of the fungicide, use detergent to wash it. In case of significant tarnish, enhance the effect of preliminary washing by using hot water.

Surface decontamination
Surface decontamination with ATLAS MYKOS can be carried out when the substrate and ambient temperature is between +5°C and +25°C. Apply the liquid uniformly with a brush, a roller, or spray it. Due to possibility of occurrence of mycelium in various stages of development (easy to remove vegetative mycelium and sprouting spores as well as much more resistant endospores like conidium), it is advisable to apply the agent three times. Intervals of 12-24 hours must be observed between consecutive applications.

Surface protection
If the topmost substrate layer was hacked off, it must be recreated with appropriate mortars, e.g. ATLAS PLASTERING MIX or ATLAS TEN-10 (according to their technology of application). Painting of surfaces treated with ATLAS MYKOS can take place not earlier than 48 hours since the agent application. Indoors, rooms can be used after 48 hours since the agent application. Silicone paints and agents, e.g. ATLAS SILSTOP, ATLAS SALTA or ATLAS FASTEL NOVA are recommended for painting. They significantly limit the substrate absorptiveness and reduce the risk of new contamination.

Consumption

For single application: 0.1 kg of agent for 1 m^2 of infected surface.
For recommended triple application: 0.25 – 0.3 kg of agent for 1 m^2.

Important additional information

- Do not eat, drink, or smoke during use of preparation. Rooms where the preparation was applied must be aired thoroughly. Wash the tools with water directly after use.
- Contains didecyl dimethyl ammonium chloride, ethanol. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation Prevention precautionary statements. Keep out of reach of children. Avoid breathing /mist/vapours/spray. Wash hands thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN: Wash with soap and water. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Call a POISON CENTER or doctor/physician if you feel unwell. Take off contaminated clothing and wash before reuse. If skin irritation occurs: Get medical advice/attention. If eye irritation persists get medical advice/attention. Dispose of contents/container to authorized companies Follow the instructions of the Safety Data Sheet.
- Keep the preparation in dry rooms, in original containers protecting against freezing, in temperature between +5°C and +25°C. Store in a well ventilated place. Keep tightly closed. Shelf life in conditions as specified is 12 months from the production date shown on the packaging.

Packaging

Plastic drums: 1 kg, 5 kg, spray 0.5 kg
Pallet: 576 kg in 1 kg drums, 540 kg in 5 kg drums and 216 kg in 0.5 kg (multi-packs 12 pcs).

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-01-08

ATLAS ELASTIC EMULSION

admixture modifying parametres of particular mortars

- improves elasticity
- improves bonding to substrates
- improves working parametres
- extends the range of use of particular mortars
- component of contact coats beneath particular ATLAS mortars

Use and properties

Improves elasticity of mortars – enables their use when installing ceramic cladding on deformable substrates, e.g. appropriately rigid and stable waterproof plywood and plasterboards.
Improves stress compensation within the mortar – enables application of non-elastic mortars on balconies, terraces, screeds with floor heating systems.
Improves mortar bonding to substrate – mortars of basic bonding can be used after modification on old glazed tiles and terracotta, directly on terrazzo and on residues of old well bonded adhesives and mineral mortars.
Improves working parameters – improves mortars elasticity, makes them more comfortable to work with.
Extends the range of use of particular cement-based mortars – ELASTIFIED ADHESIVE MORTAR ATLAS and ATLAS WIDE GROUT.
Component of contact coats beneath particular ATLAS mortars – used for appropriate preparation of substrate prior to application of ATLAS TEN-10, ATLAS POSTAR 80, ATLAS POSTAR 40 and ATLAS POSTAR 20.

Technical data

ATLAS ELASTIC EMULSION is manufactured on the basis of high quality polymer dispersions and modifiers.

Emulsion density	approx. 1.2 g/cm^3
Mix preparation, substrate and ambient temperature during work	from +5°C to +25°C

Technical requirements

The product has been given the ITB Technical Approval No. AT 15-6708/2011.
The product has been given the Factory Production Control Certificate No. ITB--0015/Z.
The product has been given the Radiation Hygiene Certificate.

Modifying

Preparation of emulsion solution
The emulsion is added to mortars in the form of water solution. Its preparation consists in pouring the emulsion into a container and diluting with clean water in appropriate ratio, depending on use:
– with ELASTIFIED ADHESIVE MORTAR ATLAS - 1 kg of emulsion with 1.7 l of water
– with ATLAS WIDE GROUT - 1 kg of emulsion with 2.0 l of water
– with screed ATLAS TEN-10 (used for contact coat) - 1 kg of emulsion with 2.0 l of water
– with screed ATLAS POSTAR 20 (used for contact coat) - 1 kg of emulsion with 2.0 l of water
– with screed ATLAS POSTAR 40 (used for contact coat) - 1 kg of emulsion with 2.0 l of water
– with screed ATLAS POSTAR 80 (used for contact coat) - 1 kg of emulsion with 2.0 l of water
– with mortar ATLAS ZW 330 (used for contact coat) - 1 kg of emulsion with 2.0 l of water

Mortar modification
Slowly add the dry mix into the emulsion solution (in ratio as listed in the Technical Data Sheet of modified product) and mix until homogenous. The modified mortar is ready to use after 10 minutes and remixing. ELASTIFIED ADHESIVE MORTAR ATLAS and ATLAS WIDE GROUT with emulsion added should be used up within 2 hours since mixing, ATLAS TEN-10, ATLAS ZW 330, ATLAS POSTAR 80, ATLAS POSTAR 40 and ATLAS POSTAR 20 just after mixing. No matter whether ATLAS ELASTIC EMULSION is added to mortar or the mortar is used unmodified, the way of its application keeps unchanged and is described is in the Technical Data Sheet of a particular mortar.

Important additional information

- Clean the tools with clean water directly after use. Wash difficult to remove residues of set mortar modified with the emulsion with ATLAS SZOP agent.
- Keep out of reach of children. Follow the instructions of the Safety Data Sheet.
- The emulsion must be transported and stored in tightly sealed packaging, in dry conditions and positive temperature. Protect against overheating. The emulsion shelf life is 12 months from the production date shown on the packaging.

Consumption

The consumption of added emulsion depends on type and use of modified product and is described in its Technical Data Sheet.

Packaging

Plastic drums: 1 kg, 5 kg
Pallet: 576 kg in 1 kg drums, 540 kg in 5 kg drums.

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-07-22

ATLAS ESKIMO – NEW FORMULA

setting accelerator for renders and paints

- enables rendering and painting at 0°C and in high air humidity (above 80%)
- accelerates coat setting time
- gives early resistance to rain
- neutral to other material properties

Use

Enables rendering and painting at 0°C – recommended during façade works in low temperature (0 – 10°C) and high air humidity (above 80%).

Types of modified materials:
ATLAS ACRYLIC renders
ATLAS SILICONE renders
ATLAS DEKO M mosaic renders
ATLAS ARKOL E and ATLAS SALTA E acrylic paints
ATLAS FASTEL NOVA and ATLAS SALTA silicone paints.

Properties

Accelerates water evaporation from the applied render or paint – accelerates the first stage of setting of dispersion products – water evaporation from the applied material. Therefore, the second stage, consisting in binder setting and drying, can start earlier – the applied material gets resistant to rapid temperature drop and precipitation earlier (already after approx. 6 - 8 hours).
Easy in use – ready-to-use liquid admixture dosed directly to material before application on a façade; easily mixing with rendering mass or paint.
Neutral to other properties of material – does not lead to deterioration of durability or operational parameters after setting.
Does not change the colour of the applied render or paint coat.

Technical data

ATLAS ESKIMO is manufactured as yellow liquid of smell of ammonia.

Relative density	approx. 1.1 g/cm^3
Temperature of use	from 0°C to +10°C

Technical requirements

The product is not classified as a construction material.

Agent use

The agent is added to render or paint directly before their application. It is recommended to observe the weight ratio of 1%, i.e. up to 0.25 kg (whole bottle) with 25 kg of render and up to 0.15 kg (3/5 of a bottle) with 10 l of paint. After thorough manual or machine mixing, the material can be applied.

Important additional information

- The substrate for render or paint must not be frozen. Recommended application and drying temperature from 0°C up to +10°C. Freshly applied material gets resistant to precipitation after approx. 6 – 8 hours, depending on ambient temperature and humidity.
- The tools must be cleaned with clean water directly after use.
- Danger. Contains the water ammonia solution CAS 1336-21-6. Causes skin irritation. Causes serious eye damage. Wash hands thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN: Wash with plenty of water with soap. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Immediately call a poison center or a doctor. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. Follow the instructions in the Safety Data Sheet.
- Keep in tightly sealed original and labeled containers. Keep in dry and cool places, protect against overheating (> 30 °C) and freezing. Protect against direct sunshine, heat sources, sparkles, flame. Shelf life in conditions as specified is 18 months from the production date shown on the packaging.

Packaging

Plastic bottle of 0.25 kg
Collective package: multipack 5 kg, pallet 300 kg

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-12-04

ATLAS GOLDEN AGE

systems for walls damp proofing and drying
wall restoration system
plaster restoration system
moulding mortars
primers, preparations, impregnators

ATLAS GOLDEN AGE

systems for walls damp proofing and drying

SYSTEMS FOR WALLS DAMP PROOFING AND DRYING

SUBSTRATE PREPARATION → **DAMP PROOFING** → **PLASTER RESTORATION SYSTEM**

USE AND PROPERTIES

- liquid silicification preparation of deep – seated action
- for use in conservatory works in heritage buildings as well as in contemporary construction
- used for waterproofing and refurbishment of buildings at plinth zone as well as foundations and basements, indoors and outdoors, in case of lack or faulty horizontal and/or vertical damp proofing
- can be used for surface as well as structural strengthening
- for execution of horizontal watertight membrane preventing the substrate material from capillary water rising
- for use with gravity or low – pressure injection method
- recommended for absorptive, porous mineral substrates, made of brick or stone, of dampness up to 80% and low or average salinity level (other cases require initial wall drying in the planned injection zone and desalination actions)
- very high substrate penetration abilities – the preparation has low viscosity and low molecular weight construction, therefore quickly fills the substrate material pores
- forms membrane within whole wall cross section without surface sealing – keeps the substrate vapour permeability and ability of free evaporation
- strengthens the substrate material – by gel accumulation in the pores during the process of silicification
- can be used as a priming preparation for substrate priming before the use of mineral mortars forming surface waterproofing

RANGE OF USE

- reconstruction of horizontal damp proofing with the injection method from outdoors, without excavation - on external foundation or basement walls, partly earth - sheltered
- reconstruction of horizontal damp proofing with the injection method from indoors, with damp proofing plaster application – on basement walls partly or full earth – sheltered and partition walls indoors
- reconstruction of horizontal damp proofing with the injection method from indoors, with application of tub – shaped damp proofing – on basement walls partly or full earth – sheltered and partition walls indoors
- reconstruction of horizontal damp proofing with the injection method from outdoors, with foundation excavation and execution of new vertical insulation in mineral or bitumen system – external walls, basement walls, partly or fully earth – sheltered

SUBSTRATE PREPARATION

The method of substrate preparation should be individually adjusted for each object, depending on strength and condition of the substrate material and its historic value. Damp and saline plasters should be removed up to the height of approx. 80 cm above the highest visible salinity and/or dampness line. Clean the surface of dust, saline efflorescence, mortar residues and poorly bonded wall elements. If need to neutralize the construction salts, use PREPARATION FOR SALT NEUTRALISATION PS, according to its technical data sheet. Carve out the masonry mortar from joints up to depth of 20 mm and re-fill with cement mortar, e.g. MORTAR FOR FILLING CAVITIES IN BRICK AND NATURAL STONE CG, without wall facing. Before injection, cracks, gaps and empty spaces should be filled with cement mortar, e.g. RENOVATION BASE COAT PLASTER TRP (it is advisable to drill sample holes in order to determine wall construction and structure).

APPLICATION

The technology of works during injection and reconstruction of horizontal damp proofing depends on planned technical solution (range of use), current groundwater conditions, wall thickness, substrate dampness and salinity level.

Recommendations for holes drilling

Holes intended for the introduction of SILICIFICATION PREPARATION KS into the wall structure should be 10 - 30 mm in diameter and executed in one row, with axial spacing 10 - 12.5 cm. Holes should keep a slope of approx. 25°, in case of thin walls the slope angle can be slightly larger, in case of thicker walls the angle should be smaller. The thickness of drilling should be chosen in order to make holes approx. 5 cm shallower than the total wall thickness. In case of very thick walls (> 60 cm) it is advisable to drill holes alternately, in both wall sides.

1. **Reconstruction of horizontal damp proofing with the injection method from outdoors, without excavation.**
   - Partition type: external walls, foundation or basement walls, partly earth – sheltered
   - Water conditions: groundwater table below the foundation level, not – dumping groundwater (infiltration), pressure – less, capillary dampness
   - Drill injection holes from outdoors, above the ground level. Clean the holes of dust with compressed air. Directly before the injection, wet the substrate with water and execute initial silicification with KS preparation diluted with water in ratio 1:1. In case of weathered walls of low strength waterproofing, apply additional coat made of ATLAS WODER S mortar within the planned injection site in order to limit the possibility of uncontrolled leakage of the injection preparation beside the walls. Pressure – less injection (gravity) should be executed with funnels providing constant and steady substrate impregnation. Stop application after full impregnation of wall within each drilled hole. In case of pressure injection, place injectors in the holes and inject the preparation with constant pressure of 4 - 8 bars. After injection, float the holes with cement mortar, e.g. RENOVATION BASE COAT PLASTER TRP. Depending on wall salinity, one should apply renovation plasters ATLAS GOLDEN AGE upon external plinth walls and internal basement walls. Depending on the expected aesthetic effect the plaster surface can be finished with a properly chosen conservatory finishing coat or Silicate Renovation Paint S-02.
2. **Reconstruction of horizontal damp proofing with the injection method from outdoors, without excavation, with the use of the damp proofing plaster HYDROTYNK U.**
   - Partition type: external walls, foundation or basement walls, partly earth – sheltered
   - Water conditions: groundwater table above the foundation level, groundwater temporarily dumping (infiltration), pressure – less
   - Execute the injection as described in point 1. Due to water conditions it is advisable to apply coat of DAMP PROOFING PLASTER HYDROTYNK U upon basement walls. It is recommended to apply the plaster in coats of thickness approx. 10 mm, depending on substrate dampness level. For walls slightly damp, one – two plaster coats are sufficient, for walls intensively damp it is advisable to use minimum three plaster coats. It is recommended to execute a plaster cove made of DAMP PROOFING PLASTER HYDROTYNK U upon wall corners and wall – floor joint edges. If needed, the damp proofing plaster can be used in combination with the coat made of two – component waterproofing membrane ATLAS WODER DUO executed upon the floor.
3. **Reconstruction of horizontal damp proofing with the injection method from outdoors, without execution, with the application of tub – shaped damp proofing made of two – component waterproofing membrane ATLAS WODER DUO.**
   - Partition type: external walls, foundation or basement walls, partly earth – sheltered
   - Water conditions: groundwater table above the foundation level, groundwater temporarily dumping (infiltration), pressure – less
   - Execute the injection as described in point 1. Due to water conditions and possible high wall dampness level it is advisable to execute upon basement walls (and floor) the tub – shaped damp proofing made of mineral two – component waterproofing membrane ATLAS WODER DUO – in two coats, keeping 3 – hour break between the coats application. ATLAS WODER DUO must be applied upon properly even substrate, in case of large wall unevenness it is recommended to apply base coat made of ATLAS GOLDEN AGE TRO. It is recommended to execute a plaster cove made of DAMP PROOFING PLASTER HYDROTYNK U upon wall corners and wall – floor joint edges. Depending on wall salinity, one should apply renovation plasters ATLAS GOLDEN AGE upon properly stabilized membrane. Depending on the expected aesthetic effect the plaster surface can be finished with a properly chosen conservatory finishing coat or Silicate Renovation Paint S-02.

4. **Reconstruction of horizontal damp proofing with the injection method from outdoors, with the foundation excavation and execution of new vertical damp proofing with mineral system.**
   - The injection is executed from the outdoors, drill holes above the strip foundation or from the indoors – in both cases the membrane should be above the basement floor level. In case of very thick walls (> 60 cm) it is advisable to drill holes alternately, in both wall sides. Apply SILICIFICATION PREPARATION KS as described in point 1. Upon foundation walls from outdoors, apply the waterproofing coat made of mineral watertight mortar ATLAS WODER S or two – component waterproofing membrane ATLAS WODER DUO, in minimum 3 coats. Protect the applied waterproofing coat against mechanical damage with dimpled membrane or extruded polystyrene XPS boards of thickness 2 cm, covered with a layer of 0.2 mm building foil. Apply XPS boards with cement adhesive ATLAS STOPTER K-20. Fill the excavation with filtration backfill and execute the sea bank made of sett around the building.
5. **Reconstruction of horizontal damp proofing with the injection method from outdoors, with the foundation excavation and execution of new vertical damp proofing with bitumen system (water – based, solvent – free).**
   - The injection is executed from the outdoors, drill holes above the strip foundation or from the indoors – in both cases the membrane should be above the basement floor level. In case of very thick walls (> 60 cm) it is advisable to drill holes alternately, in both wall sides. After silicification, prime the whole surface of excavated foundation walls with KS preparation diluted with water in ratio 1:1 and apply a coat of mineral watertight mortar ATLAS WODER S. Then, apply the waterproofing coat made of dispersion, thick – coat asphalt – rubber mass Izohan IZOBUD WM or Izohan IZOBUD WM 2K, of thickness 2 – 4 mm, depending on the water pressure. Protect the applied waterproofing coat against mechanical damage with dimpled membrane or extruded polystyrene XPS boards of thickness 2 cm, covered with a layer of 0.2 mm building foil. Apply XPS boards with adhesive Izohan EKOLEP. Fill the excavation with filtration backfill and execute the sea bank made of sett around the building.

REMARKS

- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
- Decision on the choice of technological and material solutions during waterproofing reconstruction should be made after evaluation of groundwater conditions, type of construction material of walls adjoining the ground, dampness, salinity level and foundations technical state as well as other aspects crucial for a particular object.
- The injection should be executed properly long in order to form continuous waterproofing coat within the whole wall width.
- During the foundation excavation and reconstruction of vertical damp proofing, follow the safety regulations on partial foundation excavation.
- The tools must be cleaned with clean water directly after use.
- The shelf life of the product is 12 months from the production date shown on the packaging. The product must be transported and stored in tightly sealed packages, in dry conditions, in positive temperature (most preferably on pallets). Avoid direct sunshine.
- Causes skin irritation. Causes serious eye damage. Wash face, eyes and hands thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN: Wash with plenty of water with soap. If skin irritation occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Immediately call a POISON CENTER/doctor.
- Detailed information on hazards and safe use conditions, ecological aspects and recommendations for transport and storage are listed in the Safety Data Sheet.

TECHNICAL DATA

ATLAS ZŁOTY WIEK KS is an aqueous solution of potassium silicate, potassium methyl siliconate and modifying additives.

Density	1.20 g/cm³
Substrate strengthening (depending on substrate material, its humidity and external conditions)	up to 60% (5.0 – 6.0 N/mm²)
pH	11 - 13
Colour	yellow
Consumption (depending on substrate absorptiveness and partition dampness)	approx. 0.4 kg for each filled hole in a wall 50 cm thick approx. 0.1 kg/m² for silicification priming
Substrate and ambient temperature during work and drying	from +5°C to +25°C
Packaging	plastic containers 5 kg, 10 kg, 30 kg

At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-02-12

USE AND PROPERTIES

- specialist, mineral plaster based on hydraulic binder
- for execution of barrier plasters on damp and saline substrates of brick, natural stone and concrete surfaces
- forms watertight coat blocking capillary rising of damp and its transfer indoors
- recommended for heritage sites, foundations, basement walls and building plinth zones in places where walls adjoin the ground directly
- particularly useful when reconstruction of vertical wall damp proofing is difficult or impossible due to technical or organizational reasons (walls adjoining terraces, frontage line buildings, etc.)
- can be used in contemporary construction, for execution of plasters on plinths, retaining walls and fencing, particularly at floodplains or areas at risk of flood
- protects walls construction material against splash water
- forms coat resistant to water pressure of 0.2 bars
- vapour permeable – allows free humidity evaporation and substrate drying
- resistant to sulfates – does not require salts content evaluation, ensures proper bonding to damp and saline surfaces
- high mechanical strength

RANGE OF USE

- indoors and outdoors in case of lack of or faulty horizontal and/or vertical damp proofing
- as an alternative solution for tub-shaped damp proofing with the use of one-component mineral waterproofing mortars and renovation plasters
- partly earth – sheltered, external foundation or basement walls - it is recommended to execute damp proofing membrane made of SILICIFICATION PREPARATION KS above the ground level, from indoors or outdoors
- fully earth – sheltered foundation and basement walls or those forming partitions adjoining neighboring buildings or other rooms - it is recommended to execute damp proofing membrane made of SILICIFICATION PREPARATION KS at floor level as well as in the zone just below the room ceiling
- on external walls, at plinth zone, on retaining walls and fencing, for execution of wall protective coat against rainwater and splash water action
- damp proofing plasters, due to their action characteristics, should not be used beyond the ground floors and foundation walls as well as in case of pressurised water action

SUBSTRATE PREPARATION

The method of substrate preparation should be individually adjusted for each object, depending on strength and condition of the substrate material and its historic value. Plasters/renders of low strength, poorly bonded or loosening should be removed, carve out the masonry mortar from joints up to depth of 20 mm. Then, clean the exposed surface from dust, efflorescence, mortar residues and poorly bonded wall elements. Fill the cleaned joints and wall defects with MORTAR FOR FILLING CAVITIES IN BRICK AND NATURAL STONE CG. Visible saline efflorescence should be mechanically removed by cleaning, PREPARATION FOR SALT NEUTRALISATION PS can be used, if needed. It is also necessary to remove any biological contamination. In order to do that, contaminated sites should be cleaned of visible deposits with a brush or a pressure washer, use ATLAS MYKOS preparation then. The preparation should be applied at least three times in order to neutralize the contamination in different stages of development. If needed, use SILICATE STREGTHENING PREPARATION KPW upon the whole surface in order to strengthen the substrate before plastering. After full substrate preparation, in case of concrete substrates or small – size lime – sand elements plastering, it is advisable to apply base coat made of ATLAS GOLDEN AGE TRO.

APPLICATION

Prepare the mortar by pouring the dry mix into a container with a suitable amount of water and mixing mechanically until homogenous, free from lumps and separating liquid. Recommended ratio: 5.00 liters of water to 25 kg of the dry mix. The mortar can be used up within approx. 60 minutes, it should be re-mixed from time to time. Apply the plaster with even coat, manually, by throwing with a trowel, upon appropriately prepared substrate. It is recommended to apply the plaster in coats approx. 10 mm thick, depending on substrate dampness level. For walls slightly damp, one – two plaster coats are sufficient, for walls intensively damp it is advisable to use minimum three plaster coats. It is recommended to execute a plaster cove made of DAMP PROOFING PLASTER HYDROTYNK U, upon wall corners and wall – floor joint edges. When applying the plaster outdoors, after execution of each intermediate coat, it is advisable to float its surface rough. The final coat can be slightly floated, but without surface felting. Provide proper room ventilation during the plaster drying. Protect plasters applied outdoors from drying too fast, wet them with water within 5 up to 7 days since application, if needed.

REMARKS

- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
- The tools must be cleaned with clean water directly after use.
- The shelf life of the product is 12 months from the production date shown on the packaging. The mortar must be transported and stored in tightly sealed bags, in dry conditions.
- Irritant – contains cement. Risk of serious damage to the eyes. Can trigger allergic reaction on contact with skin. Keep out of the reach of children. Do not inhale the dust. Rinse contaminated eyes with large amounts of water and seek doctor's assistance. Wear appropriate protective clothing, protective gloves and goggles or face protection. In case of ingestion immediately seek medical advice – show the packaging or label.
- Detailed information on hazards and safe use conditions, ecological aspects and recommendations for transport and storage are listed in the Safety Data Sheet.

TECHNICAL DATA

DAMP PROOFING PLASTER HYDROTYNK U is a factory made dry mix manufactured on the basis of hydraulic binder, quartz fillers and additives providing water tightness and waterproofness.

Mixing ratio: water/dry mix	5.0 l/25 kg
Pot life	approx. 1 hour
Consumption	approx. 1.7 – 1.8 kg for 1 m² with 1 mm coat thickness
Minimum coat thickness	10 mm
Maximum coat thickness	30 mm (up to 50 mm at points)
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Packaging	paper bags 25 kg
Content of soluble chromium (VI) in ready-to-use mix	≤ 0.0002%

TECHNICAL REQUIREMENTS

CE 14 Declaration of Performance no. AZW HTU/CPR PN-EN 998-1:2012 (EN 998-1:2010)	
Factory made plastering mortar of specified properties, general-purpose (GP), for manual application. For indoor and outdoor use, for walls, ceilings, posts and partition walls.	
Reaction to fire - class	A1
Water absorption - category	W1
Adhesion, FP:B	≥ 0.3 N/mm²
Water vapour permeability coefficient (tabular value), μ	15/35 (EN 1745:2002, table A.12)
Thermal conductivity coefficient (average tabular value P=50%)	0.83 W/mK ($\lambda_{10, dry}$) (EN 1745:2002, table A.12)
Durability. Compressive strength decrease after 25 freeze-thaw cycles	≤ 15 %
Durability. Mass decrement after 25 freeze-thaw cycles	≤ 3%
Gross dry mortar density	≤ 1800 kg/m³
Release/content of hazardous substances	See: Safety Data Sheet

At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-04-10

USE AND PROPERTIES

- modern, solvent – free product based on silanes of low viscosity
- for execution of horizontal membranes preventing capillary water rising in damp partitions
- for use with the pressure – free method in conservatory works in heritage buildings as well as in contemporary construction
- is a part of the system for damp proofing and refurbishment of buildings – in combination with other materials allows to reconstruct comprehensively ineffectual/ non – existent damp proofing
- can be used on substrates of very high dampness level, even up to 95%
- for injection into porous, absorptive partitions of brick, stone or concrete blocks
- particularly recommended for walls of composite structure – with cracks and cavities
- characterized by high efficiency and effectiveness – content of active ingredient approx. 80% (by weight)
- very easy to use, does not require specialist equipment or accessories
- thixotropic – properly chosen cream consistency ensures quick and continuous filling the injection hole, eliminates also the risk of uncontrollable leakage of injection cream outside the wall or into existing wall cavities
- solvent – free, does not bring harmful substances into the wall structure
- resistant to alkali
- for indoor and outdoor use

RANGE OF USE

- reconstruction of horizontal damp proofing of foundation walls of buildings with and without basements
- reconstruction of horizontal damp proofing of walls at plinth zones
- in tub – shaped damp proofing system – for damp proofing of internal walls (both partition and load bearing) adjoining the external walls

SUBSTRATE PREPARATION

The substrate should be comprehensively prepared for the use of the renovation system (see technical data sheets for other components of ATLAS GOLDEN AGE restoration plasters system, DAMP PROOFING PLASTER HYDROTYNK U). Damp and saline plasters should be removed up to the height of approx. 80 cm above the highest visible salinity and/or dampness line. Clean the surface of dust, saline efflorescence, mortar residues and poorly bonded wall elements. If need to neutralize the construction salts, use PREPARATION FOR SALT NEUTRALISATION PS, according to its technical data sheet. Carve out the masonry mortar from joints up to depth of 20 mm and re-fill with cement mortar without wall facing. Before injection, cracks, cavities and empty spaces should be filled with cement mortar, e.g. RENOVATION BASE COAT PLASTER TRP (it is advisable to drill sample holes in order to determine the wall construction and structure).

APPLICATION

The technology of works during injection and reconstruction of the horizontal damp proofing depends on the planned technical solution (range of use), current groundwater conditions, wall thickness, substrate dampness and salinity level. The site of execution of the horizontal membrane must be coordinated with the designed secondary damp proofing scheme in order to keep waterproofing continuity. In buildings with basements the horizontal membrane is usually executed in the wall zone directly above the strip foundation (so it can be joined with the floor damp proofing and vertical damp proofing from indoors), for tub – shaped damp proofing the horizontal membrane is usually executed in the upper wall zone (below ceiling). In buildings without basements the horizontal membrane is executed above the ground level (the execution level should be coordinated with the room floor placement, in order to join the floor damp proofing with horizontal damp proofing). Make sure there is no dampness penetration into the wall zone above the membrane. The injection must not be executed in zones loaded with pressurised water.

RECOMMENDATIONS FOR HOLES DRILLING AND INJECTION

Holes intended for introduction of the injection cream into wall structure should be min. 12 mm in diameter and executed in one or two rows. The axial spacing of the holes should be max. 12 cm. In case of injection in two rows, the second row should be executed with a shift (half a distance between the holes).The holes should be drilled in joints, horizontally or with a slight slope. The drilling thickness should be chosen in order to make the hole approx. 2 cm shallower than the total wall thickness. If the hole is not executed in the joint, make sure it cuts at least one horizontal joint. Mark the drilling line and holes placement on the partition. When drilling try to keep the holes parallel – use templates and T – squares, and drillers should, whenever possible, work shake-less. Drain the holes with suction or blow them through with clean compressed air. The cream can be applied with a pressure sprayer (after removing the spraying nozzle), alternatively with a tube squeezer (with additional pipe or hose installed). Place the sprayer lance or the pipe ending in the hole, then apply the cream evenly and remove the tool simultaneously. Properly applied cream should fill the hole fully. After cream absorbing, after approx. 12 hours, it is recommended to float the holes with cement mortar, e.g. RENOVATION BASE COAT PLASTER TRP or DAMP PROOFING PLASTER HYDROTYNK U.

REMARKS

- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
- Decision on the choice of technological and material solutions for damp proofing reconstruction works should be made after evaluation of the local groundwater conditions, type of construction material of walls adjoining the ground, dampness, salinity level and foundations technical state as well as other aspects crucial for a particular object.
- The tools must be cleaned with clean water directly after use.
- The shelf life of the product is 12 months from the production date shown on the packaging. The product must be transported and stored in tightly sealed packages, in dry conditions, in positive temperature (most preferably on pallets). Avoid overheating (above +30 °C). Flash point +64 °C.
- Detailed information on hazards and safe use conditions, ecological aspects and recommendations for transport and storage are listed in the Safety Data Sheet.

TECHNICAL DATA

ATLAS GOLDEN AGE KI is a solvent – free, silanes – based cream.

Product density	approx. 0.9 g/cm³
Active ingredient content	> 80% by weight
Consumption (in practice depending on substrate material type and thickness, partition dampness and holes diameter)	approx. 1.0 – 1.6 l for 1 m² of wall horizontal section
Temperature during work	from +5°C to +30°C
Available packaging	plastic buckets: 2 l, 20 l

At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-04-14

wall restoration system

WALL RESTORATION SYSTEM

CLEANING | MASONRY WORKS | FILLING CAVITIES | COLOR INTEGRATION | REPOINTING | REINFORCEMENT | HYDROPHOBIZATION

CLEANING | MASONRY WORKS | FILLING CAVITIES | COLOR INTEGRATION | REPOINTING | REINFORCEMENT | HYDROPHOBIZATION

CLEANING | MASONRY WORKS | FILLING CAVITIES | COLOR INTEGRATION | REPOINTING | REINFORCEMENT | HYDROPHOBIZATION

MASONRY MORTAR WITH TRASS
ATLAS GOLDEN AGE RZM

USE AND PROPERTIES

- for masonry works with ceramic brick
- contains trass – mineral of volcanic origin, limiting the possibility of efflorescence occurrence on the mortar surface
- low linear contraction and high bonding to masonry elements
- recommended for traditional masonry works with thick joints – joint thickness from 6 to 40 mm
- available in grey colour
- for indoor and outdoor application
- factory preparation of the material ensures repeatability of grain size, colour and properties of the finished mix – very significant factor during renovation of large façade surfaces
- waterproof
- frost resistant

SUBSTRATE PREPARATION

The bricks prepared for masonry works must be clean, free from dust and dry. During storage, they must be protected against rain and direct sunlight. Before starting the works, mix the bricks from a few pallets to minimize possible differences in the colour shades between bricks coming from various production batches.

APPLICATION

Pour the dry mix from the bag into a clean container with the suitable amount of water (recommended ratio: 2.75 ÷ 3.25 l/25 kg) and mix mechanically until homogenous, lump free and without separating liquid. The mortar is ready to use after 5 minutes and remixing. Apply the mortar with a trowel upon horizontal and vertical surfaces of the joined elements, according to traditional masonry work principles. The mortar layer must have even thickness and must fill the joints completely, as this will reduce water permeability into the wall partition. Works should be conducted in temperature between +5°C and +30°C. During application and min. 7 days since their completion, protect masonry elements against precipitation and too quick mortar drying. Do not conduct works during precipitation. It is recommended not to commence work if the weather forecast anticipates rain or lowered temperatures for the following days.

REMARKS

- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set adhesive can be removed with ATLAS SZOP agent.
- The shelf life of the product is 12 months from the production date shown on the packaging. The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets).
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.

TECHNICAL DATA

ATLAS GOLDEN AGE RZM is factory made dry mix manufactured on the basis of the best quality Portland cement, trass flour, fillers and improvers. The product conforms to PN-EN 998-2 standard. EC Declaration of Performance No. AZW RZM/CPR.

Mixing ratio: water/dry mix	2.75 - 3.25 l/25 kg
Pot life	approx. 3 hours
Consumption	approx. 34 kg of mortar for 1 m^2 of traditional size brick wall 12 cm thick
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Packaging	paper bags 25 kg
Content of soluble chromium (VI) in ready-to-use mix	≤ 0.0002%

Factory-made masonry mortar, manufactured acc. to recipe, general purpose (G), for indoor and outdoor use, in elements subject to structural requirements, for reinforced and un-reinforced walls.	CE 09
Mortar composition (relative to weight): cement, fillers (1:6), with addition of trass flour	
Reaction to fire - class	A1
Compressive strength	≥ 5 N / mm²
Initial shear strength (tabular value)	≥ 0.15 N / mm²
Water absorption	0.05 kg / m^2 $min^{0.5}$
Chloride content	0.07% Cl
Water vapour permeability coefficient μ	15/35
Thermal conductivity coefficient (average tabular value P=50%)	0.83 W / mK ($\lambda_{10, dry}$)
Durability. Mass decrement after freeze-thaw cycles	< 3%
Durability. Compressive strength decrease after freeze-thaw cycles	< 10%

MORTAR FOR FILLING GAPS IN BRICK AND NATURAL STONE ATLAS GOLDEN AGE CG-02

USE AND PROPERTIES

- for filling cavities and for reconstruction of damaged fragments in well preserved brick or stone weft, especially in sandstone
- mineral, based on hydraulic binders
- modified with redispersible powder resins improving bonding to substrate (especially on application of a relatively thin layer) and resistance to weather conditions, rich colour palette – 112 ready to use recipes
- depending on individual needs, the mortar can be dyed to a different colour
- very fine grain size (aggregate up to 0.2 mm), with appropriate use, gives the surface appearance typical for fine grain sandstone
- there is a possibility to use another aggregate stack. This way the structure as close as possible to appearance of the original substrate can be achieved.
- material prepared specifically for the needs of conservation of historical objects – it is characterized by optimally selected resistance and physical and chemical parameters (reduced linear contraction, improved water transport conditions, etc.)
- factory preparation of the material ensures repeatability of grain size, colour and properties of the finished mix – very significant factor during renovation of large façade surfaces
- waterproof
- frost resistant

SUBSTRATE PREPARATION

The method of surface cleaning must be individually adjusted for each object, depending on strength and condition of the substrate material and its historic value. The substrate must be sound, free from dust, dirt, efflorescence, remains of painting coats. Hammer off poorly bonded surface pieces and remove loose or weak parts with steel brush. Directly before filling the cavities, wet the surface with water.

APPLICATION

Pour the dry mix from the bag into a clean container with the suitable amount of water (recommended ratio: 3.5 ÷ 4.5 l/25 kg) and mix mechanically until homogenous, lump free and without separating liquid. The mortar is ready to use after approx. 5 minutes and remixing. Apply the mortar upon the substrate with an appropriate tool made of stainless steel and, depending on needs or size of gaps, matching the shape of the reconstructed element. While repairing cavities in larger surfaces, it is recommended to moisten the substrate with water and to apply mortar with the consistency of mud (approx. 0.2 l of water for 1 kg of dry mix). Then, using the "wet on wet" method, apply the proper layer of the mortar. In order to enable further work, the layer of the mortar must extend to approx. 1 – 2 mm above the surface of the original substrate. Apply a single coat not thicker than 30 mm. After a few hours (depending on weather conditions and mortar thickness), start final processing of the surface in order to match it to the structure of the original substrate surface. For a few days after application, moisten the surface of the fresh material with water many times and protect it against precipitation and direct sunlight.

REMARKS

- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set adhesive can be removed with ATLAS SZOP agent.
- The shelf life of the product is 12 months from the production date shown on the packaging. The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets).
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.

TECHNICAL DATA

ATLAS GOLDEN AGE CG-02 is factory made dry mix manufactured on the basis of the best quality white Portland cement, fillers and improvers. The product conforms to PN-EN 998-1 standard. EC Declaration of Performance No. AZW CG-02/CPR.

Mixing ratio: water/dry mix	3.5 – 4.5 l/25 kg
Pot life	approx. 2 hours
Open time	approx. 20 minutes
Consumption	approx. 1.6 kg of mortar for 1 dm^3
Total water absorption	up to 10%
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Max. aggregate grain size	0.2 mm
Packaging	paper bags 25 kg
Content of soluble chromium (VI) in ready-to-use mix	≤ 0.0002%

Factory made plastering mix of specified properties, general application (GP), suitable for indoor and outdoor use.	CE 09
Reaction to fire - class	A1
Bonding	≥ 0.5 N / mm^2 - FP:B
Compressive strength	1.5 up to 5.0 N / mm^2
Water absorption	≤ 0.40 kg/m^2 $min^{0,5}$
Water vapour permeability coefficient μ	15/35
Thermal conductivity coefficient (average tabular value P=50%)	0.83 W / mK ($\lambda_{10, dry}$)
Gross dry density	≤ 1800 kg/m^3
Durability. Mass decrement after freeze-thaw cycles	< 3%
Durability. Compressive strength decrease after freeze-thaw cycles	< 10%

MORTAR FOR FILLING GAPS IN BRICK AND NATURAL STONE ATLAS GOLDEN AGE CG-05

WALL RESTORATION SYSTEM

USE AND PROPERTIES

- for filling cavities and for reconstruction of damaged fragments in well preserved brick or stone weft, especially in sandstone
- mineral, based on hydraulic binders
- modified with redispersible powder resins improving bonding to substrate (especially on application of a relatively thin layer) and resistance to weather conditions, rich colour palette – 112 ready to use recipes
- depending on individual needs, the mortar can be dyed to a different colour
- aggregate grain size up to 0.5 mm , with appropriate use, gives the surface appearance typical for fine grain sandstone
- there is a possibility to use another aggregate stack. This way the structure as close as possible to appearance of the original substrate can be achieved.
- material prepared specifically for the needs of conservation of historical objects – it is characterized by optimally selected resistance and physical and chemical parameters (reduced linear contraction, improved water transport conditions, etc.)
- factory preparation of the material ensures repeatability of grain size, colour and properties of the finished mix – very significant factor during renovation of large façade surfaces
- waterproof
- frost resistant

SUBSTRATE PREPARATION

The method of surface cleaning must be individually adjusted for each object, depending on strength and condition of the substrate material and its historic value. The substrate must be sound, free from dust, dirt, efflorescence, remains of painting coats. Hammer off poorly bonded surface pieces and remove loose or weak parts with steel brush. Directly before filling the cavities, wet the surface with water.

APPLICATION

Pour the dry mix from the bag into a clean container with the suitable amount of water (recommended ratio: 3.5 ÷ 4.5 l/25 kg) and mix mechanically until homogenous, lump free and without separating liquid. The mortar is ready to use after approx. 5 minutes and remixing. Apply the mortar upon the substrate with an appropriate tool made of stainless steel and, depending on needs or size of gaps, matching the shape of the reconstructed element. While repairing cavities in larger surfaces, it is recommended to moisten the substrate with water and to apply mortar with the consistency of mud (approx. 0.2 l of water for 1 kg of dry mix). Then, using the "wet on wet" method, apply the proper layer of the mortar. In order to enable further work, the layer of the mortar must extend to approx. 1 – 2 mm above the surface of the original substrate. Apply a single layer not thicker than 30 mm. After a few hours (depending on weather conditions and mortar thickness), start final processing of the surface in order to match it to the structure of the original substrate surface. For a few days after application, moisten the surface of the fresh material with water many times and protect it against precipitation and direct sunlight.

REMARKS

- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set adhesive can be removed with ATLAS SZOP agent.
- The shelf life of the product is 12 months from the production date shown on the packaging. The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets).
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.

TECHNICAL DATA

ATLAS GOLDEN AGE CG-05 is factory made dry mix manufactured on the basis of the best quality white Portland cement, fillers and improvers. The product conforms to PN-EN 998-1 standard. EC Declaration of Performance No. AZW CG-05/CPR.

Mixing ratio: water/dry mix	3.5 – 4.5 l/25 kg
Pot life	approx. 2 hours
Open time	approx. 20 minutes
Consumption	approx. 1.6 kg of mortar for 1 dm^3
Total water absorption	up to 8%
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Max. aggregate grain size	0.5 mm
Packaging	paper bags 25 kg
Content of soluble chromium (VI) in ready-to-use mix	≤ 0.0002%

Factory made plastering mix of specified properties, general application (GP), suitable for indoor and outdoor use.	CE 09
Reaction to fire - class	A1
Bonding	≥ 0.5 N / mm^2 - FP:B
Compressive strength - category	CS II (1.5 up to 5.0 N / mm^2)
Capillary water absorption category	W1
Water vapor permeability coefficient μ	15/35
Thermal conductivity coefficient (average tabular value P=50%)	0.83 W / mK ($\lambda_{10, dry}$)
Gross dry density	≤ 1800 kg/m^3
Durability. Mass decrement after freeze-thaw cycles	< 3%
Durability. Compressive strength category after freeze-thaw cycles	CS II

GROUTING MORTAR WITH TRASS
ATLAS GOLDEN AGE FG-05

USE AND PROPERTIES

- for grouting and renovation of existing joints in ceramic brick and natural stone walls
- mineral, based on hydraulic binders
- contains trass – mineral of volcanic origin, limiting the possibility of efflorescence occurrence on the mortar surface
- rich colour palette – 112 ready-to-use recipes, depending on individual needs there is possibility to prepare mortar in a different colour - based on a sample of the original material
- fine granulation (aggregate up to 0.5 mm)
- material prepared specifically for the needs of conservation of historical objects – it is characterized by optimally selected resistance, enabling to grout even very poor elements
- strong bonding and low linear contraction
- factory preparation of the material ensures repeatability of grain size, colour and properties of the finished mix – very significant factor during renovation of large façade surfaces
- for application indoors and outdoors
- waterproof
- frost-resistant

SUBSTRATE PREPARATION

The method of surface cleaning must be individually adjusted for each object, depending on strength and condition of the substrate material and its historic value. The joints must be cleaned from dust, dirt, efflorescence and residues of old paint coats. Hammer off poorly bonded surface pieces and remove loose or rubbly parts with a wire brush. Directly before grouting the defect, wet the surface with water. In case of reconstruction of existing joints, remove old damaged grout to the depth of approx. 15 mm.

APPLICATION

Pour the dry mix from the bag into a clean container with the suitable amount of water (recommended ratio: 3.5 ÷ 4.5 l/25 kg) and mix mechanically until homogenous, lump free and without separating liquid. The mortar is ready to use after approx. 5 minutes and remixing. Apply the mortar upon the substrate with a grouting trowel or a, make sure the space between the wall elements is filled thoroughly and fully. Use stainless steel tools. Conduct the application in temperature between +5°C and +25°C. During application and min. 7 days since their completion, protect the grouted elements from precipitation and drying too fast. Note! Due to the content of natural components, use only material of the same production batch for each individual surface in order to avoid differences in shades of the mortar.

REMARKS

- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to building principles and OHS regulations.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with ATLAS SZOP agent.
- The shelf life of the product is 12 months from the production date shown on the packaging. The mortar must be transported and stored in tightly sealed bags, in dry conditions, in above zero temperature (most preferably on pallets).
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.

TECHNICAL DATA

ATLAS GOLDEN AGE FG-05 is factory made dry mix manufactured on the basis of the best quality white Portland cement, fillers and improvers. The product conforms to PN-EN 998-2:2012 (EN 998-2:2010) standard. EC Declaration of Performance No. AZW FG-05/CPR.

Mixing ratio: water/dry mix	3.5 – 4.5 l/25 kg
Pot life	approx. 2 hours
Consumption	approx. 1.6 kg of mortar for 1 dm^3
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Packaging	paper bags 25 kg
Content of soluble chromium (VI) in ready-to-use mix	≤ 0.0002%

Factory-made masonry mortar, according to recipe, general purpose (G), for indoor and outdoor use, in elements subject to structural requirements, for reinforced and non-reinforced walls.	CE 09
Mortar composition (relative to weight): cement-lime-aggregate (1:1:10), with addition of trass flour	
Reaction to fire - class	A1
Compressive strength	≥ 2.5 N / mm^2
Initial shear strength (tabular value)	≥ 0.15 N / mm^2
Water absorption	0.05 kg / m^2 $min^{0.5}$
Chloride content	0.07% Cl
Water vapour permeability coefficient μ	15/35
Thermal conductivity coefficient (average tabular value P=50%)	0.67 W / mK ($\lambda_{10, dry}$)
Durability. Mass decrement after freeze-thaw cycles	< 3%
Durability. Compressive strength decrease after freeze-thaw cycles	< 10%

GROUTING MORTAR WITH TRASS
ATLAS GOLDEN AGE FG-12

WALL RESTORATION SYSTEM

USE AND PROPERTIES

- for grouting and renovation of existing joints in ceramic brick and natural stone walls
- mineral, based on hydraulic binders
- contains trass – mineral of volcanic origin, limiting the possibility of efflorescence occurrence on the mortar surface
- rich colour palette – 112 ready to use recipes, depending on individual needs there is possibility to prepare mortar in a different colour - based on a sample of the original material
- aggregate grain size 1.2 mm
- material prepared specifically for the needs of conservation of historical objects – it is characterized by optimally selected resistance and physical and chemical parameters
- strong bonding and low linear contraction
- factory preparation of the material ensures repeatability of grain size, colour and properties of the finished mix – very significant factor during renovation of large façade surfaces
- for application indoors and outdoors
- waterproof
- frost resistant

SUBSTRATE PREPARATION

The method of surface cleaning must be individually adjusted for each object, depending on strength and condition of the substrate material and its historic value. The joints must be cleaned from dust, dirt, efflorescence and the residues of old paint coats. Hammer off poorly bonded surface pieces and remove loose or rubbly parts with a wire brush. Directly before grouting the defect, wet the surface with water. In case of reconstruction of existing joints, remove old damaged grout to the depth of approx. 15 mm.

APPLICATION

Pour the dry mix from the bag into a clean container with the suitable amount of water (recommended ratio: 3.5 ÷ 4.5 l/25 kg) and mix mechanically until homogenous, lump free and without separating liquid. The mortar is ready to use after approx. 5 minutes and remixing. Apply the mortar upon the substrate with a grouting trowel or a steel float, make sure the space between the wall elements is filled thoroughly and fully. Use stainless steel tools. Conduct the application in temperature between +5°C and +25°C. During application and min. 7 days since their completion, protect the grouted elements from precipitation and drying too fast. Note! Due to the content of natural components, use only material of the same production batch for each individual surface in order to avoid differences in shades of the mortar.

REMARKS

- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with ATLAS SZOP agent.
- The shelf life of the product is 12 months from the production date shown on the packaging. The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets).
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.

TECHNICAL DATA

ATLAS GOLDEN AGE FG-12 is factory made dry mix manufactured on the basis of the best quality white Portland cement, fillers and improvers. The product conforms to PN-EN 998-2:2012 (EN 998-2:2010) standard. EC Declaration of Performance No. AZW FG-12/CPR.

Mixing ratio: water/dry mix	3.5 – 4.5 l/25 kg
Pot life	approx. 2 hours
Consumption	approx. 1.6 kg of mortar for 1 dm^3
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Packaging	paper bags 25 kg
Content of soluble chromium (VI) in ready-to-use mix	≤ 0.0002%

Factory-made masonry mortar, according to recipe, general purpose (G), for indoor and outdoor use, in elements subject to structural requirements, for reinforced and non-reinforced walls.	CE 09
Mortar composition (relative to weight): cement-lime-aggregate (2:1:13), with addition of trass flour	
Reaction to fire - class	A1
Compressive strength	≥ 5.0 N / mm²
Initial shear strength (tabular value)	≥ 0.15 N / mm²
Water absorption	0.05 kg / m^2 $min^{0.5}$
Chloride content	0.07% Cl
Water vapour permeability coefficient μ	15/35
Thermal conductivity coefficient (average tabular value P=50%)	0.83 W / mK ($\lambda_{10, dry}$)
Durability. Mass decrement after freeze-thaw cycles	< 3%
Durability. Compressive strength decrease after freeze-thaw cycles	< 10%

GROUTING MORTAR WITH TRASS
ATLAS GOLDEN AGE **FG-20**

USE AND PROPERTIES

- for grouting and renovation of existing joints in ceramic brick and natural stone walls
- mineral, based on hydraulic binders
- contains trass – mineral of volcanic origin, limiting the possibility of efflorescence occurrence on the mortar surface
- rich colour palette – 112 ready to use recipes, depending on individual needs there is possibility to prepare mortar in a different colour - based on a sample of the original material
- aggregate grain size 2.0 mm
- material prepared specifically for the needs of conservation of historical objects – it is characterized by optimally selected resistance and physical and chemical parameters
- strong bonding and low linear contraction
- factory preparation of the material ensures repeatability of grain size, colour and properties of the finished mix – very significant factor during renovation of large façade surfaces
- for application indoors and outdoors
- waterproof
- frost resistant

SUBSTRATE PREPARATION

The method of surface cleaning must be individually adjusted for each object, depending on strength and condition of the substrate material and its historic value. The joints must be cleaned from dust, dirt, efflorescence and the residues of old paint coats. Hammer off poorly bonded surface pieces and remove loose or rubbly parts with a wire brush. Directly before grouting the defect, wet the surface with water. In case of reconstruction of existing joints, remove old damaged grout to the depth of approx. 15 mm.

APPLICATION

Pour the dry mix from the bag into a clean container with the suitable amount of water (recommended ratio: 3.5 ÷ 4.5 l/25 kg) and mix mechanically until homogenous, lump free and without separating liquid. The mortar is ready to use after approx. 5 minutes and remixing. Apply the mortar upon the substrate with a grouting trowel or a steel float, make sure the space between the wall elements is filled thoroughly and fully. Use stainless steel tools. Conduct the application in temperature between +5°C and +25°C. During application and min. 7 days since their completion, protect the grouted elements from precipitation and drying too fast. Note! Due to the content of natural components, use only material of the same production batch for each individual surface in order to avoid differences in shades of the mortar.

REMARKS

- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with ATLAS SZOP agent.
- The shelf life of the product is 12 months from the production date shown on the packaging. The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets).
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.

TECHNICAL DATA

ATLAS GOLDEN AGE FG-20 is factory made dry mix manufactured on the basis of the best quality white Portland cement, fillers and improvers. The product conforms to PN-EN 998-2:2012 (EN 998-2:2010) standard. EC Declaration of Performance No. AZW FG-20/CPR.

Mixing ratio: water/dry mix	3.5 – 4.5 l/25 kg
Pot life	approx. 2 hours
Consumption	approx. 1.6 kg of mortar for 1 dm^3
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Packaging	paper bags 25 kg
Content of soluble chromium (VI) in ready-to-use mix	≤ 0.0002%

Factory-made masonry mortar, according to recipe, general purpose (G), for indoor and outdoor use, in elements subject to structural requirements, for reinforced and non-reinforced walls. Mortar composition (relative to weight): cement-lime-aggregate (1:1:10), with addition of trass flour	CE 09
Reaction to fire - class	A1
Compressive strength	≥ 5.0 N / mm²
Initial shear strength (tabular value)	≥ 0.15 N / mm²
Water absorption	0.05 kg / m^2 $min^{0,5}$
Chloride content	0.07% Cl
Water vapor permeability coefficient μ	15 / 35
Thermal conductivity coefficient (average tabular value P=50%)	0.83 W / mK ($\lambda_{10, dry}$)
Durability. Mass decrement after freeze-thaw cycles	< 3%
Durability. Compressive strength decrease after freeze-thaw cycles	< 10%

plaster restoration system

PLASTER RESTORATION SYSTEM

The products of PlasterRestoration System - ATLAS GOLDEN AGE have passed the qualifying examination of WTA (Wissenschaftlich-Technische Arbeitsgemeinschaft für Bauwerkserhaltung und Denkmalpflege e.V.- Scientific and Technical Association for Building, Preservation and Conservation) and thus meets the criteria of the WTA data sheet: 2-9-04. Validity 12.2014

SCRATCH COAT → **BASE COAT** → **RENOVATION PLASTER** → SURFACE FINISHING → PRIMING → PAINTING

SCRATCH COAT → BASE COAT → RENOVATION PLASTER → **SURFACE FINISHING** → PRIMING → PAINTING

SCRATCH COAT → BASE COAT → RENOVATION PLASTER → SURFACE FINISHING → **PRIMING** → **PAINTING**

USE AND PROPERTIES

- for execution of scratch coat prior to application of ATLAS GOLDEN AGE renovation plasters on damp and saline surfaces
- developed according to WTA 2-9-04 instruction guidelines
- recommended for heritage buildings, foundations, cellar walls and aboveground storeys
- forms contact coat between substrate and main coat of renovation plaster or renovation base coat plaster
- characterized by high bonding to damp and saline substrates
- high mechanical resistance
- resistant to salts dissolved in water
- for indoor and outdoor application
- waterproof
- frost resistant

SUBSTRATE PREPARATION

Before commencement of application of renovation plasters, it is advisable to confirm the substrate salinity level. In case of medium and high salinity, apply ATLAS GOLDEN AGE TRP base coat before the application of ATLAS GOLDEN AGE TR renovation plaster and in case of low salinity, apply ATLAS GOLDEN AGE TR renovation plaster directly upon the scratch coat. Remove damp and saline plasters to the height of 80 cm above the highest visible salinity and/or dampness borderline. Hack off masonry mortar from the joints to the depth of approx. 20 mm. Further on, clean the exposed wall surface from dust, efflorescence, residues of mortar and poorly bonded wall elements. **Note!** Remove debris on regular basis. Wet excessively absorptive substrates with water.

APPLICATION

Prepare the mortar by pouring the dry mix into a container with the suitable amount of water and mixing mechanically until homogenous, free from lumps and separating liquid. Recommended ratio: 4.25-4.75 liters of water to 25 kg of dry mix. Apply scratch coat with uniform coat approx. 5 mm thick, form openwork coat, cover not more than 50% of the substrate. Formed surface must not be smoothed or floated. After scratch coat setting (approx. 24 hours), the main coat of ATLAS GOLDEN AGE TRP renovation base coat can be applied. While applied scratch coat is drying, provide appropriate ventilation indoors. Protect scratch coat applied outdoors from drying too fast.

REMARKS

- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of set mortar can be removed with ATLAS SZOP agent.
- The shelf life of the product is 12 months from the production date shown on the packaging. The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets).
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.

TECHNICAL DATA

ATLAS GOLDEN AGE TRO is factory made dry mix manufactured on the basis of high quality cement binder, quartz fillers and improvers. The product conforms to the PN-EN 998-1 standard. EC Declaration of Performance No. AZW TRO/CPR. The product has been given the WTA certificate.

Mixing ratio: water/dry mix	4.25-4.75 l/25 kg
Pot life	approx. 4 hours
Consumption	approx. 5 kg for 1 m² with 5 mm layer thickness and 50% substrate coverage
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +30°C
Packaging	paper bags 25 kg
Content of soluble chromium (VI) in ready-to-use mix	≤ 0.0002%

Factory made plastering mortar of specified properties, general-purpose (GP), for indoor and outdoor use, on masonry walls, ceilings, posts and partition walls	CE 14
Reaction to fire - class	A1
Bonding	≥ 0.3 N / mm² - FP:B
Compressive strength	≥ 6 N / mm²
Water absorption - category	W1
Water vapour permeability coefficient (tabular value, μ)	15/35 (EN 1745:2002 tab.A.12)
Thermal conductivity coefficient (average tabular value P=50%)	0.83 W / mK ($\lambda_{10, dry}$) (EN 1745:2002 tab.A.12)
Gross dry density	≤ 1800 kg/m³
Durability. Bonding	≥ 0.3 N/mm² - FP:B
Durability. Water absorption - category	W1

At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-09-01

RENOVATION BASE COAT PLASTER ATLAS GOLDEN AGE TRP

PLASTER RESTORATION SYSTEM

USE AND PROPERTIES

- for application of renovation base coat plasters on damp and saline surfaces
- recommended for heritage buildings, foundations, cellar walls and aboveground storeys
- developed according to WTA instruction guidelines
- recommended for substrates of medium and high salinity levels
- forms leveling coat - enables application of even coat of ATLAS GOLDEN AGE TR renovation plaster; it is also the first layer absorbing salt from substrate and retaining it.
- characterized by high porosity and therefore high ability of retention of crystallizing salt
- large number and volume of pores in the set mortar provides perfect coat vapour permeability, enabling free evaporation of damp and fast drying of the substrate
- resistant to salts dissolved in water
- for indoor and outdoor application
- for manual or machine application
- waterproof
- frost resistant

SUBSTRATE PREPARATION

Before commencement of application of renovation plasters, it is advisable to confirm the substrate salinity level. Application of ATLAS GOLDEN AGE TRP renovation base coat plaster is recommended in case of medium and high salinity levels. In other cases, ATLAS GOLDEN AGE TR renovation plaster can be applied directly upon ATLAS GOLDEN AGE TRO scratch coat. Remove damp and saline plasters to the height of 80 cm above the highest visible salinity and/or dampness borderline. Hack off masonry mortar from the joints to the depth of approx. 20 mm. Further on, clean the exposed surface of wall from dust, efflorescence, residues of mortar and poorly bonded wall elements. **Note!** Remove debris on regular basis. Then, wet substrate with water and apply contact coat with ATLAS GOLDEN AGE TRO renovation scratch coat, applied with openwork coat 5 mm thick covering not more than 50% of the substrate. When it sets, after approx. 24 hours, the main coat of ATLAS GOLDEN AGE TRP renovation base coat can be applied.

APPLICATION

Prepare the mortar by pouring the dry mix into a container with suitable amount of water and mixing mechanically until homogenous, free from lumps and separating liquid. Recommended ratio: 4.25-4.75 liters of water to 25 kg of dry mix. The plaster can also be prepared in plastering units. Apply plaster with uniform coat manually or mechanically upon appropriately set scratch coat. Remove the excess of material with a darby. Keep the coat even, minimum 10 mm thick, over the whole surface. Do not float the plaster. After initial setting, brush the surface with a hard hair or a sharp broom horizontally - action forms the roughest surface possible ensuring optimum bonding to the subsequent coat i.e. ATLAS GOLDEN AGE TR renovation plaster. While applied plaster is drying, provide appropriate ventilation of rooms indoors. Protect plasters applied outdoors from drying too fast.

REMARKS

- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of set plaster can be removed with ATLAS SZOP agent.
- The shelf life of the product is 12 months from the production date shown on the packaging. The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets).
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.

TECHNICAL DATA

ATLAS GOLDEN AGE TRP is factory made dry mix manufactured on the basis of the highest quality cement binder, quartz fillers and improvers. The product conforms to the PN-EN 998-1 standard. EC Declaration of Performance No. AZW TRP/CPR. The product has been given the WTA certificate.

Mixing ratio: water/dry mix	4.25-4.75 l/25 kg
Pot life	approx. 2 hours
Porosity	> 45%
Min. coat thickness	10 mm
Max. coat thickness	20 mm
Consumption	approx. 12 kg for 1 m^2 at 10 mm layer thickness
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +30°C
Packaging	paper bags 25 kg
Content of soluble chromium (VI) in ready-to-use mix	≤ 0.0002%

Factory made plastering mortar of specified properties, renovation (R), for manual or machine application, for indoor and outdoor use, on walls, ceilings, posts and partition walls	CE 15
Reaction to fire – class	A1
Bonding	≥ 0.3 N / mm^2 - FP:B
Water absorption	≤ 0.3 kg / m^2 after 24 hours
Water vapour permeability coefficient μ	≤ 15
Thermal conductivity coefficient (average tabular value P=50%)	0.67 W / mK ($\lambda_{10, dry}$)
Gross dry density	≤ 1600 kg / m^3
Durability. Bonding	< 1%
Durability. Water absorption	≥ 0.3 N/mm^2 - FP:B

At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-09-01

RENOVATION PLASTER
ATLAS GOLDEN AGE TR

PLASTER RESTORATION SYSTEM

USE AND PROPERTIES

- for application of renovation plasters on damp and saline surfaces of brick and natural stone
- recommended for heritage buildings, on foundations, cellar walls and aboveground storeys
- developed according to WTA instruction guidelines
- element of ATLAS GOLDEN AGE system of renovation plasters, which consists of three plaster types optimally combined in terms of physical and chemical parameters, and which application ensures appropriate interaction of consecutively applied coats and guarantees durability and effectiveness of renovation works
- universal – can be applied directly upon substrate (for low salinity level) or upon previously applied coat of ATLAS GOLDEN AGE TRP base coat plaster (for medium or high salinity level)
- finishing coat - used beneath rendering coat or paints
- characterized by high porosity, therefore high ability of retention of crystallizing salt
- large number and volume of pores in the set mortar provides perfect coat vapour permeability enabling free evaporation of damp and fast drying of the substrate
- contains hydrophobic components – reducing plaster surface absorptiveness, owing to which the surface is protected against precipitation and water penetration
- for manual or machine application
- for indoor and outdoor application
- waterproof
- frost resistant

SUBSTRATE PREPARATION

Before commencement of application of renovation plasters, it is advisable to confirm the substrate salinity level. In case of low salinity level, ATLAS GOLDEN AGE TR renovation plaster can be applied directly upon previously applied ATLAS GOLDEN AGE TRO scratch coat. In case of medium or high salinity level application of ATLAS GOLDEN AGE TRP renovation base coat plaster is required. Remove damp and saline plasters to the height of 80 cm above the highest visible salinity and/or dampness borderline. Hack off masonry mortar from the joints to the depth of approx 20 mm. Further on, clean the exposed surface of wall from dust, efflorescence, residues of mortar and poorly bonded wall elements. **Note!** Remove debris on regular basis. Then, wet substrate with water and apply contact coat with ATLAS GOLDEN AGE TRO renovation scratch coat, applied with openwork coat 5 mm thick covering not more than 50% of the substrate. When it sets, after approx. 24 hours, the main coat of ATLAS GOLDEN AGE TRP renovation base coat can be applied.

APPLICATION

Prepare the mortar by pouring the dry mix into a container with suitable amount of water and mixing mechanically until homogenous, free from lumps and separating liquid. Recommended ratio: 4.25-4.75 liters of water to 25 kg of dry mix. The plaster can also be prepared in plastering units. Apply plaster with uniform coat manually or mechanically upon appropriately set scratch coat or base coat. Remove the excess of material with a darby. Keep the coat even, minimum 10 mm thick, which will ensure effectiveness of the renovation plaster. Maximum thickness of a single coat is 20 mm. Float the plaster slightly, but without surface felting. Depending on the designed aesthetic effect, ATLAS GOLDEN AGE TR plaster can be finished with appropriately selected renovation top finish mortar or paint, e.g. ATLAS GOLDEN AGE S-02 silicate paint or ATLAS GOLDEN AGE N-02 silicone paint. The materials used for surface top finishing must not deteriorate vapour permeability of the renovation plaster. While applied plaster is drying, provide appropriate ventilation of rooms indoors. Protect plasters applied outdoors from drying too fast.

REMARKS

- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of set plaster can be removed with ATLAS SZOP agent.
- The shelf life of the product is 12 months from the production date shown on the packaging. The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets).
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.

TECHNICAL DATA

ATLAS GOLDEN AGE TR is factory made dry mix manufactured on the basis of high quality cement binder, quartz fillers and improvers. The product conforms to the PN-EN 998-1 standard. EC Declaration of Performance No. AZW TR/CPR. The product has been given the WTA certificate.

Mixing ratio: water/dry mix	4.25-4.75 l/25 kg
Pot life	approx. 2 hours
Consumption	approx. 12 kg of mortar for 1 m² at 10 mm layer thickness
Min. coat thickness	10 mm
Max. coat thickness	20 mm
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +30°C
Packaging	paper bags 25 kg
Content of soluble chromium (VI) in ready-to-use mix	≤ 0.0002%

Factory made plastering mortar of specified properties, renovation (R), for manual or machine application, for indoor and outdoor use, on walls, ceilings, posts and partition walls	CE 15
Reaction to fire – class	A1
Bonding	≥ 0.3 N / mm² - FP:B
Water absorption	≤ 0.3 kg / m² after 24 hours
Water vapour permeability coefficient μ	≤ 15
Thermal conductivity coefficient (average tabular value P=50%)	0.67 W / mK ($\lambda_{10, dry}$)
Gross dry density	≤ 1600 kg/m³
Durability. Bonding	≥ 0.3 N/mm² - FP:B
Durability. Water absorption	≤ 0.3 kg / m² after 24 hours

At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-09-01

USE AND PROPERTIES

- for application of renovation plasters upon damp and saline surfaces of brick and natural stone
- recommended for heritage buildings, on foundations, cellar walls and aboveground storeys
- developed according to WTA 2-9-04 instruction guidelines
- element of ATLAS GOLDEN AGE system of renovation plasters. System consists of materials optimally combined in terms of physical and chemical parameters
- finishing coat in vintage white colour, plaster surface is ready for further painting
- highly porous, therefore ensures ability of retention of crystallizing salt
- large number and volume of pores in the set mortar provides perfect coat vapour permeability, enabling free evaporation of damp and fast drying of the substrate
- contains hydrophobic components – reducing plaster surface absorptiveness, owing to which the surface is protected against precipitation and water action
- for manual or machine application indoors and outdoors
- waterproof and frost resistant

COATS ARRANGEMENT

Before commencement of application of renovation plasters, it is advisable to confirm the substrate salinity level, which decides on arrangement of coat and thickness – see table.

Salinity level	Recommended arrangement of coats	Coat thickness [mm]
low	Scratch coat TRO	≤ 5
	Renovation plaster TR or Renovation plaster TR-B	≥ 20
medium	Scratch coat TRO	≤ 5
	Renovation plaster TR or Renovation plaster TR-B	10 up to 20
	Renovation plaster TR or Renovation plaster TR-B	10 up to 20
high	Scratch coat TRO	≤ 5
	Renovation plaster TR or Renovation plaster TR-B	≥ 10
	Renovation plaster TR or Renovation plaster TR-B	≥ 15

SUBSTRATE PREPARATION

Remove damp and saline plasters to the height of 80 cm above the highest visible salinity and/or dampness borderline. Hack off masonry mortar from the joints to the depth of approx. 20 mm. Further on, clean the exposed surface of wall from dust, efflorescence, residues of mortar and poorly bonded wall elements. **Note!** Remove debris on regular basis. Then, wet substrate with water and apply contact coat with ATLAS GOLDEN AGE TRO renovation scratch coat, applied with openwork coat 5 mm thick covering not more than 50% of the substrate. When it sets, after approx. 24 hours, the subsequent coat of renovation plaster can be applied.

APPLICATION

Prepare the mortar by pouring the dry mix into a container with suitable amount of water and mixing mechanically until homogenous, free from lumps and separating liquid. Recommended ratio: 4.50-4.75 liters of water to 25 kg of dry mix. The plaster can also be prepared in plastering units. Apply plaster with uniform coat, manually or mechanically upon appropriately set scratch coat or base coat. Remove the excess of material with a darby. Keep the coat minimum 10 mm thick, which will ensure effectiveness of the renovation plaster. Maximum thickness of a single coat is 20 mm. Float the plaster slightly, but without surface felting. Depending on the designed aesthetic effect, surface of ATLAS GOLDEN AGE TR-B plaster can be finished with appropriately selected renovation top finish or paint, e.g. ATLAS GOLDEN AGE S-02 silicate paint or ATLAS GOLDEN AGE N-02 silicone paint. The materials used for surface top finishing must not deteriorate vapour permeability of the renovation plaster. While applied plaster is drying, provide appropriate ventilation of rooms indoors. Protect plasters applied outdoors from drying too fast.

REMARKS

- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with ATLAS SZOP agent.
- The shelf life of the product is 12 months from the production date shown on the packaging. The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets).

- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.

TECHNICAL DATA

ATLAS GOLDEN AGE TR-B is factory made dry mix manufactured on the basis of the high quality white cement, quartz fillers and improvers. The product conforms to PN-EN 998-1 standard. EC Declaration of Performance No. AZW TR-B/CPR.

Mixing ratio: water/dry mix	4.50-4.75 l/25 kg
Pot life	approx. 2 hours
Water penetration	≤ 5 mm
Consumption	approx. 12 kg of mortar for 1 m² at 10 mm layer thickness
Min. coat thickness	10 mm
Max. coat thickness	20 mm
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +30°C
Packaging	paper bags 25 kg
Content of soluble chromium (VI) in ready-to-use mix	≤ 0.0002%

Factory made plastering mortar of specified properties, renovation (R), for manual or machine application, for indoor and outdoor use, on walls, ceilings, posts and partition walls	CE 15
Reaction to fire - class	A1
Bonding	≥ 0.3 N / mm² - FP:B
Water absorption	≤ 0.3 kg / m² after 24 hours
Water vapour permeability coefficient μ	≤ 15
Thermal conductivity coefficient (average tabular value P=50%)	0.67 W / mK (λ10,dry) (EN 1745:2002, tab. A12)
Gross dry density	≤ 1600 kg/m³
Durability. Bonding	≥ 0.3 N / mm² - FP:B
Durability. Water absorption	≤ 0.3 kg / m² after 24 hours

At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-05-30

RENOVATION CONTACT COAT
ATLAS GOLDEN AGE **TK**

USE AND PROPERTIES

- mineral mortar, reinforced with fibers, used during refurbishment of plasters as adhesive for mesh embedding, contact coat and repair mortar
- for mesh embedding and base coat application in case of repairs of cracked façade and interior plasters
- as contact coat, for application of intermediate coats beneath top finish plasters of class CS I, CS II and CS III, including thin-coat and fine ones
- can be used as repair mortar for repairs of local gaps in plaster coats
- for use upon plastered surfaces coated with lime, lime-cement or cement-lime plasters, concrete and aerated concrete. It can be used upon old paint coats and resin plasters after cleaning and test of bonding
- manufactured on the basis of white hydraulic binder, enables forming bright plaster coats (vintage white) facilitating coating with façade paints and limiting risk of dis-colouration
- fine aggregate (grain size up to 0.8 mm)
- modified with redispersible powder resins, which improve bonding to substrate (particularly in case of very thin coats)
- resistant to cracking – contains fiberglass which strengthens coat structure and improves compensation of deformations resulting from substrate properties and operation thermal factors
- water vapour permeable – does not limit free transfer of water vapour through partition
- characterised by reduced absorptiveness, does not require priming prior to application of subsequent coats
- very good workability, contains methylcellulose improving water retention, which positively influences setting conditions and binder setting
- material prepared specifically for the needs of conservation of heritage buildings – it is characterized by optimally selected resistance and physical and chemical parameters (limited linear contraction, favourable modulus of elasticity – reduced ratio of compressive and flexural strength)
- free of harmful construction salts
- factory-made – ensures repeatability of aggregate size, colour and mixed mortar properties, which is extremely important during large scale renovation
- for indoor and outdoor use
- waterproof and frost resistant

SUBSTRATE PREPARATION

The method of surface cleaning must be individually adjusted for each object, depending on strength and condition of the substrate material and its historic value. The substrate must be sound, free from dust, dirt, efflorescence, residues of paint coats. Concrete substrates should be cleaned of anti-adhesion agents and formwork oil. Hack off poorly bonded surface pieces and remove loose or weak parts with a steel brush. In case of cracks or stable gaps above 0.2 mm wide, one should make them deeper and fill with TK mortar of thick consistency. Cracks and gaps up to 0.2 mm wide can be left without initial filling. Directly before mortar application, wet absorptive substrate with water.

APPLICATION

Pour the dry mix from the bag into a clean container with suitable amount of water (recommended ratio: 4.75 – 5.25 l/25 kg) and mix mechanically until homogenous, lump free and without separating liquid. The mortar is ready to use after approx. 5 minutes and remixing.
Mesh embedding: apply the mortar with a steel float, spread and shape with a notched trowel (notch size 8 mm), embed reinforcing mesh in freshly applied mortar, keep min. 10 cm wide overlaps between neighbouring mesh strips. Additional mesh strips should be applied diagonally upon window and door reveal corners and upon joint of elements made of different materials. Embed mesh thoroughly and even the surface. **Surface floating:** apply the mortar with a steal float, spread and smooth. Slightly grind, if needed. **Contact coat:** apply the mortar with a steel float, spread uniformly upon whole surface, brush horizontally fresh mortar coat with a hard bristle brush. **Filling gaps:** apply the mortar with a stainless steel float, depending on needs and gaps size, keep shape of filled or reshaped element. **Note.** Protect the surface against excessive drying during material application and setting. It is advisable to use scaffolding protective nets. Coats applied outdoors should be protected with paint coats, e.g. ATLAS GOLDEN AGE S-02 silicate paint or ATLAS GOLDEN AGE N-02 silicone paint. .

REMARKS

- Do not use upon gypsum substrates.
- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
- Use fiberglass reinforcing mesh, protected against alkali in acrylic bath, of individually selected density (55-160 g/m^2).
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set plaster can be removed with ATLAS SZOP agent.
- The shelf life of the product is 12 months from the production date shown on the packaging. The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets).
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.

TECHNICAL DATA

ATLAS GOLDEN AGE TK is factory made dry mix manufactured on the basis of high quality white hydraulic binder, quartz fillers and improvers. The product conforms to PN-EN 998-1 standard. EC Declaration of Performance No. AZW TK/CPR.

Bulk density	approx. 1.4 kg/dm³
Colour	vintage white
Mixing ratio: water/dry mix	4.75 – 5.25 l/25 kg
Pot life	approx. 4 hours
Open time	approx. 25 minutes
Grain size	0.8 mm
Compressive strength	≥ 6.0 N/mm² (CS IV)
Bonding to substrate	≥ 0.25 N/mm²
Water absorption caused by capillary action W2	≤ 0.2 kg/m²/$h^{0,5}$
Water vapour diffusion coefficient S_d (coat thickness 2 mm)	0.5 m
Consumption	approx. 1.5 kg of mortar for 1 m² at 1 mm layer thickness
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +30°C
Min. / max. coat thickness	2 mm / 6 mm
Packaging	paper bags 25 kg

Factory made, one coat plastering mortar (OC), for outdoor and indoor use, on masonry walls, ceilings, posts, partition walls	CE 15
Reaction to fire - class	A1
Bonding after required freeze-thaw cycles	≥ 0.3 N / mm² - FP:B
Water absorption - category	W2
Water absorption after required freeze-thaw cycles	≤ 1 ml / cm² after 48 hours
Water vapour permeability coefficient μ	15/35 (EN 1745:2002, tab. A.12)
Thermal conductivity coefficient (average tabular value P=50%)	0.83 W / mK ($\lambda_{10,dry}$) (EN 1745:2002, tab. A12)
Gross dry density	≤ 1800 kg/m³
Durability. Bonding after required freeze-thaw cycles	≥ 0.3 N / mm² - FP:B
Durability. Water absorption after required freeze-thaw cycles	≤ 1 ml / cm² after 48 hours
Content/release of hazardous substances	See Safety Data Sheet

At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-03-01

RENOVATION FINE-AGGREGATE FINISHING COAT ATLAS GOLDEN AGE TS

PLASTER RESTORATION SYSTEM

USE AND PROPERTIES

- for application of finishing coats upon walls and ceilings
- very fine granulation (aggregate up to 0.2 mm) – allows to form very smooth surface
- recommended for plastering rough surfaces of ceramic brick, lime-sand brick, natural stone, concrete, cement plaster, cement, cement-lime and renovation plaster
- based on very high quality white Portland cement
- contains lime – natural binder used for ages in production of construction materials - its content decides about coat elasticity and its resistance to cracking
- high resistance to micro-cracking – owing to use of special microfibres additionally reinforcing the structure of material
- wide range of application – coat thickness from 1 up to 10 mm
- white finish – allows for easy and economical painting
- material developed specifically for the needs of renovation of heritage buildings – characterized by optimally combined resistance, physical and chemical properties
- for indoor and outdoor application
- waterproof
- frost resistant

SUBSTRATE PREPARATION

The method of surface cleaning must be individually adjusted for each object, depending on strength and condition of the substrate material and its historic value. The substrate must be sound, free from dust, dirt, efflorescence, residues of paint coats. Hack off poorly bonded surface pieces and remove loose or weak parts with a steel brush. Directly before plaster application, wet the surface with water.

APPLICATION

Pour the dry mix from the bag into a clean container with suitable amount of water (recommended ratio: 7.0 ÷ 8.0 l/25 kg) and mix mechanically until homogenous, lump free and without separating liquid. The mortar is ready to use after approx. 5 minutes and remixing. Apply the mortar with uniform coat with a stainless steel float, pressing strongly against the substrate. Surface can be finished by grinding or light floating with a felt float. Protect the surface against excessive drying during material application and setting.

REMARKS

- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with ATLAS SZOP agent.
- The shelf life of the product is 12 months from the production date shown on the packaging. The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets).
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.

TECHNICAL DATA

ATLAS GOLDEN AGE TS is factory made dry mix manufactured on the basis of high quality mineral binder (cement and lime), quartz fillers and improvers. The product conforms to the PN-EN 998-1 standard. EC Declaration of Performance No. AZW TS/CPR.

Mixing ratio: water/dry mix	7.0 – 8.0 l/25 kg
Pot life	approx. 2 hours
Open time	approx. 25 minutes
Consumption	approx. 15 kg of mortar for 1 m^2 at 10 mm layer thickness
Mortar preparation temperature, substrate and ambient temperature during work	from +5 °C to +25 °C
Min. / max. coat thickness	1 mm / 10 mm
Packaging	paper bags 25 kg
Content of soluble chromium (VI) in ready-to-use mix	≤ 0.0002%

Factory made, one coat plastering mix of specified properties (OC), for outdoor use on walls, ceilings, posts and partition walls	CE 14
Reaction to fire – class	A1
Bonding	≥ 0.3 N / mm^2 - FP:B
Water absorption - category	W1
Water permeability after freeze-thaw cycles	≤ 1 ml/cm^2 after 48 hours
Water vapour permeability coefficient μ (tabular value)	15/35 (EN 1745:2002, tab.A.12)
Thermal conductivity coefficient (average tabular value P=50%)	0.83 W / mK ($\lambda_{10, dry}$)
Gross dry density	≤ 1800 kg / m^3
Durability. Bonding after required freeze-thaw cycles	≥ 0.3 N/mm^2
Durability. Water permeability after required freeze-thaw cycles	≤ 1 ml/cm^2 after 48 hours

At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-05-05

RENOVATION COARSE-AGGREGATE FINISHING COAT ATLAS GOLDEN AGE TSG

PLASTER RESTORATION SYSTEM

USE AND PROPERTIES

- for application of finishing coats upon walls and ceilings
- granulation up to 1.0 mm – allows forming surface characteristic for historic plasters
- recommended for smoothing surfaces of previously applied cement, lime-cement and cement-lime renovation plasters and concrete
- based on very high quality white Portland cement
- contains lime – natural binder used in production of construction materials - its content decides about coat elasticity and its resistance to cracking
- high resistance to micro-cracking – owing to use of special microfibres additionally reinforcing the structure of material
- wide range of application – coat thickness from 1 up to 10 mm
- white finish – allows for easy and economical painting
- material developed specifically for the needs of renovation of heritage buildings – characterized by optimally combined resistance, physical and chemical properties
- for indoor and outdoor application
- waterproof
- frost resistant

SUBSTRATE PREPARATION

The method of surface cleaning must be individually adjusted for each object, depending on strength and condition of the substrate material and its historic value. The substrate must be sound, free from dust, dirt, efflorescence, residues of paint coats. Hack off poorly bonded surface pieces and remove loose or weak parts with a steel brush. Directly before plaster application, wet the surface with water.

APPLICATION

Pour the dry mix from the bag into a clean container with suitable amount of water (recommended ratio 7.0 ÷ 8.0 l/25 kg) and mix mechanically until homogenous, lump free and without separating liquid. The mortar is ready to use after approx. 5 minutes and remixing. Apply the mortar with uniform coat with a stainless steel float, pressing strongly against the substrate. Surface can be finished by grinding or light floating with a felt float. Protect the surface against excessive drying during the material application and setting.

REMARKS

- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with ATLAS SZOP agent.
- The shelf life of the product is 12 months from the production date shown on the packaging. The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets).
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.

TECHNICAL DATA

ATLAS GOLDEN AGE TSG is factory made dry mix manufactured on the basis of high quality mineral binder (cement and lime), quartz fillers and improvers. The product conforms to the PN-EN 998-1 standard. EC Declaration of Performance No. AZW TSG/CPR.

Mixing ratio: water/dry mix	7.0 – 8.0 l/25 kg
Pot life	approx. 2 hours
Open time	approx. 25 minutes
Consumption	approx. 15 kg of mortar for 1 m^2 at 10 mm layer thickness
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Min. / max. coat thickness	1 mm / 10 mm
Packaging	paper bags 25 kg
Content of soluble chromium (VI) in ready-to-use mix	≤ 0.0002%

Factory made, one coat plastering mix of specified properties (OC), for outdoor use on walls, ceilings, posts and partition walls	CE 14
Reaction to fire – class	A1
Bonding	≥ 0.3 N/mm² - FP:B
Water absorption - category	W1
Water permeability after freeze-thaw cycles	≤ 1 ml/cm² after 48 hours
Water vapour permeability coefficient μ (tabular value)	15/35 (EN 1745:2002, tab.A.12)
Thermal conductivity coefficient (average tabular value P=50%)	0.83 W / mK ($\lambda_{10, dry}$)
Gross dry density	≤ 1800 kg / m³
Durability. Bonding after required freeze-thaw cycles	≥ 0.3 N/mm²
Durability. Water permeability after required freeze-thaw cycles	≤ 1 ml/cm² after 48 hours

At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-05-05

COARSE AGGREGATE LIME FINISHING COAT WITH TRASS ATLAS GOLDEN AGE **TSGW**

USE AND PROPERTIES

- for indoor and outdoor application of finishing coats upon walls and ceilings coated with lime, cement-lime and lime-cement plasters
- for renovation of façade and interior plasters in heritage buildings, particularly recommended for smoothing renovation plasters Atlas Golden Age
- coarse aggregate (grain size up to 1.0 mm), for manual application with coats 5-10 mm thick
- mineral, cement-free, manufactured on the basis of natural hydraulic lime (NHL), enables forming surfaces of colour and appearance characteristic for historic lime plasters
- contains trass – mineral of volcanic origin limiting the possibility of efflorescence occurrence on the mortar surface
- high resistance to cracking – slow process of setting and mechanical strength improvement as well as content of microfibres highly reduce the risk of surface cracking
- contains hydrophobic additives – reducing plaster surface absorptiveness, therefore coat is protected against precipitation and water action
- perfect vapour permeability ($\mu \leq 15$), enables use upon repair layers made of renovation plasters
- high bonding to substrate (≥ 0.3 N / mm^2 - FP:B)
- free of harmful construction salts
- material prepared specifically for the needs of conservation of historical objects – it is characterized by optimally selected resistance and physical and chemical parameters (limited linear contraction, favourable modulus of elasticity – reduced ratio of compressive and flexural strength)
- waterproof and frost resistant (after setting)

SUBSTRATE PREPARATION

The method of surface cleaning must be individually adjusted for each object, depending on strength and condition of the substrate material and its historic value. The substrate must be sound, free from dust, dirt, efflorescence, residues of paint coats. Hack off poorly bonded surface pieces and remove loose or weak parts with a steel brush. Directly before finishing coat application, wet the surface with water.

APPLICATION

Pour the dry mix from the bag into a clean container with suitable amount of water (recommended ratio: 5.50 – 6.25 l/25 kg) and mix mechanically until homogenous, lump free and without separating liquid. The mortar is ready to use after approx. 5 minutes and remixing. Apply the mortar with uniform coat with a stainless steel float, pressing strongly against the substrate. Surface can be finished by grinding or light floating with a felt float. Protect the surface against excessive drying during material application and setting.

REMARKS

- Do not use upon gypsum plasters.
- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set plaster can be removed with ATLAS SZOP agent.
- The shelf life of the product is 12 months from the production date shown on the packaging. The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets).
- Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.

TECHNICAL DATA

ATLAS GOLDEN AGE TSGW is factory made dry mix manufactured on the basis of high quality hydraulic binder, quartz fillers and improvers. The product conforms to PN-EN 998-1 standard. EC Declaration of Performance No. AZW TSGW/CPR.

Mixing ratio: water/dry mix	5.50 – 6.25 l/25 kg
Pot life	approx. 1 hour
Open time	approx. 30 minutes
Compressive strength	approx. 2.0 N/mm² (CS I)
Consumption	approx. 1.3 kg of mortar for 1 m² at 1 mm layer thickness
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Min. / max. coat thickness	5 mm / 10 mm
Packaging	paper bags 25 kg

Factory made plastering mortar of specified properties, renovation (R), for manual or machine application, for indoor and outdoor use, on walls, ceilings, posts and partition walls	CE 15
Reaction to fire - class	A1
Bonding	≥ 0.3 N / mm² - FP:B
Water absorption	≤ 0.3 kg / m² after 24 hours
Water vapour permeability coefficient μ	≤ 15
Thermal conductivity coefficient (average tabular value P=50%)	0.47 W / mK (λ10,dry) (EN 1745:2002, tab. A12)
Gross dry density	≤ 1300 kg/m³
Durability. Bonding Water absorption	 ≥ 0.3 N / mm² - FP:B ≤ 0.3 kg / m² after 24 hours
Content/release of hazardous substances	See Safety Data Sheet

At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-08-03

FINE AGGREGATE LIME FINISHING COAT WITH TRASS ATLAS GOLDEN AGE **TSW**

PLASTER RESTORATION SYSTEM

USE AND PROPERTIES

- for indoor and outdoor application of finishing coats upon walls and ceilings coated with lime, cement-lime and lime-cement plasters
- for renovation of façade and interior plasters in heritage buildings, particularly recommended for smoothing renovation plasters Atlas Golden Age
- fine aggregate (grain size up to 0.2 mm), for manual application with coats max. 5 mm thick
- mineral, cement-free, manufactured on the basis of natural hydraulic lime (NHL), enables forming surfaces of colour and appearance characteristic for historic lime plasters
- contains trass – mineral of volcanic origin limiting the possibility of efflorescence occurrence on the mortar surface
- high resistance to cracking – owing to proper content of microfibres strengthening the plaster and natural properties of lime (slow process of setting and mechanical strength improvement as well as low modulus of elasticity)
- contains hydrophobic additives – reducing plaster surface absorptiveness, therefore coat is protected against precipitation and water action
- bright and uniform coat colour (vintage white) enables easy and quick coating with paints
- perfect vapour permeability ($\mu \leq 15$), enables use upon repair layers made of renovation plasters
- high bonding to substrate (≥ 0.3 N / mm² - FP:B)
- free of harmful construction salts
- material prepared specifically for the needs of conservation of heritage buildings – it is characterized by optimally selected resistance and physical and chemical parameters (limited linear contraction, favourable modulus of elasticity – reduced ratio of compressive and flexural strength
- waterproof and frost resistant (after setting)

SUBSTRATE PREPARATION

The method of surface cleaning must be individually adjusted for each object, depending on strength and condition of the substrate material and its historic value. The substrate must be sound, free from dust, dirt, efflorescence, residues of paint coats. Hack off poorly bonded surface pieces and remove loose or weak parts with a steel brush. Directly before finishing coat application, wet the surface with water.

APPLICATION

Pour the dry mix from the bag into a clean container with suitable amount of water (recommended ratio: 5.75 – 6.25 l/25 kg) and mix mechanically until homogenous, lump free and without separating liquid. The mortar is ready to use after approx. 5 minutes and remixing. Apply the mortar with uniform coat with a stainless steel float, pressing strongly against the substrate. Surface can be finished by grinding or light floating with a felt float. Protect the surface against excessive drying during material application and setting.

REMARKS

- Do not use upon gypsum plasters.
- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set plaster can be removed with ATLAS SZOP agent.
- The shelf life of the product is 12 months from the production date shown on the packaging. The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets).
- Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.

TECHNICAL DATA

ATLAS GOLDEN AGE TSW is factory made dry mix manufactured on the basis of high quality hydraulic binder, quartz fillers and improvers. The product conforms to PN-EN 998-1 standard. EC Declaration of Performance No. AZW TWT/CPR.

Mixing ratio: water/dry mix	5.75 – 6.25 l/25 kg
Pot life	approx. 1 hour
Open time	approx. 30 minutes
Consumption	approx. 1.3 kg of mortar for 1 m² at 1 mm layer thickness
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Min. / max. coat thickness	1 mm / 5 mm
Packaging	paper bags 25 kg

Factory made plastering mortar of specified properties, renovation (R), for manual or machine application, for indoor and outdoor use, on walls, ceilings, posts and partition walls	CE 15
Reaction to fire - class	A1
Bonding	≥ 0.3 N / mm² - FP:B
Water absorption	≤ 0.3 kg / m² after 24 hours
Water vapour permeability coefficient μ	≤ 15
Thermal conductivity coefficient (average tabular value P=50%)	0.47 W / mK (λ10,dry) (EN 1745:2002, tab. A12)
Gross dry density	≤ 1300 kg/m³
Durability. Bonding Water absorption	 ≥ 0.3 N / mm² - FP:B ≤ 0.3 kg / m² after 24 hours
Content/release of hazardous substances	See Safety Data Sheet

At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-08-03

LIME PLASTER WITH TRASS
ATLAS GOLDEN AGE TWT

PLASTER RESTORATION SYSTEM

USE AND PROPERTIES

- for plastering upon surfaces coated with old lime and cement-lime plasters, can be used on rough surfaces made of brick or natural stone
- for walls and ceilings, indoors and outdoors
- for manual and machine application, coat thickness 10-20 mm
- mineral, cement-free, manufactured on the basis of natural hydraulic lime (NHL), enables forming surfaces of colour and appearance characteristic for historic lime plasters, bright and uniform plaster colour (vintage white) enables easy and quick coating with paints
- contains trass – mineral of volcanic origin limiting the possibility of efflorescence occurrence on the mortar surface
- high resistance to cracking – owing to proper content of microfibres strengthening the plaster and natural properties of lime (slow process of setting and mechanical strength improvement as well as low modulus of elasticity)
- perfect vapour permeability ($\mu \leq 15$)
- high bonding to substrate (≥ 0.3 N / mm² - FP:B)
- free of harmful construction salts
- material prepared specifically for the needs of conservation of heritage buildings – it is characterized by optimally selected resistance and physical and chemical parameters (limited linear contraction, favourable modulus of elasticity – reduced ratio of compressive and flexural strength
- waterproof and frost resistant (after setting)

SUBSTRATE PREPARATION

The method of surface cleaning must be individually adjusted for each object, depending on strength and condition of the substrate material and its historic value. The substrate must be sound, free from dust, dirt, efflorescence, residues of paint coats. Hack off poorly bonded surface pieces and remove loose or weak parts with a steel brush. Directly before plaster application, wet the surface with water.

APPLICATION

Pour the dry mix from the bag into a clean container with suitable amount of water (recommended ratio: 6.0 – 6.5 l/25 kg) and mix mechanically until homogenous, lump free and without separating liquid. The mortar is ready to use after approx. 5 minutes and remixing. Apply the plaster with two coats - as base coat and top coat. Apply the mortar manually with a trowel, with uniform coat, level the surface and leave for initial setting. In case of application of plasters above 20 mm thick, it is advisable to apply plaster with a few coats with appropriate technological breaks (one day for each mm of coat thickness). In such cases, after initial plaster setting, one should horizontally brush the surface with a brush with hard bristles, which would form rough surface and ensure perfect bonding of the subsequent plaster coat. Plaster can be smoothed, floated or grinded. Protect the surface against excessive drying during material application and setting, wet it with water, if necessary. Lead finishing works when the plaster fully sets and hardens.

REMARKS

- Do not use upon gypsum plasters.
- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set plaster can be removed with ATLAS SZOP agent.
- The shelf life of the product is 12 months from the production date shown on the packaging. The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets).
- Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet

TECHNICAL DATA

ATLAS GOLDEN AGE TWT is factory made dry mix manufactured on the basis of high quality hydraulic binder, quartz fillers and improvers. The product conforms to PN-EN 998-1 standard. EC Declaration of Performance No. AZW TWT/CPR..

Mixing ratio: water/dry mix	6.0 – 6.5 l/25 kg
Pot life	approx. 1 hour
Open time	approx. 30 minutes
Compressive strength	approx. 2.0 N/mm² (CS I)
Consumption	approx. 13 kg of mortar for 1 m² at 10 mm layer thickness
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Min. / max. coat thickness	10 mm / 20 mm
Packaging	paper bags 25 kg

Factory made plastering mortar of specified properties, renovation (R), for manual or machine application, for indoor and outdoor use, on walls, ceilings, posts and partition walls	CE 15
Reaction to fire - class	A1
Bonding	≥ 0.3 N / mm² - FP:B
Water absorption	≤ 0.3 kg / m² after 24 hours
Water vapour permeability coefficient μ	≤ 15
Thermal conductivity coefficient (average tabular value P=50%)	0.47 W / mK (λ10,dry) (EN 1745:2002, tab. A12)
Gross dry density	≤ 1300 kg/m³
Durability. Bonding Water absorption	 ≥ 0.3 N / mm² - FP:B ≤ 0.3 kg / m² after 24 hours
Content/release of hazardous substances	See Safety Data Sheet

At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-08-03

WHITE RENOVATION TOP FINISH ATLAS GOLDEN AGE TG

USE AND PROPERTIES

- for application of thin-coat top finishes upon typical mineral substrates like concrete, aerated concrete, brick and cement, gypsum and lime plasters
- for smoothing surfaces of casted sculptures and architectural elements
- white – mortar based on white Portland cement
- based on dolomite flour of grain size up to 0.1 mm – allows forming ideally smooth surfaces
- coat thickness between 1 and 5 mm
- for indoor and outdoor application
- waterproof
- frost resistant

SUBSTRATE PREPARATION

The method of surface cleaning must be individually adjusted for each object, depending on strength and condition of the substrate material and its historic value. The substrate must be sound, free from dust, dirt, efflorescence, residues of paint coats. Hack off poorly bonded surface pieces and remove loose or weak parts with a steel brush. Directly before plaster application wet the surface with water.

APPLICATION

Pour the dry mix from the bag into a clean container with suitable amount of water (recommended ratio: 8.5 l/25 kg) and mix mechanically until homogenous, lump free and without separating liquid. The mortar is ready to use after approx. 5 minutes and remixing. Apply the mortar with uniform coat with a stainless steel float, pressing strongly against the substrate. Surface can be finished by grinding or light floating with a felt float. Mortar open time (between mortar application and floating) depends on substrate absorptiveness, ambient temperature and mortar consistency. Protect the surface against excessive drying during material application and setting.

REMARKS

- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with ATLAS SZOP agent.
- The shelf life of the product is 12 months from the production date shown on the packaging. The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets).
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.

TECHNICAL DATA

ATLAS GOLDEN AGE TG is factory made dry mix manufactured on the basis of high quality mineral binder (cement and lime), dolomite fillers and improvers. The product conforms to the PN-EN 998-1 standard. EC Declaration of Performance No. AZW TG/CPR.

Mixing ratio: water/dry mix	8.5 l/25 kg
Pot life	approx. 2 hours
Open time	approx. 15 minutes
Consumption	up to 1.5 kg of mortar for 1 m^2 at 1 mm layer thickness
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Min. / max. coat thickness	1 mm / 5 mm
Packaging	paper bags 25 kg
Content of soluble chromium (VI) in ready-to-use mix	≤ 0.0002%

Factory made, one coat plastering mix of specified properties (OC), for outdoor use on walls, ceilings, posts and partition walls	CE 14
Reaction to fire – class	A1
Bonding	≥ 0.3 N / mm^2 - FP:B
Water absorption - category	W1
Water permeability after freeze-thaw cycles	≤ 1 ml/cm^2 after 48 hours
Water vapour permeability coefficient μ (tabular value)	15/35 (EN 1745:2002, tab.A.12)
Thermal conductivity coefficient (average tabular value P=50%)	0.83 W / mK ($\lambda_{10, dry}$)
Gross dry density	≤ 1800 kg / m^3
Durability. Bonding after required freeze-thaw cycles	≥ 0.3 N/mm^2
Durability. Water permeability after required freeze-thaw cycles	≤ 1 ml/cm^2 after 48 hours

At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-05-05

CEMENT-LIME PLASTER
ATLAS GOLDEN AGE TCW

PLASTER RESTORATION SYSTEM

USE AND PROPERTIES

- recommended for plastering rough surfaces of ceramic and lime-sand brick, natural stone, concrete, fiber-cement panels, cement and cement-lime plaster
- for walls and ceilings, for indoor and outdoor application
- for manual application
- as the top finishing coat or – after rough troweling – as base coat plaster for other top finishing coats (plaster category from 0 to III)
- based on cement – formed surface is strong, resistant to weather conditions and mechanical damage
- contains lime providing the plaster with higher coating elasticity and higher resistance to scoring and cracking
- vapour permeable – enables free transport of water vapour and release of humidity by the material upon which it is applied
- easy in application and floating – owing to content of lime, the mortar is very plastic and has very good working parameters
- material developed specifically for the needs of renovation of heritage buildings – characterized by optimally combined resistance, physical and chemical properties
- waterproof
- frost resistant

SUBSTRATE PREPARATION

The method of surface cleaning must be individually adjusted for each object, depending on strength and condition of the substrate material and its historic value. The substrate must be sound, free from dust, dirt, efflorescence, residues of paint coats. Hack off poorly bonded surface pieces and remove loose or weak parts with a steel brush. Directly before plaster application, wet the surface with water.

APPLICATION

Pour the dry mix from the bag into a clean container with suitable amount of water (recommended ratio 7.5 – 8.0 l/25 kg) and mix mechanically until homogenous, lump free and without separating liquid. Apply the plaster with two coats - base coat and top plaster coat. Apply the mortar manually with a trowel, with uniform coat and level the surface with an H-type darby, leave for initial setting. The moment of floating must be established experimentally in order to prevent plaster from drying too much. Use tool appropriate for expected finishing effect and purpose of the plaster. Protect the plaster against excessive drying, wet it with water, if necessary.

REMARKS

- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set plaster can be removed with ATLAS SZOP agent.
- The shelf life of the product is 12 months from the production date shown on the packaging. The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets).
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.

TECHNICAL DATA

ATLAS GOLDEN AGE TCW is factory made dry mix manufactured on the basis of high quality mineral binder (cement and lime), quartz fillers and improvers. The product conforms to the PN-EN 998-1 standard. EC Declaration of Performance No. AZW TCW/CPR.

Mixing ratio water/dry mix	7.5 – 8.0 l/25 kg
Pot life	approx. 2 hours
Consumption	approx. 17 kg of mortar for 1 m^2 at 10 mm layer thickness
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +30°C
Max. aggregate grain size	0.5 mm
Min. / max. plaster thickness	5 mm / 30 mm
Packaging	paper bags 25 kg
Content of soluble chromium (VI) in ready-to-use mix	≤ 0.0002%

Factory made plastering mix of specified properties, general purpose (GP), for indoor and outdoor use, on masonry walls, ceilings, posts and partition walls	CE 14
Reaction to fire – class	A1
Bonding	≥ 0.3 N / mm^2 - FP:B
Water absorption - category	W0
Water vapour permeability coefficient μ (tabular value)	15/35 (EN 1745:2002, tab.A.12)
Thermal conductivity coefficient (average tabular value P=50%)	0.83 W / mK ($\lambda_{10, dry}$)
Gross dry density	≤ 1800 kg/m^3
Durability. Mass decrement after 25 freeze-thaw cycles	≤ 3%
Durability. Compressive strength decrease after 25 freeze-thaw cycles	≤ 10%

At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-04-29

LIME-CEMENT PLASTER
ATLAS GOLDEN AGE **TWC**

PLASTER RESTORATION SYSTEM

USE AND PROPERTIES

- recommended for plastering surfaces coated with old lime and lime-cement plasters, can also be used on rough surfaces of brick or natural stone
- for manual application
- for walls and ceilings, for indoor and outdoor application
- as the top finishing coat or – after rough troweling – as base coat plaster for other top finishing coats (plaster category from 0 to III)
- based on lime, natural binder used for production of plasters for ages - content of lime determines coating elasticity and resistance to cracking
- contains cement, which improves mortar resistance to weather conditions and mechanical damage
- high vapour permeability – very important factor in case of old, damp substrates - plaster enables free transport of water vapour and release of humidity by the material upon which it is applied
- easy in application and floating – owing to content of lime, the mortar is very plastic and has very good working parameters
- light-grey coating colour – enables easy and economical covering the surface with paint
- material developed specifically for the needs of renovation of heritage buildings – characterized by optimally combined resistance, physical and chemical properties
- waterproof
- frost resistant

SUBSTRATE PREPARATION

The method of surface cleaning must be individually adjusted for each object, depending on strength and condition of the substrate material and its historic value. The substrate must be sound, free from dust, dirt, efflorescence, residues of paint coats. Hack off poorly bonded surface pieces and remove loose or weak parts with a steel brush. Directly before plaster application wet the surface with water.

APPLICATION

Pour the dry mix from the bag into a clean container with suitable amount of water (recommended ratio 7.5 – 8.0 l/25 kg) and mix mechanically until homogenous, lump free and without separating liquid. Apply the plaster with two coats - base coat and top plaster coat. Apply the mortar manually with a trowel, with uniform coat and level the surface with an H-type darby, leave for initial setting. The moment of floating must be established experimentally in order to prevent plaster from drying too much. Use tool appropriate for expected finishing effect and purpose of the plaster. Protect the plaster against excessive drying, wet it with water, if necessary.

REMARKS

- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set plaster can be removed with ATLAS SZOP agent.
- The shelf life of the product is 12 months from the production date shown on the packaging. The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets).
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.

TECHNICAL DATA

ATLAS GOLDEN AGE TWC is factory made dry mix manufactured on the basis of high quality mineral binder (lime and cement), quartz fillers and improvers. The product conforms to the PN-EN 998-1 standard. EC Declaration of Performance No. AZW TWC/CPR.

Mixing ratio water/dry mix	7.5 – 8.0 l/25 kg
Pot life	approx. 2 hours
Consumption	approx. 17 kg of mortar for 1 m^2 at 10 mm layer thickness
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +30°C
Max. aggregate grain size	0.5 mm
Min. / max. plaster thickness	5 mm / 30 mm
Packaging	paper bags 25 kg
Content of soluble chromium (VI) in ready-to-use mix	≤ 0.0002%

Factory made plastering mix of specified properties, general purpose (GP), for indoor and outdoor use, on masonry walls, ceilings, posts and partition walls	CE 09
Reaction to fire – class	A1
Bonding	≥ 0.3 N / mm^2 - FP:B
Water absorption - category	W0
Water vapour permeability coefficient μ (tabular value)	15/35 (EN 1745:2002, tab.A.12)
Thermal conductivity coefficient (average tabular value P=50%)	0.83 W / mK ($\lambda_{10, dry}$)
Gross dry density	≤ 1800 kg / m^3
Durability. Mass decrement after 25 freeze-thaw cycles	≤ 3%
Durability. Compressive strength decrease after 25 freeze-thaw cycles	≤ 10%

At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-04-29

SCRAPED PLASTER
ATLAS GOLDEN AGE TCL

PLASTER RESTORATION SYSTEM

USE AND PROPERTIES

- recommended for decorative plastering rough surfaces of ceramic and lime-sand brick, natural stone, concrete, cement and cement-lime plaster and renovation plaster
- for manual application
- cement-based – formed surface is resistant to weather conditions and mechanical damage
- vapour permeable – enables free transport of water vapour and release of humidity by the material upon which it is applied
- possibility of dyeing in mass and ordering the plaster in version with mica flakes
- material developed specifically for the needs of renovation of heritage buildings – characterized by optimally combined resistance, physical and chemical properties
- for indoor and outdoor application
- waterproof
- frost resistant

SUBSTRATE PREPARATION

The method of surface cleaning must be individually adjusted for each object, depending on strength and condition of the substrate material and its historic value. The substrate must be sound, free from dust, dirt, efflorescence, residues of paint coats. Hack off poorly bonded surface pieces and remove loose or weak parts with a steel brush. Directly before plaster application, wet the surface well with water – until saturation.

APPLICATION

Pour the dry mix from the bag into a clean container with suitable amount of water (recommended ratio 3.5 – 4.0 l/25 kg) and mix mechanically until homogenous, lump free and without separating liquid. The mortar is ready to use after a few minutes since mixing. It is recommended to mix the content of a few bags in a bigger container simultaneously. Remix directly before application. Apply the mortar manually with a trowel, with uniform coat approx. 10 mm thick. Level the resulting surface with a long darby and leave for initial setting. The moment of floating must be established experimentally in order to prevent plaster from drying too much. Perform scraping test – if the mortar does not stick to spikes of a scraper scraping can start. Uniformly scrape the plaster surface with a scraper. Avoid repeated scraping at the same place, as this can result in differences in shade. When the mortar sets, clean the surface with a soft brush. In order to improve plaster resistance against weather conditions, impregnation with ATLAS GOLDEN AGE SH is recommended. While applied plaster is drying, provide appropriate ventilation of rooms. Protect plasters applied outdoors from drying too fast.

REMARKS

- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set plaster can be removed with ATLAS SZOP agent.
- The shelf life of the product is 12 months from the production date shown on the packaging. The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets).
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.

TECHNICAL DATA

ATLAS GOLDEN AGE TCL is factory made dry mix manufactured on the basis of high quality white cement, quartz and dolomite fillers, modern plasticisers making it easily workable. The product conforms to the PN-EN 998-1 standard. EC Declaration of Performance No. AZW TCL/CPR.

Mixing ratio water/dry mix	3.5 - 4.0 l/25 kg
Pot life	approx. 2 hours
Open time	approx. 15 minutes
Consumption	approx. 18 kg of mortar for 1 m^2 at 10 mm layer thickness
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Min. / max. plaster thickness	5 mm / 30 mm
Packaging	paper bags 25 kg
Content of soluble chromium (VI) in ready-to-use mix	≤ 0.0002%

Factory made plastering mortar of specified properties, renovation (R), for manual or machine application, for indoor and outdoor use, on walls, ceilings, posts and partition walls	CE 13
Reaction to fire – class	A1
Bonding	≥ 0.3 N/mm² - FP:B
Water absorption	≥ 0.3 kg / m² after 24 hours
Water penetration	≤ 5 mm
Water vapour permeability coefficient μ	15/35
Thermal conductivity coefficient (average tabular value P=50%)	0.67 W/mK ($\lambda_{10, dry}$)
Gross dry density	≤ 1700 kg/m³
Durability. Mass decrement after 25 freeze-thaw cycles	≤ 3%
Durability. Compressive strength decrease after 25 freeze-thaw cycles	≤ 15%

At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-04-29

WHITE ADHESIVE MORTAR WITH TRASS
ATLAS GOLDEN AGE TZK-B

PLASTER RESTORATION SYSTEM

USE AND PROPERTIES

- for fixing wall and floor stone, ceramic and mosaic cladding, exposed to significant moisture in operation
- based on white hydraulic binder – prevents discolouration of fixed elements, designed for tiles of high absorptiveness, e.g. marble
- contains trass – mineral of volcanic origin limiting the possibility of efflorescence occurrence on the surface of fixed facing
- very high bonding to substrate – mortar recommended for fixing tiles on difficult, old substrates (degenerated by longtime moisture, salts, biological contamination), can also be used for fixing decorative moulding elements, window frames, trims, stucco elements, etc.
- deformable – absorbs thermal and mechanical strains the cladding is exposed to, may be used for fixing cladding exposed to extremely hard operation conditions
- stable on vertical elements, does not slip, enables fixing cladding from top to bottom
- comfortable in use – extended open time up to 30 minutes
- thick bonding coat (from 2 to 10 mm) – enables fixing cladding without initial substrate leveling and tiles of irregular of profiled back surface
- recommended for plinths and other building elements exposed to moisture
- for indoor and outdoor application
- developed specifically for the needs of renovation of heritage buildings – characterized by optimally combined resistance, physical and chemical properties
- waterproof and frost resistant

SUBSTRATE PREPARATION

The method of surface cleaning must be individually adjusted for each object, depending on strength and condition of the substrate material and its historic value. The substrate should be cleaned of dust, dirt, patina, loose and dusty elements and residues of grease, oils and wax. Remove surface biological contamination and impregnate the cleaned substrate. For excessively absorptive substrates one should use an agent regulating and limiting absorptiveness.

APPLICATION

Prepare the mortar by pouring the dry mix into a container with suitable amount of water (recommended ratio 6.5 – 7.00 liters of water for 25 kg of dry mix) and mixing mechanically until homogenous, free from lumps and separating liquid. The mortar is ready to use after approx. 5 minutes and remixing. The adhesive should be applied upon surface with a steel notched trowel (notch size 4-12 mm) and with thin coat upon tile back side (with the smooth trowel edge). Directly after adhesive application place the tile, move slightly and press against the substrate. After pressing the surface of bonding should be complete, with no free spaces. Position of a tile can be adjusted within approx. 10 minutes since pressing. Leave the joint between tiles of thickness proper for the tile edge size. Grouting can start when the adhesive sets, not earlier however than 24 hours since fixing the tiles. It is recommended to use Renovation Grouting Mortar with Trass ATLAS GOLDEN AGE FG. Apply the mortar in temperature from +5 °C up to +25 °C. During application and just after protect the cladding from precipitation and too fast mortar drying.

REMARKS

- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to building principles and OHS regulations.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set adhesive can be removed with ATLAS SZOP agent.
- The shelf life of the product is 12 months from the production date shown on the packaging. The mortar must be transported and stored in tightly sealed bags, in dry conditions, in positive temperature (most preferably on pallets).
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.

TECHNICAL DATA

ATLAS GOLDEN AGE TZK-B is factory made dry mix manufactured on the basis of white hydraulic binder with addition of trass flour, fillers and improvers.

Mixing ratio: water/dry mix	6.5 – 7.0 l/25 kg
Pot life	approx. 4 hours
Consumption	approx. 1.5 kg for 1 m² for 1 mm layer thickness
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Bonding to substrate	> 1.00 N / mm²
Packaging	paper bags 25 kg
Content of soluble chromium (VI) in ready-to-use mix	≤ 0.0002%

At the time of publication of this product data sheet all previous ones become void.
Date of update: 2012-06-21

SILICATE PRIMING AGENT ATLAS GOLDEN AGE S-01

USE AND PROPERTIES

- for proper preparation of substrates for ATLAS GOLDEN AGE S-02 silicate paint
- for priming mineral substrates like cement and cement-lime plasters and rough surfaces made of concrete, brick, blocks, hollow brick and other similar ceramic and lime-sand materials
- agent based on potassium silicate – strengthens and unifies substrate absorptiveness, improves paint bonding and reduces its consumption
- may be used for diluting Renovation Silicate Paint S-02 used for base coat painting
- transparent after drying
- for indoor and outdoor application

SUBSTRATE PREPARATION

The method of surface cleaning must be individually adjusted for each object, depending on strength and condition of the substrate material and its historic value. The substrate must be dry, stable and free from layers which would impair emulsion bonding, in particular dust, dirt, wax and grease. Carefully remove any old paints and other layers poorly bonded to the substrate and dispersion paint coatings.

APPLICATION

ATLAS GOLDEN AGE S-01 is manufactured as a ready-to-use product. It should not be thinned or mixed with other materials. Apply with thin uniform coat with a roller or a paintbrush. In case of highly absorbable substrates priming can be repeated, apply the second coat crosswise to the first one. The second coat must not be applied earlier than 4 hours since application of the first one. The time of drying of ATLAS GOLDEN AGE S-01 is approx. 30 min, depending on substrate, ambient temperature and relative air humidity. Substrates to be painted with silicate paint must be primed at least 4 hours earlier. When diluting ATLAS GOLDEN AGE S-02 silicate paint, ATLAS GOLDEN AGE S-01 can be added in volume not exceeding 7% of the paint volume. **Note!** Before painting, thoroughly protect any neighbouring elements, such as window panes, frames and flashings, because dry stains of silicate primer are difficult to remove without the risk of damaging the substrate.

REMARKS

- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
- The tools must be cleaned with clean water directly after use.
- The shelf life of the product is 12 months from the production date shown on the packaging. The agent must be transported and stored in tightly sealed containers, in dry conditions (most preferably on pallets).
- Keep out of the reach of children
- ATLAS GOLDEN AGE S-01 priming paint; maximum content of VOC in the product 7.39 g/l, maximum allowable VOC content in the product 30 g/l.

TECHNICAL DATA

ATLAS GOLDEN AGE S-01 silicate priming agent is manufactured on the basis of potassium silicate.

Consumption	approx. 0.2 kg / 1 m²
Emulsion preparation temperature, substrate and ambient temperature during work	from +5°C to +30°C
Packaging	plastic drums 5 kg

At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-03-17

SILICATE FAÇADE PAINT
ATLAS GOLDEN AGE S-02

PLASTER RESTORATION SYSTEM

USE AND PROPERTIES

- for painting mineral substrates like cement and cement-lime plasters and rough substrates made of concrete, brick, hollow brick and other similar ceramic or lime-sand-based materials
- for original painting and upon substrates exposed to dampness, both in historic and modern buildings
- for indoor and outdoor application
- perfectly reflects texture of painted surface (without smoothing effect) and has natural matte appearance
- rich colour palette - 392 ready recipes and possibility of prepration of paint in other colours depending on individual needs, also colours based on samples of the original material
- forms mineral coat of excellent water vapour permeability, thus ensures free diffusion of water vapour and evaporation of moisture from substrates it is applied upon
- strong bonding – paint reacts chemically with substrate in the silicification process, penetrates structure of substrate and forms very durable bond structure
- highly resistant to weathering, atmospheric precipitation and any types of aggressive components of the substrate and of the environment
- alkaline reaction resulting from properties of water glass reduces susceptibility of painted surfaces to development of microorganisms

SUBSTRATE PREPARATION

The method of surface cleaning must be individually adjusted for each object, depending on strength and condition of the substrate material and its historic value. The substrate must be dry, stable and free from layers which would impair paint bonding, in particular dust, dirt, wax and grease. Carefully remove any old paints and other layers poorly bonded to substrate and dispersion paint coatings. Before paint application, prime the surface with ATLAS GOLDEN AGE S-01 silicate priming agent.

APPLICATION

The paint is delivered as a ready to use product. After opening, mix the mass in order to equalize consistency. Dilute the paint with ATLAS GOLDEN AGE S-01 agent added in volume not exceeding 7% of the paint volume (0.7 liters of agent to one 10 l packaging of paint). The assumed dilution ratio has to be preserved for the whole painted surface. Execute final painting with undiluted paint. Apply paint with thin uniform coat with a paintbrush, a roller or a spray gun. Paint can be applied with one or two coats depending on needs and absorbability and structure of the substrate. The second coat can be applied when the first one dries. Paint should be applied in a continuous manner, "wet-on-wet", avoid breaks or painting over partly dried coats. The time of drying is approx. 2 to 6 hours, depending on substrate, ambient temperature and relative air humidity. Technological breaks should be planned in advance, e.g. in corners and angles of the building, along cornices, pilasters or other architectural division lines. During application and drying, protect the painted surface from direct sunlight, wind and precipitation. It is recommended to use a protective net on scaffolding.

Note: To avoid differences in shade during coloured paint application, each surface should be painted with paint of the same production date. Painting surfaces of different texture and technical parameters can result in two different shades of the same colour.

Before painting, thoroughly protect any neighbouring elements, such as window panes, frames and flashings, because dry stains of silicate paint are difficult to remove without the risk of damaging the substrate.

REMARKS

- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
- The tools must be cleaned with clean water directly after use.
- The shelf life of the product is 12 months from the production date shown on the packaging. The paint must be transported and stored in tightly sealed buckets, in dry conditions (most preferably on pallets).
- Harmful to aquatic life with long lasting effects. Keep out of reach of children. Avoid release to the environment. Dispose of contents/container to appropriately labeled containers designed for selective waste treatment, emptied by an authorized company. Follow the instructions of the Safety Data Sheet.
- ATLAS GOLDEN AGE S-02 silicate façade paint; maximum content of VOC in the product 22.29 g/l, maximum allowable VOC content in the product 40 g/l.

TECHNICAL DATA

ATLAS GOLDEN AGE S-02 paint is manufactured on the basis of potassium silicate. Dyed with inorganic pigments - resistant to alkali and UV radiation.

Product density	approx. 1.5 g/cm^3
Bonding grade (according to PN-80/C-81531)	1
Consumption	approx. 0.2 l of paint for 1 m^2 (on smooth surface)
Paint preparation, substrate and ambient temperature during work	from +5°C to +25°C
Packaging	plastic buckets 10 l

At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-03-17

SILICONE PRIMING AGENT ATLAS GOLDEN AGE N-01

USE AND PROPERTIES

- for proper preparation of substrates for ATLAS GOLDEN AGE N-02 silicone paint
- for priming mineral substrates like cement and cement-lime plasters and rough surfaces made of concrete, brick, blocks, hollow brick and other similar ceramic and lime-sand materials
- agent based on silicone dispersion – strengthens and unifies substrate absorptiveness, improves paint bonding and reduces its consumption
- transparent after drying
- forms micro-porous structure, ensures free diffusion of water vapour and evaporation of humidity from the material it is applied upon
- hydrophobic
- for indoor and outdoor application

SUBSTRATE PREPARATION

The method of surface cleaning must be individually adjusted for each object, depending on strength and condition of the substrate material and its historic value. The substrate must be dry, stable and free from layers which would impair emulsion bonding, in particular dust, dirt, wax and grease. Carefully remove any old paints and other layers poorly bonded to the substrate and dispersion paint coatings.

APPLICATION

ATLAS GOLDEN AGE N-01 is manufactured as a ready-to-use product. It should not be thinned or mixed with other materials. Apply with thin uniform coat with a roller or a paintbrush. In case of highly absorbable substrates priming can be repeated, apply the second coat crosswise to the first one. The second coat must not be applied earlier than 4 hours since application of the first one. The time of drying of ATLAS GOLDEN AGE N-01 is approx. 30 min, depending on substrate, ambient temperature and relative air humidity.

REMARKS

- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
- The tools must be cleaned with clean water directly after use.
- The shelf life of the product is 12 months from the production date shown on the packaging. The agent must be transported and stored in tightly sealed containers, in dry conditions (most preferably on pallets).
- Keep out of reach of children.
- ATLAS GOLDEN AGE N-01 priming agent: maximum content of VOC in the product 19.93 g/l, maximum allowable VOC content in the product 30 g/l.

TECHNICAL DATA

ATLAS GOLDEN AGE N-01 silicone priming agent is manufactured on the basis of silicone dispersion.

Consumption	approx. 0.2 kg / 1 m²
Emulsion preparation temperature, substrate and ambient temperature during work	from +5°C to +30°C
Packaging	plastic drums 5 kg

At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-03-17

SILICONE FAÇADE PAINT
ATLAS GOLDEN AGE N-02

USE AND PROPERTIES

- for painting mineral substrates like cement and cement-lime plasters and rough substrates made of concrete, brick, hollow brick and other similar ceramic or lime-sand-based materials
- for original painting and upon substrates exposed to dampness, both in historic and modern buildings
- for indoor and outdoor application
- resistant to pollution, self-cleaning – particles of dust and other pollution are washed away from surface by rainfall, owing to which the painted surface retains aesthetic appearance for longer time and does not require repeated conservation
- recommended for painting buildings situated in areas particularly exposed to pollution – close to heavy traffic communication routes, industrial areas, etc.
- hydrophobic – non absorbable, resistant to water action, protects substrate against water and dissolved harmful chemical compounds
- resistant to biological contamination – effectively prevents development of algae, fungi and lichens on the painted surface
- vapour permeable – characterized by low diffusion resistance coefficient, forms coating ensuring free diffusion of water vapour and evaporation of moisture from substrate it is applied upon
- durable – resistant to weathering, precipitation, UV radiation and any types of aggressive components of the substrate and of the environment
- very good coating
- rich colour palette - 655 ready recipes and possibility of preparation of paint in other colours depending on individual needs, also colours based on samples of the original material

SUBSTRATE PREPARATION

The method of surface cleaning must be individually adjusted for each object, depending on strength and condition of the substrate material and its historic value. The substrate must be dry, stable and free from layers which would impair paint bonding, in particular dust, dirt, wax and grease. Carefully remove any old paints and other layers poorly bonded to the substrate and dispersion paint coatings. Before paint application, prime the surface with ATLAS GOLDEN AGE N-01 silicone priming agent.

APPLICATION

The paint is delivered as a ready to use product. After opening, mix the mass in order to equalize consistency. Apply paint with thin uniform coat with a paintbrush, a roller or a spray gun. Paint can be applied with one or two coats depending on needs, absorbability and structure of the substrate. The second coat can be applied when the first one dries. Paint should be applied in a continuous manner, "wet-on-wet", avoid breaks or painting over partly dried coats. The time of drying is approx. 2 to 6 hours, depending on substrate, ambient temperature and relative air humidity. Technological breaks should be planned in advance, e.g. in corners and angles of the building, along cornices, pilasters or other architectural division lines. During application and drying, protect the painted surface from direct sunlight, wind and precipitation. It is recommended to use a protective net on scaffolding.

Note: In order to avoid differences in shade during coloured paint application, each surface should be painted with the paint of the same production date. Painting surfaces of different texture and technical parameters can result in achieving two different shades of the same colour.

REMARKS

- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
- The tools must be cleaned with clean water directly after use.
- The shelf life of the product is 12 months from the production date shown on the packaging. The mortar must be transported and stored in tightly sealed buckets, in dry conditions (most preferably on pallets).
- Harmful to aquatic life with long lasting effects. Keep out of reach of children. Avoid release to the environment. Dispose of contents/container to appropriately labeled containers designed for selective waste treatment, emptied by an authorized company. Follow the instructions of the Safety Data Sheet.
- ATLAS GOLDEN AGE N-02 silicone façade paint; maximum content of VOC in the product 35.72 g/l, maximum allowable VOC content in the product 40 g/l.

TECHNICAL DATA

ATLAS GOLDEN AGE N-02 pant is manufactured on the basis of water dispersion of organic resins. Dyed mainly with inorganic pigments - resistant to alkali and UV radiation.

Product density	approx. 1.5 g/cm^3
Bonding grade (according to PN-80/C-81531)	1
Consumption	approx. 0.125 l of paint for 1 m^2 (on smooth surface)
Paint preparation, substrate and ambient temperature during work	from +5°C to +25°C
Packaging	plastic buckets 10 l

At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-03-17

GLAZING MINERAL PAINT
ATLAS GOLDEN AGE L

USE AND PROPERTIES

- recommended for application upon historical objects for colour integration of substrates executed with various materials, e.g. after filling cavities
- can be used for original or renovating painting, upon old and strongly bonded paint coatings
- designed for painting mineral substrates like rough surfaces made of natural stone, brick, blocks, hollow brick and other similar ceramic or lime-and-sand materials. It can also be applied upon cement, cement-lime and lime plasters
- characterized by low coating strength allowing to achieve effect of semi-transparency (where the substrate shows through) - therefore, the resulting coat preserves natural appearance and texture of the painted surface and exactly reproduces original appearance of the substrate
- rich colour palette of 112 ready to use recipes; there is a possibility to prepare a paint of a different colour, depending on individual needs, also based on a sample of the original material
- vapour permeable – provides free diffusion of water vapour and evaporation of moisture from the substrate
- contains hydrophobic components protecting painted surface against humidity penetrating from the outside
- paint coating is durable, resistant to weathering, precipitation and any types of aggressive components of the substrate and of the environment

SUBSTRATE PREPARATION

The method of surface cleaning must be individually adjusted for each object, depending on strength and condition of the substrate material and its historic value. The substrate should be dry and sound, free of pollution which would impair paint bonding, especially dust, dirt, wax and grease. Old, low quality paint coats and other coatings of uncertain bonding have to be removed.

APPLICATION

The paint is supplied in the form of dry mix, ready to use after mixing with water. It s prepared in two stages. The first consists in pouring the bag contents into water (ratio approx. 5.0÷6.0 l for 10 kg of dry mix) and mixing until homogenous in structure and colour. When the preliminary mix thickens (after approx. 30 minutes), pour the remaining 3.0 ÷ 4.0 l of water so that the final ratio does not exceed 10 l of water for 10 kg of dry mix. Mix thoroughly. Keep the same ratio for the whole surface. The paint has to be used up within approx. 10 hours. Do not add water during painting. Apply the paint with thin uniform coat with a brush. Depending on substrate absorptiveness, structure and intended aesthetic effect, apply one or two coats of paint. Apply the second coat when the first one dries. Apply the paint continuously (using the "wet on wet" method), avoid breaks in work and painting on partly dried coats. The time of drying is approx. 2 – 6 hours, depending on substrate, temperature and relative air humidity. Technological breaks have to be planned in advance, e.g. in the corners and angles of the building, along cornices, pilasters or other architectural division lines. During application and drying, protect the painted surface from direct sunlight, wind and precipitation. It is recommended to use protective nets on scaffolding. **Note! To avoid any differences in colour shades of the paint, each surface should be coated with paint of the same production date. Painting surfaces differing in structure and technological parameters can result in the effect of various shades of the same paint colour.**

REMARKS

- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
- The tools must be cleaned with clean water directly after use.
- The shelf life of the product is 24 months from the production date shown on the packaging. The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets).
- ATLAS GOLDEN AGE L paint for external walls: maximum VOC content in the product 31.95 g/l, allowable VOC content in the product 40 g/l.

TECHNICAL DATA

ATLAS GOLDEN AGE L is factory made dry mix manufactured on the basis of hydrated lime, quartz fillers and powdered resins. Inorganic pigments – resistant to alkali and UV radiation are used for pigmentation.

Mixing ratio: water/dry mix	I mixing 5.0 – 6.0 l/10 kg II mixing 4.0 – 5.0 l/10 kg
Pot life	approx. 10 hours
Consumption	approx. 0.15 ÷ 0.20 kg of paint for 1 m^2
Paint preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Packaging	paper bags 10 kg
Content of soluble chromium (VI) in ready-to-use mix	≤ 0.0002%

At the time of publication of this product data sheet all previous ones become void.
Date of update: 2009-06-16

moulding mortars


ATLAS ZŁOTY WIEK
ATLAS
SPECJALISTYCZNE WYROBY DO PRAC KONSERWATORSKICH
* MINERALNA * ZAPRAWA DO ODLEWÓW
F-01
doskonale wypełnia przestrzenie w formach
wyjątkowa gładkość
wysoka wytrzymałość
mrozoodporność


ATLAS ZŁOTY WIEK
ATLAS
SPECJALISTYCZNE WYROBY DO PRAC KONSERWATORSKICH
* SZPACHLA * DO POWLEKANIA RDZENI PROFILI CIĄGNIONYCH
SM
wzmocniona włóknami
drobnoziarnista - granulacja kruszywa do 0,5 mm


ATLAS ZŁOTY WIEK
ATLAS
SPECJALISTYCZNE WYROBY DO PRAC KONSERWATORSKICH
* ZAPRAWA * DO ODLEWÓW BARWIONA W MASIE DROBNOZIARNISTA
ZBM-05-36
szeroka gama kolorystyczna
odporna na UV
mrozoodporna


ATLAS ZŁOTY WIEK
ATLAS
SPECJALISTYCZNE WYROBY DO PRAC KONSERWATORSKICH
* ZAPRAWA * DO ODLEWÓW BARWIONA W MASIE GRUBOZIARNISTA
ZBM-25-36
szeroka gama kolorystyczna
mrozoodporna
odporna na UV


ATLAS ZŁOTY WIEK
ATLAS
SPECJALISTYCZNE WYROBY DO PRAC KONSERWATORSKICH
* SZYBKOWIĄŻĄCA * ZAPRAWA DO ODLEWÓW BARWIONA W MASIE
ZBM-R-25-36
szeroka gama kolorystyczna
mrozoodporna
odporna na UV


ATLAS ZŁOTY WIEK
ATLAS
SPECJALISTYCZNE WYROBY DO PRAC KONSERWATORSKICH
* ZAPRAWA * DO ODLEWÓW I RDZENI PROFILI CIĄGNIONYCH LEKKA
ZMP
mała gęstość
mrozoodporność
ograniczony skurcz


ATLAS ZŁOTY WIEK
ATLAS
SPECJALISTYCZNE WYROBY DO PRAC KONSERWATORSKICH
* SZYBKOWIĄŻĄCA * ZAPRAWA DO ODLEWÓW I RDZENI PROFILI CIĄGNIONYCH LEKKA
ZMP-R
mała gęstość
mrozoodporność
ograniczony skurcz

USE AND PROPERTIES

- for making castings (in open moulds) and filling moulds
- for making construction elements (banisters, balusters, cantilevers) and decorative architectonic details
- mineral – based on hydraulic binder
- combines favorable working parameters and easy formation of uniform casts, characteristic for gypsum mortars, with high resistance and advantages offered by cement binder
- available in white colour
- fine-aggregate (grain size up to 0.5 mm) – can be a perfect imitation of gypsum masses
- characterized by low absorptivity and very low contraction
- material developed specifically for the needs of renovation of heritage buildings – characterized by optimally combined resistance, physical and chemical properties
- for indoor and outdoor application
- waterproof
- frost resistant

APPLICATION

Pour the dry mix from the bag into a clean container with suitable amount of water (recommended ratio 5.0 – 5.5 l/25 kg) and mix mechanically until homogenous, lump free and without separating liquid. Use low speed mixer in order to avoid excessive mortar aeration. The mortar is ready to use after approx. 5 minutes and remixing. Pour the prepared mortar slowly and carefully into previously prepared moulds protected with anti-adhesive agents. Demoulding of cast elements can take place not earlier than after approx. 24 hours.

REMARKS

- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set adhesive can be removed with ATLAS SZOP agent.
- The shelf life of the product is 12 months from the production date shown on the packaging. The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets).
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.

TECHNICAL DATA

ATLAS GOLDEN AGE F-01 is factory made dry mix manufactured on the basis of high quality hydraulic binder and quartz fillers with addition of liquefying substances, agents improving adhesion and resistance to weather conditions.

Mixing ratio water/dry mix	5.0 – 5.25 l/25 kg
Pot life	approx.
Compressive strength	approx. 25 N/mm^2
Flexural strength	approx. 6 N/mm^2
Contraction	0.22 mm/rm
Total water absorption	approx. 2%
Porosity	approx. 5%
Consumption	approx. 2 kg of mortar for 1 dm^3
Mortar preparation and ambient temperature during work	from +5°C to +25°C
Packaging	paper bags 25 kg
Content of soluble chromium (VI) in ready-to-use mix	≤ 0.0002%

At the time of publication of this product data sheet all previous ones become void.
Date of update: 2013-09-16

MORTAR FOR DRAWN MOULDINGS ATLAS GOLDEN AGE ZMP

USE AND PROPERTIES

- for making castings or cores of drawn mouldings
- volume weight twice as light as cement-based moulding mortars
- contains very light silicate fillers (glass granules filled with air) – enables making large size elements of small weight. Finished elements are light and easy to mount.
- standard setting time – demoulding possible after 24 hours
- manufactured in vintage white colour
- for indoor and outdoor application
- waterproof
- frost resistant

SUBSTRATE PREPARATION

The method of surface cleaning must be individually adjusted for each object, depending on strength and condition of the substrate material and its historic value. The substrate must be sound, free from dust, dirt, efflorescence and other contamination. Hack off poorly bonded surface pieces and remove loose or weak parts.

APPLICATION

Casting

Pour the dry mix from the bag into a clean container with suitable amount of water (recommended ratio 4.5 – 5.25 l/15 kg) and mix mechanically until homogenous, lump free and without separating liquid. Use low speed mixer in order to avoid excessive aeration of the mortar. The mortar is ready to use after approx. 5 minutes and remixing. Pour the prepared mortar slowly and carefully into previously prepared moulds protected with anti-adhesive agents. Demoulding of cast elements can take place not earlier than after approx. 24 hours. Surface of the resulting cast is very smooth.

Drawn profile core making

Pour the dry mix from the bag into a clean container with suitable amount of water (recommended ratio 3 l/15 kg) and mix mechanically until homogenous, lump free and without separating liquid. Use low speed mixer in order to avoid excessive aeration of the mortar. The mortar is ready to use after approx. 5 minutes and remixing. Depending on desired thickness of the core, the ready mortar is applied with one or more layers and then the profile is drawn in a continuous manner. The surface of the core after profile passing is rough. In case of very thick or long mouldings additional strengthening of the profile with reinforcement in the form of, e.g. steel mesh is recommended, keep appropriate covering. Demoulding is possible after 24 hours. Before the application of ATLAS GOLDEN AGE SM-FINISZ finishing coat, surface of the core must be properly set.

REMARKS

- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with ATLAS SZOP agent.
- The shelf life of the product is 12 months from the production date shown on the packaging. The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets).
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.

TECHNICAL DATA

ATLAS GOLDEN AGE ZMP is factory made dry mix manufactured on the basis of high quality Portland cement, hydrated lime, fillers and improvers.

Mixing ratio: water/dry mix	4.5 – 5.25 l/15 kg (casting) 3.0 l/15 kg (core making)
Specific weight	max. 0.8 kg/dm^3
Pot life	approx. 2 hours
Consumption	approx. 1.0 kg of mortar for 1 dm^3
Mortar preparation and ambient temperature during work	from +5°C to +25°C
Packaging	paper bags 15 kg
Content of soluble chromium (VI) in ready-to-use mix	≤ 0.0002%

At the time of publication of this product data sheet all previous ones become void.
Date of update: 2013-09-16

FAST-SETTING MORTAR FOR DRAWN MOULDINGS ATLAS GOLDEN AGE ZMP-R

USE AND PROPERTIES

- for making the internal layer (core) of castings or cores of drawn mouldings
- fast setting – possibility of demoulding already after 3 hours ensures quick progress of moulding works and economical rotation of forms
- volume weight twice as light as cement-based moulding mortars
- contains very light silicate fillers (glass granules filled with air) – enables making large size elements of small weight. Finished elements are light and easy to mount.
- manufactured in grey colour
- for indoor and outdoor application
- waterproof
- frost resistant

SUBSTRATE PREPARATION

The method of surface cleaning must be individually adjusted for each object, depending on strength and condition of the substrate material and its historic value. The substrate must be sound, free from dust, dirt, efflorescence and other contamination. Hack off poorly bonded surface pieces and remove loose or weak parts.

APPLICATION

Casting

Pour the dry mix from the bag into a clean container with suitable amount of water (recommended ratio 4.5 – 5.25 l/15 kg) and mix mechanically until homogenous, lump free and without separating liquid. Use low speed mixer in order to avoid excessive aeration of the mortar. The mortar is ready to use after approx. 5 minutes and remixing. Pour the prepared mortar slowly and carefully into previously prepared moulds protected with anti-adhesive agents. Demoulding of cast elements can take place after approx. 3 hours. Surface of the resulting cast is very smooth.

Drawn profile core making

Pour the dry mix from the bag into a clean container with suitable amount of water (recommended ratio 3.0 l/15 kg) and mix mechanically until homogenous, lump free and without separating liquid. Use low speed mixer in order to avoid excessive aeration of the mortar. The mortar is ready to use after approx. 5 minutes and remixing. Depending on desired thickness of the core, the ready mortar is applied with one or more layers and then the profile is drawn in a continuous manner. The surface of the core after profile passing is rough. In case of very thick or long mouldings additional strengthening of the profile with reinforcement in the form of, e. g. steel mesh is recommended, keep appropriate cover. Demoulding is possible after 3 hours. Before the application of ATLAS GOLDEN AGE SM-FINISZ finishing coat, surface of the core must be properly set.

REMARKS

- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set adhesive can be removed with ATLAS SZOP agent.
- The shelf life of the product is 12 months from the production date shown on the packaging. The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets).
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.

TECHNICAL DATA

ATLAS GOLDEN AGE ZMP-R is factory made dry mix manufactured on the basis of high quality Portland cement, hydrated lime, fillers and improvers.

Mixing ratio: water/dry mix	4.5 – 5.25 l/15 kg (casting) 3.0 l/15 kg (core making)
Specific weight	max. 0.8 kg/dm^3
Pot life	approx. 40 minutes
Consumption	approx. 1.0 kg of mortar for 1 dm^3
Mortar preparation and ambient temperature during work	from +5°C to +25°C
Packaging	paper bags 15 kg
Content of soluble chromium (VI) in ready-to-use mix	≤ 0.0002%

At the time of publication of this product data sheet all previous ones become void.
Date of update: 2009-06-16

MOULDING FINISHING COAT ATLAS GOLDEN AGE SM-FINISZ

USE AND PROPERTIES

- for execution of finishing coats of drawn mouldings and for surface leveling and filling small gaps in the substrate
- recommended for finishing surface of cores executed with ATLAS GOLDEN AGE ZMP or ATLAS GOLDEN AGE ZMP-R mortars
- for application upon concrete and brick substrates and upon cement and lime plasters
- for indoor and outdoor application
- recommended coat thickness 3 – 10 mm
- contains special polypropylene fibres additionally reinforcing the coat and limiting the possibility of occurrence of cracks
- hydrophobic
- material developed specifically for the needs of renovation of heritage buildings – characterized by optimally combined resistance, physical and chemical properties
- manufactured in white colour

SUBSTRATE PREPARATION

The method of surface cleaning must be individually adjusted for each object, depending on strength and condition of the substrate material and its historic value. When filling gaps, the substrate must be sound, free from dust, dirt and other contamination. Hack off poorly bonded surface pieces and remove loose or weak parts with a steel brush. Before application of ATLAS GOLDEN AGE SM-FINISZ finishing coat, the cleaned surface must be damp but not wet. If reduction of substrate absorptiveness is necessary, application of ATLAS UNI-GRUNT priming emulsion is recommended.

APPLICATION

Pour the dry mix from the bag into a clean container with suitable amount of water (recommended ratio: 7.0 l/ 25 kg) and mix mechanically until homogenous, lump free and without separating liquid. The mortar is ready to use after approx. 5 minutes and remixing. Apply the mortar upon substrate with coat of even thickness and then shape in a continuous manner using a moulding profile. The open time (between application of the mortar and drawing the profile) depends on absorptivity of the substrate, ambient temperature and mortar consistency. In case of filling gaps, filling larger cavities first is recommended. Protect freshly applied coats from excessive drying.

REMARKS

- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with ATLAS SZOP agent.
- The shelf life of the product is 12 months from the production date shown on the packaging. The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets).
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.

TECHNICAL DATA

ATLAS GOLDEN AGE SM-FINISZ is factory made dry mix manufactured on the basis of high quality hydraulic binder, quartz fillers and additives.

Mixing ratio: water/dry mix	7 l/ 25 kg
Pot life	approx. 2 hours
Open time	approx. 15 minutes
Consumption	approx. 1.5 kg of mortar for 1 m^2
Mortar preparation and ambient temperature during work	from +5°C to +25°C
Packaging	paper bags 25 kg
Content of soluble chromium (VI) in ready-to-use mix	≤ 0.0002%

At the time of publication of this product data sheet all previous ones become void.
Date of update: 2013-09-16

USE AND PROPERTIES

- for making castings of architectural details and filling moulding forms
- finished elements can be installed indoors and outdoors
- mineral – based on hydraulic binder
- fine-aggregate - aggregate grain size up to 0.5 mm
- rich colour palette – 112 ready recipes, possibility of mortar dyeing with other colours, depending on individual needs - based on samples of the original material
- easy to use – consistency and working parameters enable fast and accurate form filling
- after setting, characterized by low absorptivity, high mechanical parameters and very good frost resistance
- material developed specifically for the needs of renovation of heritage buildings – characterized by optimally combined resistance, physical and chemical properties
- waterproof
- frost resistant

APPLICATION

Pour the dry mix from the bag into a clean container with suitable amount of water (recommended ratio 4.5 l/25 kg) and mix mechanically until homogenous, lump free and without separating liquid. Use low speed mixer in order to avoid excessive mortar aeration. The mortar is ready to use after approx. 5 minutes and remixing. Pour the prepared mortar slowly and carefully into previously prepared moulds protected with anti-adhesive agents. Demoulding of cast elements can take place not earlier than after approx. 24-48 hours, depending on the casting size. Time of demoulding depends to a significant degree on the ambient temperature and can extend in low temperature. Depending on needs and designed aesthetic effect, castings can be painted with ATLAS GOLDEN AGE S-02 silicate paint or ATLAS GOLDEN AGE N-02 silicone paint, or ATLAS GOLDEN AGE L glazing paint. Apart from painting, hydrophobization of the whole surface with ATLAS GOLDEN AGE SH compound can be executed as additional protection against weather conditions.

REMARKS

- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set adhesive can be removed with ATLAS SZOP agent.
- The shelf life of the product is 12 months from the production date shown on the packaging. The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets).
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.

TECHNICAL DATA

ATLAS GOLDEN AGE ZBM-05 is factory made dry mix manufactured on the basis of high quality hydraulic binder, fillers and improvers. Inorganic pigments resistant to alkali and UV radiation are used for mix dyeing.

Mixing ratio water/dry mix	4.5 l/25 kg
Pot life	approx. 2 hours
Open time	approx. 20 minutes
Consumption	approx. 1.6 kg of mortar for 1 dm^3
Total water absorption	up to 8%
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +30°C
Max. aggregate grain size	0.5 mm
Packaging	paper bags 25 kg
Content of soluble chromium (VI) in ready-to-use mix	≤ 0.0002%

At the time of publication of this product data sheet all previous ones become void.
Date of update: 2013-09-16

MORTAR FOR CASTINGS
ATLAS GOLDEN AGE ZBM-25

USE AND PROPERTIES

- for making castings of architectural details and filling moulding forms
- recommended for making large size castings
- finished elements can be installed indoors and outdoors
- mineral – based on hydraulic binder
- coarse-aggregate - aggregate grain size up to 2.5 mm
- standard setting time – demoulding possible after 24 hours
- rich colour palette – 112 ready recipes, possibility of mortar dyeing with other colours, depending on individual needs - based on samples of the original material
- easy to use – consistency and working parameters enable fast and accurate form filling
- after setting, characterized by low absorptivity, high mechanical parameters and very good frost resistance
- material developed specifically for the needs of renovation of heritage buildings – characterized by optimally combined resistance, physical and chemical properties
- waterproof
- frost resistant

APPLICATION

Pour the dry mix from the bag into a clean container with suitable amount of water (recommended ratio 4.5 l/25 kg) and mix mechanically until homogenous, lump free and without separating liquid. Use low speed mixer in order to avoid excessive mortar aeration. The mortar is ready to use after approx. 5 minutes and remixing. Pour the prepared mortar slowly and carefully into previously prepared moulds protected with anti-adhesive agents. Demoulding of cast elements can take place not earlier than after approx. 24-48 hours, depending on the casting size. Time of demoulding depends to a significant degree on the ambient temperature and can extend in low temperature. Depending on needs and designed aesthetic effect, castings can be painted with ATLAS GOLDEN AGE S-02 silicate paint or ATLAS GOLDEN AGE N-02 silicone paint, or ATLAS GOLDEN AGE L glazing paint. Apart from painting, hydrophobization of the whole surface with ATLAS GOLDEN AGE SH agent can be executed as additional protection against weather conditions.

REMARKS

- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set adhesive can be removed with ATLAS SZOP agent.
- The shelf life of the product is 12 months from the production date shown on the packaging. The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets).
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.

TECHNICAL DATA

ATLAS GOLDEN AGE ZBM-25 is factory made dry mix manufactured on the basis of high quality hydraulic binder, fillers and improvers. Inorganic pigments resistant to alkali and UV radiation are used for mix dyeing.

Mixing ratio water/dry mix	4.5 l/25 kg
Pot life	approx. 2 hours
Open time	approx. 20 minutes
Consumption	approx. 1.6 kg of mortar for 1 dm^3
Total water absorption	up to 8%
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +30°C
Max. aggregate grain size	2.5 mm
Packaging	paper bags 25 kg
Content of soluble chromium (VI) in ready-to-use mix	≤ 0.0002%

At the time of publication of this product data sheet all previous ones become void.
Date of update: 2013-09-16

USE AND PROPERTIES

- for making castings of architectural details and filling moulding forms
- recommended for making large size castings with fast demoulding possibility
- finished elements can be installed indoors and outdoors
- mineral – based on hydraulic binder
- coarse-aggregate - aggregate grain size up to 2.5 mm
- fast setting – possibility of demoulding already after 3 hours ensures quick progress of moulding works and economical rotation of forms
- rich colour palette – 112 ready recipes, possibility of mortar dyeing with other colours, depending on individual needs - based on samples of the original material
- easy to use – consistency and working parameters enable fast and accurate form filling
- after setting, characterized by low absorptivity, high mechanical parameters and very good frost resistance
- material developed specifically for the needs of renovation of heritage buildings – characterized by optimally combined resistance, physical and chemical properties
- waterproof
- frost resistant

APPLICATION

Pour the dry mix from the bag into a clean container with suitable amount of water (recommended ratio 4.5 l/25 kg) and mix mechanically until homogenous, lump free and without separating liquid. Use low speed mixer in order to avoid excessive mortar aeration. The mortar is ready to use after approx. 5 minutes and remixing. Pour the prepared mortar slowly and carefully into previously prepared moulds protected with anti-adhesive agents. Demoulding of cast elements can take place already after 3 hours. Time of demoulding depends to a significant degree on the ambient temperature and can extend in low temperature. Depending on needs and designed aesthetic effect, castings can be painted with ATLAS GOLDEN AGE S-02 silicate paint or ATLAS GOLDEN AGE N-02 silicone paint, or ATLAS GOLDEN AGE L glazing paint. Apart from painting, hydrophobization of the whole surface with ATLAS GOLDEN AGE SH agent can be executed as additional protection against weather conditions.

REMARKS

- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set adhesive can be removed with ATLAS SZOP agent.
- The shelf life of the product is 12 months from the production date shown on the packaging. The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets).
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.

TECHNICAL DATA

ATLAS GOLDEN AGE ZBM-25 R is factory made dry mix manufactured on the basis of high quality Portland cement, quartz fillers and improvers. Inorganic pigments resistant to alkali and UV radiation are used for mix dyeing.

Mixing ratio: water/dry mix	4.5 l/25 kg
Pot life	approx. 2 hours
Consumption	approx. 1.6 kg of mortar for 1 dm^3
Total water absorption	up to 8%
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +30°C
Max. aggregate grain size	2.5 mm
Packaging	paper bags 25 kg
Content of soluble chromium (VI) in ready-to-use mix	≤ 0.0002%

At the time of publication of this product data sheet all previous ones become void.
Date of update: 2013-09-16

primers, preparations, impregnators

SUBSTRATE STRENGTHENING | **SUBSTRATE PREPARATION** | **WALL RESTORATION SYSTEM** | **HYDROPHOBISATION**

SUBSTRATE STRENGTHENING | **SUBSTRATE PREPARATION** | **PLASTER RESTORATION SYSTEM** | **HYDROPHOBISATION**

SUBSTRATE STRENGTHENING | **SUBSTRATE PREPARATION** | **WALL RESTORATION SYSTEM** | **HYDROPHOBISATION**

REINFORCING AGENT
ATLAS GOLDEN AGE SW 100

USE AND PROPERTIES

- modern one-component agent for reinforcing typical construction substrates
- for impregnation of elements made of natural stone, brick and other construction materials degraded by time and weather
- general-purpose – can be used both for initial and structural impregnation
- does not act as hydrophobic agent, therefore treated surface can still be cleaned and repaired with mineral mortars
- does not seal the material pores and does not limit its water vapour permeability
- characterized by medium degree of precipitated gel content, at the level of 10% - recommended for reinforcement of well preserved or hardly absorbable substrates
- high penetration ability – penetrates deep into the structure of weakened substrate and reinforces it uniformly
- resistant to alkali and weather conditions, e.g. acid rains
- one-component – easy to use

SUBSTRATE PREPARATION

The method of surface cleaning must be individually adjusted for each object, depending on strength and condition of the substrate material and its historic value. The substrate must be cleaned from dust, dirt, patina, efflorescence, loose and crumbling pieces and residues of grease, oils and biological contamination. Patina and other permanent pollution of the substrate surface weaken the agent action, as they limit its absorption. In case of very poor or weathered substrate, application of ATLAS GOLDEN AGE SW 300 is recommended.

APPLICATION

ATLAS GOLDEN AGE SW 100 is manufactured as a ready to use product. It must not be mixed with other materials, diluted or thickened. The agent is applied similarly to paints, once or twice, depending on the substrate type and absorptiveness. Special care should be taken to ensure uniform spreading of the agent upon treated substrate. The second coat can be applied when the first one has dries fully (after approx. 6 hours). Freshly impregnated surfaces should be protected from precipitation for a few days more.

REMARKS

- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
- The tools must be cleaned with clean water directly after use.
- The shelf life of the product is 24 months from the production date shown on the packaging. The agent must be stored in original, tightly sealed containers in dry conditions, temperature between +5°C to +20°C, away from open fire sources. Protect against overheating. Limit the contact of open container with air to necessary minimum.
- Highly flammable product. Irritates eyes, airways and skin. Possible harmful effect upon child in mother's womb (Rep. cat. 3). Harmful, can damage lungs on ingestion. Vapors can cause sleepiness and dizziness. Harmful when inhaled, creates serious hazard to health in result of long time exposure. Harmful to water organisms; can cause long lasting adverse changes in water environment. Harmful. Contains TEOS and toluene. Keep out of reach of children. Do not inhale vapors or aerosol. Wear appropriate protective clothing and protective gloves. Do not discharge into sewer system and dispose of the product and the packaging in a safe way. Avoid discharges into environment. Follow the instructions of the Safety Data Sheet. In case of ingestion do not induce vomiting, immediately seek doctor's advice and show the packaging or label.

TECHNICAL DATA

ATLAS GOLDEN AGE SW 100 reinforcement compound is manufactured from silicone resin and organic solvent.

Density	1.0 g/cm^3
Precipitated gel content	10%
Consumption	approx. 0.1 – 0.3. l of agent for 1 m^2
Active agent content	25%
Substrate and ambient temperature during work	from +5°C to +20°C
Packaging	steel drums 1 kg, 5 kg

At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-04-11

REINFORCING AGENT
ATLAS GOLDEN AGE SW 300

USE AND PROPERTIES

- modern one-component agent for reinforcing typical construction substrates
- for impregnation of elements made of natural stone, brick and other construction materials degraded by time and weather
- general-purpose – can be used both for initial and structural impregnation
- does not act as hydrophobic agent, therefore treated surface can still be cleaned and repaired with mineral mortars
- does not seal material pores and does not limit its water vapour permeability
- characterized by high degree of precipitated gel content, at the level of 30% - results in significant improvement of durability of impregnated substrates, recommended for reinforcement of very weak substrates
- high penetration ability – penetrates deep into the structure of weakened substrate and reinforces it uniformly
- resistant to alkali and weather conditions, e.g. acid rains
- one-component – easy to use

SUBSTRATE PREPARATION

The method of surface cleaning must be individually adjusted for each object, depending on strength and condition of the substrate material and its historic value. The substrate must be cleaned from dust, dirt, patina, efflorescence, loose and crumbling pieces and residues of grease, oils and biological contamination. Patina and other permanent pollution of the substrate surface weaken the agent action, as they limit its absorption. In case of very poor or weathered substrate, initial impregnation with ATLAS GOLDEN AGE SW 300 is recommended, than cleaning and final proper reinforcing then.

APPLICATION

ATLAS GOLDEN AGE SW 300 is manufactured as a ready to use product. It must not be mixed with other materials, diluted or thickened. The agent is applied similarly to paints, once or twice, depending on substrate type and absorptiveness. Special care should be taken to ensure uniform spreading of the agent upon treated substrate. The second coat can be applied when the first one has dries fully (after approx. 6 hours). Freshly impregnated surfaces should be protected from precipitation for a few days more.

REMARKS

- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
- The tools must be cleaned with clean water directly after use.
- The shelf life of the product is 24 months from the production date shown on the packaging. The agent must be stored in original, tightly sealed containers in dry conditions, temperature between +5°C to +20°C, away from open fire sources. Protect against overheating. Limit the contact of open container with the air to the necessary minimum.
- Flammable product. Irritates skin. Harmful when inhaled, creates serious hazard to health in result of long time exposure. Harmful to water organisms; can cause long lasting adverse changes in water environment. Possible harmful effect upon child in mother's womb (Rep. cat. 3). Harmful, can damage lungs on ingestion. Vapors can cause sleepiness and dizziness. Harmful. Contains TEOS and toluene. Keep out of the reach of children. do not inhale vapors or aerosol. Wear appropriate protective clothing and protective gloves. Do not discharge into sewer system and dispose of the product and the packaging in a safe way. Avoid discharges into environment. Follow the instructions of the Safety Data Sheet. In case of ingestion do not induce vomiting, immediately seek doctor's advice and show the packaging or label.

TECHNICAL DATA

ATLAS GOLDEN AGE SW 300 reinforcement compound is manufactured from silicone resin and organic solvent.

Density	1.0 g/cm^3
Precipitated gel content	30%
Consumption	approx. 0.1 – 0.3. l of agent for 1m^2
Active agent content	75%
Substrate and ambient temperature during work	from +5°C to +20°C
Packaging	steel drums 1 kg, 5 kg

At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-04-11

USE AND PROPERTIES

- for priming substrates before the application of ATLAS GOLDEN AGE plasters
- forms rough coat strongly bonded to substrate – improves bonding of the subsequent layers
- forms chemical barrier protecting the substrate from the subsequent coat influence – limits their reciprocal influence
- vapour permeable
- manufactured in white colour

SUBSTRATE PREPARATION

The method of surface cleaning must be individually adjusted for each object, depending on strength and condition of the substrate material and its historic value. The substrate should be cleaned of dust, dirt, patina, loose and dusty elements and residues of grease, oils and wax.

APPLICATION

The agent is manufactured as a ready to use product. It must not be mixed with other materials, diluted or thickened. Mix the mass in packaging before application. Apply with uniform coat, with a roller or a paintbrush. Further works may begin when agent dries, not earlier than 4 – 6 hours since application.

REMARKS

- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to building principles and OHS regulations.
- The tools must be cleaned with clean water directly after use.
- The shelf life of the product is 12 months from the production date shown on the packaging. The agent must be transported and stored in tightly sealed buckets, in dry conditions, in positive temperature. Protect against overheating.
- Follow the instructions of the Safety Data Sheet..

TECHNICAL DATA

ATLAS GOLDEN AGE DPG is an one-component agent manufactured on the basis of acrylic resins with addition of quartz aggregate.

Product density	approx. 1.5 g/cm^2
Bonding to substrate	> 1.00 N / mm^2
Consumption	approx. 0.3 kg / 1 m^2
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Further work after priming	after approx. 6 hours
Packaging	plastic buckets 5 kg, 25 kg

At the time of publication of this product data sheet all previous ones become void.
Date of update: 2012-06-19

SILICONE HYDROPHOBIC AGENT ATLAS GOLDEN AGE SH

USE AND PROPERTIES

- hydrophobization and protection against adverse environment action of absorptive stone materials and other typical construction substrates, e.g. ceramic and silicate brick, aerated concrete, concrete, paving blocks and cement tiles
- after solvent evaporation, the active agent reacts with air components and with water kept in material pores, therefore reduces the surface absorptiveness
- high penetration ability – due to low viscosity and-small molecule structure, substrate deeply and ensures optimum hydrophobization of the surface
- durable and resistant to alkali, therefore the impregnation treatment does not have to be repeated periodically
- does not deteriorate properties of protected materials in terms of gas and water vapor diffusion, keeps pores open

SUBSTRATE PREPARATION

The method of surface cleaning must be individually adjusted for each object, depending on strength and condition of the substrate material and its historic value. Before impregnation, the substrate must be cleaned from dust, dirt, patina, efflorescence, loose and crumbling pieces and residues of grease, oils and wax. Any holes in the substrate should be repaired prior to hydrophobic treatment. Note! ATLAS GOLDEN AGE SH must not be used on substrates affected with salt corrosion, as it may intensify the process.

APPLICATION

ATLAS GOLDEN AGE SH is manufactured as a ready to use product. It must not be mixed with other materials, diluted or thickened. The agent is applied similarly to paints, once or twice, depending on substrate type and absorptiveness. Special care should be taken to ensure uniform spreading of the agent upon treated substrate. The second coat can be applied when the first one has dries fully (after approx. 6 hours). Freshly impregnated surfaces should be protected from precipitation for a few days more. Note! Do not use on substrates containing polystyrene or other building materials not resistant to organic solvents (e.g. expansion joint sealants, latex materials) at the depth of penetration of agent.

REMARKS

- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
- The tools must be cleaned with clean water directly after use.
- The shelf life of the product is 12 months from the production date shown on the packaging. The product must be stored and transported in original, tightly sealed containers in dry conditions and positive temperatures between +5°C and +20°C. Protect against overheating. During storage observe OHS regulations like for solvent-based paints and keep storage conditions like for flammable materials. Limit the contact of open container with air to necessary minimum.
- Contains trimethoxy(ethyl)silane. Flammable liquid and vapour. May be fatal if swallowed and enters airways. May cause an allergic skin reaction. Repeated exposure may cause skin dryness or cracking. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid breathing spray. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN: Wash with plenty of water. IF SWALLOWED: Immediately call a POISON CENTER/doctor. Store in a well ventilated place. Keep container tightly closed. Follow the instructions of the Safety Data Sheet.

TECHNICAL DATA

ATLAS GOLDEN AGE SH is an one-component solution of silicone dispersion in organic solvent.

Density	0.8 g/cm^3
Flash-point	59 °C
Consumption, depending on substrate type and absorptiveness.	approx. 0.1-0.3 l of agent for 1 m^2
Substrate and ambient temperature during work	from +5°C to +20°C
Packaging	steel containers 5 kg, cans 1 kg

At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-02-11

HYDROPHOBIC PREPARATION ATLAS GOLDEN AGE WH

USE AND PROPERTIES

- water, hydrophobic impregnant based on oxosilanes
- for protection against water action of mineral, porous construction substrates – stone elements (e.g. sandstone), face bricks (ceramic and silicate), aerated concrete, concrete, setts, cement slabs
- can be used for hydrophobization of mineral renders used in external thermal insulation
- limits the substrate absorptiveness – protects against rainwater and structural penetration of harmful chemicals diluted in water
- improves resistance of impregnated surface to soiling, efflorescence and biological corrosion
- resistant to alkalis – can be used for protection of fresh renovation plasters, new joints and face walls after cavities re - profiling.
- durable – resistant to UV radiation
- solvent – free – safe for impregnated substrate, does not cause substrate discoloration
- characterized by neutral odour – can be used indoors
- does not deteriorate properties of protected materials in terms of gas and water vapor diffusion, keeps pores open

RANGE OF USE

- impregnation of face walls made of brick or stone, after previous conservatory actions and filling cavities in joints and wall elements with the use of Atlas Golden Age system mortars
- protection against water action of façades coated with renovation finishing coats, including renovation plasters Atlas Golden Age
- external wall insulation, executed with the use of polystyrene or mineral wool boards, where the finishing coat is made of mineral renders
- hydrophobization of facings and stone tiles, installed upon walls and floors
- hydrophobization of stone sculptures and architectonic decors subject to direct atmospheric factors action
- protection against water action of mouldings made of moulding mortars Atlas Golden Age and installed upon façades
- hydrophobization of existing mineral paint coats
- impregnation of contemporary and heritage ceramic roofing tiles
- for indoor and outdoor use

SUBSTRATE PREPARATION

The method of substrate cleaning must be individually adjusted for each object, depending on strength and condition of the substrate material and its historic value. Before impregnation, the substrate must be cleaned from dust, dirt, patina, efflorescence, loose and crumbling pieces and residues of grease, oils and wax. Substrate should by dry, it can be also slightly wet. In case of biological contamination clean the surface with ATLAS MYKOS. It is recommended to protect against possible soiling all any neighbouring surfaces against possible soiling – woodwork, glass, plants, etc. Note! Hydrophobization should not be executed on surfaces of high salinity level as it may lead to intensification of construction salts crystallization process and substrate material deterioration .

APPLICATION

ATLAS GOLDEN AGE WH is manufactured as a ready to use product. It must not be mixed with other materials, diluted or thickened. The preparation is applied similarly to paints, with a soft brush, upon larger surfaces it can be applied by spraying with nozzle assuring oblate liquid stream. In both cases one should provide plentiful and even preparation spreading upon whole surface until full substrate saturation. When applied appropriately, the preparation coming down the surface forms damp patches up to 50 cm long. Repeat the action several times, depending on properties and porosity of the treated substrate, use the wet on wet method. During work and directly after, the freshly impregnated surfaces should be protected against direct sunshine and precipitation (min. 5 hours).

- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
- The tools must be cleaned with clean water directly after use.
- The shelf life of the product is 12 months from the production date shown on the packaging. The product must be stored and transported in original, tightly sealed containers in dry conditions and positive temperature. Protect against overheating.
- Keep out of reach of children.
- Priming paint of setting properties ATLAS GOLDEN AGE WH, maximum content of VOC in the product 29.9 g/l, maximum allowable content of VOC 30 g/l

ATLAS GOLDEN AGE WH is an one-component preparation based on oxosilanes.

Density	approx. 1.0 kg/dm^3
Active ingredient content	approx. 10% by weight
pH	7
Colour	milky white, transparent after drying
Consumption depending on substrate type and absorptiveness.	approx. 0.5 – 1.5 kg for 1m^2
Temperature of use	from +10°C to +25°C
Packaging	Plastic containers 5 kg, 30 kg

At the time of publication of this product data sheet all previous ones become void.
Date of update: 2015-10-07

SILICATE STRENGTHENING PREPARATION KPW

USE AND PROPERTIES

- one – component preparation for strengthening typical building substrates
- can be used for surface as well as structural strengthening
- for impregnation of old, weathered and weakened by atmospheric factors elements, made of absorptive materials
- characterized by very good penetration abilities – penetrates the substrate deeply and fills the pores, does not migrate to surface pores during the solvent (water) evaporation
- does not cause hydrophobic action, this way after strengthening the substrate, cleaning and filling the defects with mineral mortars can be continued
- limits and unifies the substrate absorption of the whole surface
- can be used as an additive accelerating the binding of cement – based mortars used, e.g. for water leakage blocking
- transparent – does not cause discolouration of the impregnated substrate
- for indoor and outdoor use

RANGE OF USE

- surface substrate strengthening allowing further refurbishment works, including defects treatment and filling
- tructural strengthening, improving the mechanical substrate properties and increasing its resistance to external factors
- for preparation of fast – setting cement – based mortars, used for blocking active water leakages, e.g. in reconstruction of vertical and horizontal building insulations

SUBSTRATE PREPARATION

The method of substrate preparation should be individually adjusted for each object, depending on the strength and condition of the substrate material and its historic value. The substrate should be stable, cleaned of dust, dirt, wax and grease. Layers of poor adhesion and old paint coats should be removed. In case of structural impregnation, it is extremely important to fill any cracks, cavities and empty spaces in a wall with a cement – based mortar, e.g. RENOVATION BASE COAT PLASTER TRP. Do not use the preparation on saline and gypsum substrates.

APPLICATION

Surface strengthening (pressure – less method). Wet the substrate abundantly with water until matt – wet state, without leaving puddles, best ca. 24 hours before the planned strengthening action. Apply the undiluted preparation with a brush or sprayer, until sated. Repeat the action several times, apply each new coat onto the substrate still wet after the previous application.

Structural strengthening (pressure method). Drill in the substrate holes of diameter from 18 up to 30 mm (depending on the wall thickness), with spacing 20 – 30 cm. Wet the substrate with water directly before the preparation application. Place the injectors in the holes and start injecting the preparation with pressure of min. 3 bars (walls of thickness up to 50 cm) or min. 10 bars (walls of thickness above 50 cm).

The preparation effectiveness and the strengthening result depend on the substrate type, and, in case of structural strengthening, on its structure and wall construction as well.

Acceleration of setting of cement – based mortars. The preparation accelerates the setting of cement – based mortars, it should be used for preparation of mortars made of Portland cement and sand (proportions 1:2) designed for quick blocking of water leakages. Depending on the expected setting time the preparation should be used undiluted or diluted with water in ratio 1:1. The place of planned blocking should be properly prepared, cracks and scores should be mechanically widened and cleaned. Apply the prepared mass directly into the blocking site. If needed, the "burn - through" action can be executed – wet the blocking site with SILICATE STRENGTHENING PREPARATION KPW and sprinkle with Portland cement until the cement stands uniformly light.

REMARKS

- The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.
- The tools must be cleaned with clean water directly after use.
- The shelf life of the product is 12 months from the production date shown on the packaging. The product must be transported and stored in tightly sealed, original packages, in dry conditions and positive temperature. Avoid overheating.
- Keep out of the reach of children. Avoid contact with skin. Avoid contact with eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

TECHNICAL DATA

ATLAS ZŁOTY WIEK KPW is an aqueous solution of potassium silicate.

Density	ca. 1.15 – 1.20 g/cm³
Substrate strengthening (depending on substrate material, its humidity and external conditions)	up to 60% (4.0 – 8.0 N/mm²)
pH	12
Colour	transparent
Viscosity (measurement with Ford cup)	Φ 2 – 48 seconds Φ 4 – 11 seconds Φ 6 – 6 seconds
Consumption (depending on the use type)	0.5 – 1.0 kg/m² (pressure – less method) 30 – 50 kg/m³ (pressure method) 0.2 – 0.4 kg for 1 kg of Portland cement (setting acceleration)
Substrate and ambient temperature during work and drying	from +5°C to +25°C
Available packaging	containers 5 l, 10 l

At the time of publication of this product data sheet all previous ones become void.
Date of update: 2014-02-12

European Technical Assessment
ETA 06/0081
ATLAS Thermal Insulation Composite System
with Rendering

European Technical Approval
ETA 07/0316
ATLAS XPS Thermal Insulation Composite System
with Rendering

European Technical Assessment
ETA 06/0173
ATLAS ROKER Thermal Insulation Composite System
with Rendering

Irish Agrément Board Certificate
10/0347
for Atlas/Aval EPS, ATLAS/AVAL ROKER
and ATLAS XPS External Wall Insulation Systems

British Board of Agrément Certificate
13/5018
for Atlas/Aval EPS and ATLAS/
AVAL ROKER External Wall Insulation Systems

The products of PlasterRestoration System - ATLAS GOLDEN AGE have passed the qualifying examination of WTA (Wissenschaftlich-Technische Arbeitsgemeinschaft für Bauwerkserhaltung und Denkmalpflege e.V.- Scientific and Technical Association for Building, Preservation and Conservation) and thus meets the criteria of the WTA data sheet: 2-9-04.

Quality, Environmental, Occupational Health and Safety Management System Certificate
awarded by IQNet.

Quality Management System Certificate
awarded by DQS GmbH

Environmental Management System Certificate
awarded by DQS GmbH.

Occupational Health and Safety Management System Certificate
awarded by DQS GmbH.

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