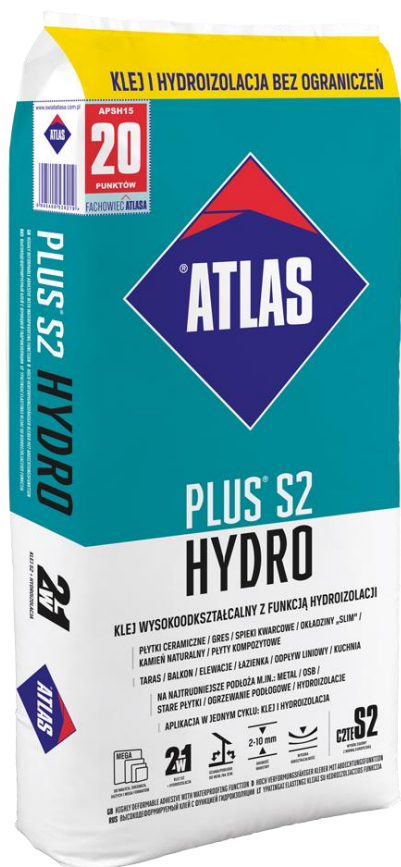




ATLAS PLUS S2 HYDRO

highly deformable adhesive
with waterproofing function

- 1 product - a complete solution:
2 in 1 - S2 class adhesive and waterproofing
- application in one cycle: waterproofing and adhesive
- ceramic tiles, porcelain tiles, quartz sintered "slim" cladding, natural stone, composite panels
- terraces, balconies, facades, bathrooms, kitchens, linear drains
- for the most difficult substrates such as: metal, OSB, old tiles, underfloor heating, waterproofing
- Bridging of cracks up to 0.8 mm
- Installation of terrace profiles and sealing strips possible



FOR INTERIOR
AND EXTERIOR USE
WALL/FLOOR



LAYER
THICKNESS
2-10 mm



HIGH
DEFORMABILITY

Adhesive and waterproofing in one - without limits

ATLAS PLUS S2 HYDRO can be applied in three variants:

- as a tile adhesive,
- simultaneously as a waterproofing and adhesive,
- as light, medium and heavy duty waterproofing - watertight up to 15 metres water column.

The formulation of ATLAS PLUS S2 HYDRO adhesive uses:

- POLYMER TECHNOLOGY,
- DOUBLE-FIBRE TECHNOLOGY,
- ELASTOMER FILLER TECHNOLOGY.

Thanks to its high content of polymer compounds, fibres and modified rubber fillers, this adhesive achieves unique properties, making it a product with the highest technical and performance characteristics, guaranteeing durability for many years.

Polymer technology

The presence of polymers ensures high adhesion of all types of cladding to any substrate, including so-called difficult and critical substrates. Thanks to the combination and interpenetration of the polymer network with the network of inorganic hydration bonds of the cement, the adhesive achieves exceptional performance.

The use of polymer technology in ATLAS PLUS S2 HYDRO offers the following benefits:

- durable and strong bonding of the cladding to difficult and non-absorbent substrates,
- can be used on substrates subject to high deformation and vibration,
- high resistance to extreme operating loads - mechanical and thermal,
- excellent adhesion to all types of cladding,
- safe to use for all tile formats, including tiles with a surface area of more than 5 m²,
- excellent working parameters and rheology.

Double-fibre technology

ATLAS DOUBLE-FIBRE TECHNOLOGY is based on a mixture of polypropylene and cellulose fibres. The polypropylene fibres used in the DOUBLE-FIBRE TECHNOLOGY are a material with very high chemical resistance to acids, alkalis and solvents or salts. They are hydrophobic, practically non-absorbent and therefore resistant to microbial infestation. The fibres improve the mechanical properties of the mortar by creating a dispersed reinforcement in the mortar structure.

Cellulose fibres become elastic and malleable under the influence of water. They increase their volume and allow the free transport of water along the fibres, thus they have a significant effect on the working properties of the mortar - they improve the rheology of the mortar, limit its flow, extend the open time and increase the wettability of the substrate. The cellulose fibres prevent the substrate from drawing water away too quickly, which is why after setting ATLAS PLUS S2 HYDRO achieves the best technical parameters such as adhesion to the substrate or strength.

The DOUBLE-FIBRE TECHNOLOGY in ATLAS PLUS S2 HYDRO provides the following benefits:

- increase in strength parameters,
- a significant increase in resistance to high operating loads and impact loads and vibrations,
- installation safety in the event of large temperature differences,
- compensation of stresses arising on deforming substrates,
- improving water retention:
 - in the adhesive mortar - the fibres reduce the effects of rapid water extraction both at the interface with the absorbent substrate and with the absorbent tile,
 - in the evaporation zone - during the setting and drying of the adhesive mortar (especially when applied in the maximum thickness), the fibres accumulate and transport water, keeping its level uniform throughout the layer,
- reducing the 'pulling in' effect of the plate,
- significant improvement in performance,
- increasing the stability of the tiles immediately after they are fixed to the substrate.

Elastomer filler technology

The ELASTOMER FILLER TECHNOLOGY in ATLAS PLUS S2 HYDRO offers the following benefits:

- quick and easy application,
- excellent working parameters and rheology,
- high deformability,
- can be used on substrates subjected to high operating loads - mechanical and thermal - deformation and vibration,
- compensation of thermal stresses even on large-format tiles laid on terraces and facades,
- safe to use for all tile formats, including tiles with a surface area of more than 5 m²,
- excellent working parameters and rheology.

Properties

ATLAS PLUS S2 HYDRO is produced as a dry mixture of the highest quality cement binder, aggregates and specially selected modifying agents.

It is highly elastic - high deformability of S2 class (test according to EN 12002) - can be used on substrates made with floor and wall heating systems and other surfaces subject to deformation.

It has three times the initial grip.

The adhesive layer thickness range (2-10 mm) allows:

- thin-bedding of cladding on an even substrate,
- thin-bedding of coverings on uneven substrates, preceded by levelling mudding.

Extended open time - allows the adhesive to be applied to the tile for up to 30 minutes after it is applied to the substrate - can be applied to a larger area at a time and thus significantly reduces working time.

Reduced run-off - allows tiles to be fixed 'from above' - the correct consistency and layer thickness eliminate adhesive run-off. This makes it possible to start work from the top of the wall and avoid gluing cut tiles on its exposed surface.

Versatility of use - the adhesive is dedicated to practically all types of coverings, irrespective of the size of the tiles (even above 5 m²), on all, even the most difficult substrates, in various types of facilities, even under very high loads of the covering (for details, see the paragraph **Intended use**)

Static puncture resistance, as determined by the water resistance of the coating, MPa, after sequential loading:	no leakage under pressure
5 kg	0,5
10 kg	0,5
15 kg	0,5
20 kg	0,5

Watertightness - at a pressure of 15 m water column (with a minimum layer thickness of 3 mm.)

Installation of terrace profiles and sealing strips possible.

Resistance to crack formation in the substrate - thanks to its high polymer dispersion content, the adhesive mortar bridges cracks up to 0.8 mm wide.

Provides a coating seal - forms a coating resistant to pressurised water penetration (necessary protection against mechanical damage by means of e.g. ceramic cladding).

It can be used directly under ceramic tiling without the need to over-build the subfloor - it replaces membranes and traditional membranes on which an additional layer was required before the tiles could be bonded.

Free of volatile substances, it can be used indoors without restrictions.

Seamless insulation - the product allows a continuous coating to be achieved, without the need for overlaps and special joints, as is the case with roll materials.

Convenient and easy to apply - it is easily applied to plasterboard, OSB as well as cement or gypsum plaster, metal elements and PVC.

Allows easy control of the thickness of the layer to be applied - using a steel trowel of the indicated size.

It sets without shrinkage - linear shrinkage is kept to a minimum, no shrinkage microcracks appear during drying while maintaining the recommended thickness of the adhesive mortar layer.

Purpose

TYPES OF TILES TO BE FIXED	
glazed tiles	+
terracotta	+
porcelain tiles	+
laminated tiles	+
natural stone cladding (granite, marble, travertine, syenite, slate, etc.).	perform an application test*
clinker	+
stoneware	+
ceramic mosaic	+
glass mosaic	perform an application test*
glass plates, coloured, printed, etc.	perform an application test* and check the tile manufacturer's recommendations
concrete / cement mortar tiles	+
composite panels	+
insulation and soundproofing panels	+

*for a description of the application test, see paragraph Important additional information

FORMATS OF THE ELEMENTS TO BE FIXED	
all tile formats, even over 5 m²	+
slim discs	+

TYPES OF FACILITIES	
housing construction	+
public, educational, office and healthcare buildings	+
commercial and service construction	+
religious buildings	+
industrial buildings and multi-storey garages	+
industrial warehouses	+
traffic construction	+
SPA facilities	+

PLACE OF INSTALLATION OF TILES OR WATERPROOFING	
low-traffic areas	+
medium traffic areas	+
high traffic areas	+
kitchen, bathroom, laundry room, garage (in individual housing)	+
terraces	+
balconies, loggias	+
external panel staircase	+
external beam stairs, e.g. cantilever stairs	+
traffic routes	+
facades (including on thermal insulation systems)	+
cladding of building plinths	+
process tanks, swimming pools, fountains, jacuzzis, balneotechnology (without aggressive chemicals)	+
showers, washing facilities, rooms washed with large quantities of water	+

TYPE OF SUBSTRATE* - standard	
cement floors and screeds	+
anhydrite primers	+
cement and cement-lime plasters	+
gypsum plastering in dry areas of rooms	+
gypsum plastering in damp and wet areas of rooms	+
cellular concrete walls	+
brick or silicate block walls	+
brick or hollow brick walls	+
gypsum block masonry	+

*For more detailed information on substrate preparation, please refer to the table at the end of this technical data sheet.

ATLAS PLUS S2 HYDRO adhesive can also be used for:

- fixing to the substrate of plastic sheets intended for installation of underfloor heating (if the manufacturer's instructions of the heating system require such fixing),
- filling grooves between heating elements in boards covered with aluminium foil (the substrate should be previously primed with ATLAS ULTRAGRUNT).

TYPE OF SUBSTRATE - difficult	
concrete	+
terrazzo	+
mineral, dispersion and reactive sealing coatings	+
dry gypsum board underlays	+
subfloors (cement or anhydrite) with embedded heating, either water-based or electric	+
screeds with embedded heating mats	+
plaster with concealed heating	+
gypsum boards	+
gypsum fibre boards	+
cement fibre boards	+
existing ceramic or stone cladding (tile on tile)	+
resin varnishes for concrete bound with the substrate	+
dispersion oil-bound coatings	+
plank floors (thickness >25mm)	+
wood-based flooring panels, minimum 22 mm thick, fixed with ATLAS M-System fasteners	+
OSB/3, OSB/4 and particle board on the floor (thickness > 25 mm)	+
OSB/3, OSB/4 and particle board on the wall (thickness > 18 mm)	+
metal and steel surfaces	+
plastic surfaces	+

*For more detailed information on substrate preparation, please refer to the table at the end of this technical data sheet.

Technical data

Use as:	min/max. adhesive thickness	Waterproofing type
only bonding of tiles (consumption depending on format and bonding method)	min. 2 mm max. 10 mm	has no waterproofing function
waterproofing only	2 mm/ 3mm max. 10 mm	medium/heavy type
tiling and waterproofing: carrying out the work in two stages - waterproofing and adhesive in two layers (full fill)	waterproofing: min. 2 mm + adhesive thickness max. 10 mm	heavy type, >15 m water column
tiling and waterproofing: carrying out the work in one stage - waterproofing and adhesive (full fill)	min. 5 mm max. 10 mm	heavy type, >15 m water column

Bulk density	approx. 1.1 g/cm ³
Mixing ratio (water/dry mix): - waterproofing + tiling - tiling	5.55 ÷ 6.15 l / 15 kg 5.10 ÷ 5.55 l / 15 kg
Temperature of the adhesive preparation and of the substrate and surroundings during the work	from +5 °C to +25 °C
Temperature range of the substrate and bonded cladding during use	from -30 to +90 °C
Maturation time	approx. 5 minutes
Pot life (stand-by time)*	approx. 2 hours
Open operating time*	min. 30 minutes
Adjustability*	approx. 10 minutes
Grouting of floor coverings*	after approx. 24 hours
Grouting of wall cladding*	after approx. 16 hours
Stepping on the floor*	after approx. 24 hours
Resistance of waterproofing to rain	after approx. 24 hours
Full operational loads - pedestrian traffic*	after 3 days
Full operational loads - wheeled traffic*	after 14 days
Full load under water - pool / tank*	after 14 days

*The times shown in the table are recommended for application conditions of approx. 23 °C and 55 % humidity.

** see paragraph Cadding application

Technical requirements

The product complies with the requirements:

- EN 12004+A1:2012 - Cementitious adhesive with increased performance, reduced run-off, extended open time and high deformability C2TE S2 for indoor and outdoor use on both walls and floors;
- PN-EN 14891:2012 - polymer-modified cementitious water-repellent liquid applied product, resistant to chlorinated water (CM P), for outdoor use and swimming pools under ceramic tiles fixed with adhesives.

ATLAS PLUS S2 HYDRO Declaration of performance No. 228/CPR	
EN 12004:2007+A1:2012	
Intended use: all internal and external tiling	
Reaction to fire	B-s1, d0 B-s1 _{fl}
Joint strength expressed as initial adhesion	≥ 1.0 N/mm ²
Durability of the joint under conditioning/thermal ageing conditions expressed as adhesion after thermal ageing	≥ 1.0 N/mm ²
Durability of the joint under exposure to water/moisture expressed as adhesion after immersion in water	≥ 1.0 N/mm ²
Freeze-thaw durability of the joint expressed as adhesion after freeze-thaw cycles	≥ 1.0 N/mm ²
EN 14891:2012	
Intended use: all applications under ceramic tiles fixed outside and in swimming pools	
Initial grip	≥ 0.5 N/mm ²
Crack-bridging capacity under standardised conditions	≥ 0.75 mm
Durability of initial adhesion against climatic/thermal effects: • adhesion after thermal ageing	≥ 0.5 N/mm ²
Initial adhesion strength on exposure to water/moisture: • adhesion after water exposure	≥ 0.5 N/mm ²
Initial adhesion strength on exposure to lime water • adhesion after exposure to lime water	≥ 0.5 N/mm ²
Initial adhesion strength on exposure to freeze-thaw cycles: • adhesion after freeze-thaw cycles	≥ 0.5 N/mm ²

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Adhesion to substrate, MPa: - concrete - of ceramic bricks - of cement-lime mortar - of gypsum plasterboard	≥ 0,8 ≥ 0,8 ≥ 0,8 ≥ 0,5
Interlayer adhesion 1), MPa	≥ 0,8
Watertightness of the coating, no leakage at coating pressure, MPa	0,5
Resistance to high-temperature water (+60° C), determined by the adhesion of the coating to the substrate, MPa	≥ 0,5
Water vapour permeability, defined by the thickness of the air layer S _d , whose diffusion resistance is equivalent to the average diffusion resistance of the coating in relation to water vapour, μ	≤ 1
Maximum tensile stress, MPa	≥ 5
Relative elongation at maximum stress, %.	≥ 1,5

Substrate preparation

The substrate should be:

stable - sufficiently load-bearing, resistant to deformation, free of substances that reduce adhesion and seasoned.

even - maximum adhesive thickness is 10 mm, for levelling the substrate in case of larger irregularities use e.g:

- ATLAS ZW 330 levelling mortar,
- ATLAS SMS, MMS, SAM or POSTAR screeds,

cleaned - from layers that could weaken the adhesion of the adhesive, especially dust, dirt, lime, oil, grease, wax, oil and emulsion paint residues; substrates with visible biological infestation (mould decay fungi, algae) should be cleaned and protected with a preparation, e.g:

- ATLAS MYKOS PLUS.

Priming the substrate

The substrate prepared for application of ATLAS PLUS S2 HYDRO requires:

wetting with water to a dull-moist state - applies to absorptive cement substrates such as: traditional plasters, cement bases

priming with:

- ATLAS GRUNT NKP (ready to use - without dilution),
- ATLAS UNI-GRUNT,
- ATLAS UNI-GRUNT ULTRA,

applies to gypsum substrates, masonry made of silicate elements, ceramic, cellular concrete, expanded concrete,

ATLAS ULTRAGRUNT - applies to substrates with low absorption capacity (e.g. terrazzo, monolithic concrete) and on so-called critical substrates (e.g. bare OSB boards, old tiles, metal or plastic substrates)

Attention. In the case of large-surface slabs (over 1 m²) or board-type tiles (side length over 1.5 m), anhydrite substrates must be considered as critical substrates. In this case, priming with ATLAS EPO-S and a quartz sand bed of grain size e.g. 0.4-0.8 mm is required.

Detailed information on substrate preparation can be found in the table at the end of this technical data sheet.

Waterproofing and cladding application

Preparation of the adhesive

Pour the contents of the bag into a vessel with a measured amount of water (proportions given in the Technical Data) and mix with a slow-speed mixer with a mortar mixer until a uniform consistency is obtained. The mixed adhesive should be set aside for 5 minutes and mixed again. The adhesive thus prepared should be used within approximately 2 hours.

Waterproofing and tile bonding in a single process cycle.

STEP 1 - Installation of ATLAS HYDROBAND 3G. In the place of installing the accessories, make a bonding layer by rubbing ATLAS PLUS S2 HYDRO adhesive into the substrate with a sharp edge of a trowel or a skimming brush. Then apply the adhesive with a steel trowel with tooth size 4. The accessories should be embedded in the freshly applied adhesive. The overlap of the tapes should be greater than 5 cm. Squeeze out excess adhesive with the sharp edge of the trowel. The tapes must not be wrinkled after laying.

STEP 2 - Installation of ATLAS drip profiles. Carry out the assembly in accordance with the recommendations of the Technical Data Sheet of the profiles, using ATLAS PLUS S2 HYDRO adhesive.

STEP 3 - Moisten the substrate with water to a dull wet state. Apply a bonding layer on the whole surface by rubbing ATLAS PLUS S2 HYDRO adhesive with a sharp edge of a trowel. Then apply the adhesive with a steel float with teeth size 10 and smooth the surface.

STEP 4 - Apply the adhesive to the underside of the tile. It is recommended to rub a thin layer of adhesive first and then apply a thicker layer of adhesive with a notched trowel of min. 6. Apply the tile using the wet-on-wet method, pressing down firmly and vibrating slightly, ensuring that the adhesive is 100% filled under the tile.

Waterproofing and tile bonding in two separate process cycles.

The first step should be performed analogously to steps 1-3 described above. After the first layer has set, the tile can be bonded using any bonding technique and a trowel with a minimum of 6 teeth. The tile should be pressed down firmly and lightly vibrated, ensuring that the adhesive is 100% filled under the tile.

Tile bonding

The adhesive should be applied to the substrate with a smooth steel trowel and then evenly distributed and profiled (possibly in one direction) using a toothed trowel. It is recommended to first rub a thin layer of adhesive into the substrate and then apply a thicker layer of adhesive, profiling immediately with the toothed trowel. It is recommended that the toothed trowel is guided as much as possible in one direction. On walls, it is recommended to profile the adhesive in a vertical direction.

In the case of floor tiles, outdoor cladding and the installation of large-format tiles, it is recommended that the bonding surface is complete (if necessary, use a combined method of applying adhesive mortar to the substrate and to the undersurface of the tile).

For bonding large-format tiles 300 x 100 cm and larger, use one of three variants of the combination method:

- adhesive on substrate with 8 mm trowel + adhesive on tile with 6 mm trowel,
- adhesive on substrate with 10 mm trowel + adhesive on tile with 4 mm trowel.

- adhesive on the substrate with a 12 mm trowel + adhesive on the tile, smooth to a thickness of approx. 1 mm.

Once spread on the substrate, the adhesive retains its properties for approximately 30 minutes (at a temperature of approximately 23 °C and 55 % humidity). During this time, apply the tile to it and press down carefully (the contact area between the tile and the adhesive should be even and as large as possible - min. 2/3 of the surface of the tile for indoor applications, when gluing outdoors - full support of the tile is required). Excess adhesive appearing in the joints when pressing the tiles should be removed on an on-going basis.

Maintain the joint width according to the size of the tiles and use conditions (see Technical Data Sheets for ATLAS grouts).

Correcting the position of the plate

The position of the plate can be corrected by gently moving it in the plane of bonding. This can be done for about 10 minutes after pressing (at a temperature of approx. 23 °C and 55 % humidity).

Grouting and use of the cladding

The use of ATLAS grouts, e.g. ATLAS CERAMIC GROUT, is recommended for grouting the cladding. Grouting the cladding made on the walls is possible 16 hours after the tiles have been fixed. The floor covering can be walked on and grouted approximately 24 hours after the tiles have been stuck. The mortar reaches its service strength after 3 days (see Technical Data).

Expansion joints between tiles, joints along wall corners, joints at sanitary facilities should be filled with ATLAS SANITARY SILICONE SILTON S or ATLAS ELASTIC SANITARY SILICONE.

After applying the product, the room should be ventilated for 24 hours.

Consumption for use as tile adhesive

Tile size [cm]	Place of application	Recommended trowel tooth size [mm]	Consumption rate [kg/m ²]
2 x 2	wall	4	1,2
	flooring	4	1,2
10 x 10	wall	4	1,2
	flooring	6	2,0
15 x 60	wall	6	2,0
	flooring	8	2,5
20 x 25	wall	6	2,0
	flooring	8	2,5
25 x 40	wall	6	2,0
	flooring	8	2,5
30 x 30	wall	6	2,0
	flooring	8	2,5
30 x 60	wall	8	2,5
	flooring	10	3,0
40 x 40	wall	8	2,5
	flooring	10	3,0
50 x 50	wall	8	2,5
	flooring	10	3,0
60 x 60	wall	10	3,0
	flooring	12	3,7
above 60 x 60 e.g. 90 x 90, 120 x 20, 300 x 100	wall	combined method	approx. 5.2 (depending on the adhesive used)
	flooring		
plank-type tiles*, e.g. 20 x 90 or 25 x 100	wall	8	2,5
	flooring	10	3,7

The average adhesive consumption figures given in the table refer to application on an even substrate. Unevenness of the substrate increases the unit consumption of the adhesive mortar.

*for plank-type tiles, a combined laying method is recommended

If the so-called combined method is used, the adhesive consumption will increase.

Consumption for use as waterproofing applied as a separate layer

The consumption is approx. 3.0 kg/m².

Consumption for use as adhesive + waterproofing

When carrying out bonding and waterproofing work in a single layer, the consumption is approx. 4.5 kg/m².

When working in separate layers, the total consumption is the sum of the consumption for the individual layers.

Packaging

15 kg plastic bag.

Safety information

Safety information is given on the product packaging and in the Safety Data Sheet, available at www.atlas.com.pl.

Storage and transport

Information on storage and transport is given on the product packaging and in the Safety Data Sheet, available at www.atlas.com.pl.

The shelf life of the product (best before use) is 12 months from the production date on the packaging.

Important additional information

Do not soak the tiles before fixing. When determining the thickness of the adhesive under the cladding to be fixed, geometric deviations in the shape of the tiles, e.g. curling of the plane, must be taken into account.

Before fixing natural stone tiles or glass elements, it is necessary to carry out an application test. For this purpose, one tile should be fixed to the substrate. The bonding area should be 60 % (40% of the tile surface should not be in contact with the adhesive). After 2-3 days, the appearance of the tile should be assessed. The test result can be considered positive if there are no shade differences on the tile surface between areas in contact and not in contact with the adhesive.

The open time - from the application of the adhesive to the substrate to the application of the tiles - is limited. To check whether it is still possible to fix the tiles, a simple test is recommended. This consists of pressing the fingers of your hand against the applied adhesive. If the adhesive remains on the fingers, then the tiles can be fixed. If the adhesive does not stick to your fingers, remove it from the substrate and apply a new layer.

Clean the tools with clean water, directly after using the adhesive. Difficult to remove remains of the bonded adhesive should be washed off with ATLAS SZOP.

The information contained in this Technical Data Sheet is a basic guideline for the use of the product and does not relieve the user of the obligation to carry out the work in accordance with the rules of the art of construction and safety regulations. With the issue of this Technical Data Sheet, all previous ones are no longer valid. Documents accompanying the product are available at www.atlas.com.pl.

The contents of the Technical Data Sheet and the designations and trade names used therein are the property of Atlas Ltd. Their unauthorised use will be sanctioned.

Update date: 2024-02-08

The table below shows the specific requirements for substrate preparation. Before starting work, please also refer to the Technical Sheets of the products listed in the table. The times shown in the table are recommended for application and seasoning conditions of approx. 20 °C and 50 % humidity.

Newly manufactured screeds ATLAS POSTAR 10	Moisture content of the screed 4.0 % CM - after approx. 1.5 days for a screed thickness of 1.0-3.0 cm - after approx. 3 days for a screed thickness of 3.1-5.0 cm - after approx. 9 days for a screed thickness of 5.1-10.0 cm
Newly manufactured screeds ATLAS POSTAR 20	Moisture content of the screed 4.0 % CM - after approx. 1 day for a screed thickness of 1.0-3.0 cm - after approx. 2 days for a screed thickness of 3.1-5.0 cm - after approx. 5 days for a screed thickness of 5.1-8.0 cm
Newly manufactured screeds ATLAS POSTAR 60	Moisture content of the screed 4.0 % CM - after approx. 6 hours for a screed thickness of 1.0-3.0 cm - after approx. 12 hours for a screed thickness of 3.1-5.0 cm - after approx. 40 hours for a screed thickness of 5.1-8.0 cm
Newly manufactured screeds ATLAS POSTAR 80	Moisture content of the screed 4.0 % CM - after approx. 3 hours for a screed thickness of 1.0-3.0 cm - after approx. 6 hours for a screed thickness of 3.1-5.0 cm - after approx. 18 hours for a screed thickness of 5.1-8.0 cm
Newly manufactured screeds ATLAS SMS 15	Moisture content of the screed 4.0 % CM - after approx. 8 hours for a screed thickness of 1-15 mm
Newly manufactured screeds ATLAS SMS 30	Moisture content of the screed 4.0 % CM - after approx. 18 hours for a screed thickness of 3-5 mm - after approx. 48 hours for a screed thickness of 6-10 mm - after approx. 72 hours for a screed thickness of 11-20 mm - after approx. 96 hours for a screed thickness of 21-30 mm
Newly manufactured screeds ATLAS SMS 80	Moisture content of the screed 4.0 % CM - after approx. 4 days for a screed thickness of 25-40 mm - after approx. 6 days for a screed thickness of 41-60 mm - after approx. 9 days for a screed thickness of 61-80 mm
Other cement screeds	Compressive strength of at least 12 MPa. Seasoning minimum 28 days Optimum moisture content < 4% by weight
Newly manufactured hybrid screeds ATLAS MMS 60	Required moisture content of the screed 1.0 % CM - after approx. 14 days for a screed thickness of 2.0 - 4.0 cm - after approx. 21 days for a screed thickness of over 4.0 cm
Newly manufactured anhydrite screeds ATLAS SAM 100	Moisture content of the screed 1.0 % CM - approx. 4 days for a thickness of 0.5-3.0 cm
Newly manufactured anhydrite screeds ATLAS SAM 200	Moisture content of the screed 1.0 % CM - approx. 10 days for a thickness of 2.5-4.0 cm - approx. 21 days for a thickness of 4.1 to 6.0 cm If a white surface deposit has appeared while the primer is drying, it should be removed mechanically by sanding and then the entire surface dusted.
Cement and anhydrite screeds with underfloor heating (heating underlay)	Attention. When the substrate is a screed with sunken underfloor heating, it must absolutely be heated. Information on the heating of ATLAS screeds is given in their technical data sheets. Tiles with ATLAS PLUS S2 HYDRO adhesive can be adhered both on and off the underfloor heating: - when the tiles are bonded on a screed with the underfloor heating switched off , then the underfloor heating may be activated after a minimum of 21 days, - when the tiles are installed on a screed with the underfloor heating system switched on, the temperature of the screed must be stabilised and may not exceed +25 °C. For a further 21 days after the installation of the tiles, the temperature of the screed must not exceed +25 °C. Bonding tiles to other types of operating (switched on) underfloor heating, embedded in e.g. an adhesive layer, is excluded.
Bricks or hollow bricks of calcium-silicate, ceramic or cellular concrete	A two-layer render (render + filler) trowelled to a rough finish is required. Bonding directly to unrendered masonry is only possible if the geometric requirements of the substrate are met. In this case, it is necessary to complete the wall with a full joint (or to complete the jointing) and to repair any defects and irregularities using ready-made mortars.
Cement and cement-lime plasters from ATLAS ready-mixed mortars	Seasoning minimum 3 days for every 1 cm of thickness Optimum moisture content < 4% CM
Other cement and cement-lime plasters	Minimum CS category III Minimum curing time of 7 days for each 1 cm of thickness

Gypsum plasters	Recommended compressive strength > 4 MPa If the gypsum plaster is made in a wet room, make an insulating coating. We recommend the use of polymer dispersion compounds ATLAS FAST-DRYING LIQUID FOIL WODER E or ATLAS LIQUID FOIL WODER W. Gypsum finishing plasters should be removed.
Mortar levelled substrates ATLAS ZW 330	Moisture content of the screed 1.0 % CM - 5 hours at 5 mm layer thickness - 10 hours at a layer thickness of 10 mm - 20 hours for a layer thickness of 20 mm - 48 hours for layer thicknesses over 20 mm
Concrete floors	Seasoning time minimum 3 months Optimum moisture content < 4% by weight Absolutely clean off any residue from concreting separators and other substances that may impair adhesion Repair deficiencies, chipping and other cavities with one of the mortars: - ATLAS ZW 330 - ATLAS FILER S Prime with ATLAS ULTRAGRUNT
Newly installed waterproofing	- ATLAS ATLAS FAST-DRYING LIQUID FOIL WODER E-- possibility to install the cladding after 2 hours for damp proofing and after 4 hours for waterproofing. - ATLAS ATLAS LIQUID FOIL WODER W - possibility to install the cladding after 24 hours - ATLAS WODER DUO - possibility to install the cladding after 12 hours - ATLAS WODER SX - possibility to install the cladding after 40 hours
Terazzo	Thoroughly degrease the surface and, in the case of pasted terazzo, remove the top part or all of it and make a new primer. Prime with ATLAS ULTRAGRUNT.
Concrete water tanks, swimming pool basins, made of water-permeable concrete	Sanding, sandblasting or hydro-sanding required to open up surface pores.
Water tanks (retention basins, etc.), swimming pool basins, paddling pools, etc. surfaces insulated with flexible grouts or liquid membranes	If required, clean the surface of the waterproofing coating gently so as not to damage the waterproofing.
Oil paint and resin varnish coatings	Remove coats with low adhesion to the substrate mechanically. Stable coatings well bonded to the substrate: sand, vacuum; oil-based coatings should be primed with ATLAS ULTRAGRUNT. Remove gypsum putty based on which the substrate has been levelled.
OSB, chipboard and plank flooring - the layering should be designed and constructed to prevent deformation that could lead to damage to the cladding.	- check the type of boards used, OSB/3 and OSB/4 boards (according to PN-EN 300:2007) may be used on the floors, with a minimum thickness of 25 mm (22 mm in the case of installation on ATLAS M-system), and wall cladding min. 18 mm - Check the stability of the sheathing on the substructure, the panels must not buckle under operational loads, if necessary tighten an additional, stiffening layer of panels - Matt down the surface using 40-60 grit sandpaper. - clean the surface of the resulting dust
Existing ceramic or stone tile coverings	- Check the adhesion of the existing cladding to the substrate by tapping; any loose tiles must be removed. - wash and degrease the tile surfaces thoroughly - roughen glazed tiles with a diamond disc grinder. - clean the surface of dust - prime with ATLAS ULTRAGRUNT
Metal and steel surfaces	Cleaning and de-rusting required, priming with ATLAS ULTRAGRUNT. For cladding that will be subject to dynamic loads, ATLAS EPO-S universal epoxy binder with quartz sprinkling should be used for priming.
Plastic surfaces	Required cleaning, sanding and priming with ATLAS ULTRAGRUNT. To confirm bonding ability on plastic substrates, an adhesion test should be carried out on the substrate prior to cladding.