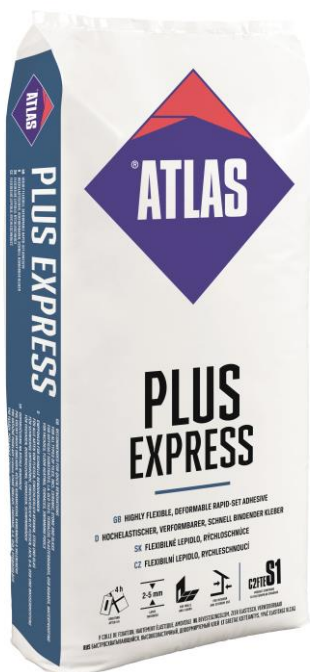




ATLAS PLUS EXPRESS

fast-setting, highly deformable adhesive 2-5 mm

- for claddings requiring very rapid work progress and virtually immediate use
- for all types of ceramic, stone, glass, composite panels and panelling
- for small, medium and large format tiles
- for difficult substrates: underfloor heating, OSB and plasterboard, old tiles, wooden ceilings, metal surfaces and plastics
- for terraces, balconies and facades, for swimming pools and process vessels
- for residential, commercial, public and industrial buildings



FOR WALLS
AND FLOORS



FOR INTERIOR
AND EXTERIOR USE



FROST
AND WATERPROOF



2-5mm
LAYER
THICKNESS

Polymer technology

The formulation of ATLAS PLUS EXPRESS adhesive uses polymer technology. Thanks to the high content of redispersible polymer resins, the cementitious adhesive obtains unique properties making it a product with the highest technical and performance parameters, guaranteeing durability for many years. The presence of polymers ensures that high adhesion is achieved for any cladding to any substrate, including so-called difficult and critical substrates. Thanks to the interlacing of the polymer network with the network of inorganic hydration bonds of the cement, the adhesive achieves exceptional performance. The use of fast-performance cement enables very rapid increases in adhesion and strength to be achieved within no more than 6 hours of bonding the tiles.

The use of polymer technology offers benefits in the form of:

- the ability to bond any type of cladding, both absorbent and non-absorbent, due to the high adhesion provided by the high content of polymer resin in the adhesive formulation
- ability to fix tiles on so-called difficult substrates including OSB, plasterboard, old "cladding-on-covering" tiles as well as those exposed to high and very high mechanical and thermal loads, thanks to high deformability,
- exceptional ductility and homogeneity of the paste - the adhesive is easy to work and spreads perfectly over the surface - the adhesion forces prevent the adhesive from 'rolling off' onto the trowel.

Properties

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

It is highly flexible - deformability S1 - the allowable deflection of the cured adhesive is between 2.5 and 5 mm (tested according to EN 12002).

It is fast-performing - it provides very rapid increases in strength parameters - very high early adhesion allows tiles to be stepped on and the cladding grouted after just 4 h, pedestrian traffic after 24 h, and vehicular traffic on the finished floor is possible as early as 14 days after bonding.

It has high adhesion and durability - the actual achieved adhesion to the concrete substrate after 28 days, including after thermal ageing, wetting, freezing and thawing under standard conditions, is twice the adhesion required according to EN 12004.

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 fixing cut tiles on its exposed surface.

Reduces the impact of weather conditions on the correct execution of the cladding - allows the cladding work to be completed quickly and safely in the face of unpredictable changes in weather conditions. Optimum working speed and rapid achievement of performance by the adhesive reduces the possibility of damage to cladding carried out outdoors.

Recommended for wall and floor coverings in general construction, industry, commercial buildings, health care facilities, nurseries, kindergartens, etc., wherever very rapid work progress is required and almost immediate use of the surface is expected after completion.

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 tiles, coloured, printed, etc.	perform an application test* and check the recommendations of the tile manufacturer
concrete / cement 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

small, medium and large format tiles ($\leq 0.25 \text{ m}^2$) and length of long side $\leq 100 \text{ cm}$	+
large tile format ($> 0.25 \text{ m}^2$)	use ATLAS PLUS
slim discs	use ATLAS PLUS

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 THE TILES

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	use ATLAS PLUS
traffic routes	+
facades (including on thermal insulation systems)	+
cladding of building plinths	+
process tanks, swimming pools, fountains, jacuzzis, balneotechnology (without aggressive chemicals)	+
drinking water tanks	use ATLAS PLUS
saunas	+
showers, washing facilities, rooms washed with large quantities of water	+

TYPE OF FLOORING - standard

cement floors and bases	+
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	+

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)	+
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	+

Technical data

Bulk density	approx. 1.6 g/cm 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
Temperature of the adhesive preparation and of the substrate and surroundings during the work	from +5 °C to +25 °C
Maturation time	approx. 5 minutes
Pot life	approx. 1 h
Open working time	min. 30 minutes
Correctability	approx. 10 minutes
Walking on the floor / grouting	after approx. 4 h
Full operational loads - pedestrian traffic*	after 24 hours
Full operational loads - wheeled traffic*	after 14 days
Full load under water - pool / tank*	after 14 days
Underfloor heating (heated surfaces)*	after 21 days

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

Technical requirements

The product complies with the requirements of EN 12004+A1:2012 for an adhesive of class C2FTE S1 - cementitious tile adhesive with increased parameters, fast-setting, extended open time and reduced run-off, deformable, for indoor and outdoor use on floors.

ATLAS PLUS EXPRESS (2019) Declaration of performance No. 1087/1/CPR. EN 12004:2007+A1:2012	
Intended use: all internal and external tiling	
Reaction to fire	A1/A1 _{fl}
Joint strength expressed as - initial adhesion - early adhesion	≥ 1.0 N/mm ² ≥ 0.5 N/mm ²
Joint durability under conditioning / thermal ageing conditions expressed as: - adhesion after thermal ageing	≥ 1.0 N/mm ²
Joint durability under water/moisture conditions expressed as: - adhesion after immersion in water	≥ 1.0 N/mm ²
Joint durability under freeze-thaw cycling conditions expressed as: - adhesion after freeze-thaw cycles	≥ 1.0 N/mm ²

Substrate preparation

The substrate should be:

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

even - the maximum thickness of the adhesive is 10 mm, for levelling substrates with larger irregularities, e.g. ATLAS ZW 330 or ZW 50 levelling mortars, ATLAS SMS, SAM or POSTAR screeds can be used.

cleaned - from layers that may impair adhesion of the adhesive, in particular from dust, dirt, lime, oil, grease, wax, oil and emulsion paint residues; substrates covered with algae, fungi, etc. should be cleaned and protected with ATLAS MYKOS No 1 or ATLAS MYKOS PLUS,

primed

- ATLAS UNI-GRUNT or ATLAS UNI-GRUNT PLUS - when the substrate has excessive or non-uniform absorptivity,
- ATLAS GRUNTO-PLAST - when the substrate has low absorption or is covered with layers limiting adhesion,
- ATLAS ULTRAGRUNT - when tiles will be fixed on critical substrates.

insulated - when laying tiles on surfaces that are exposed to water:

- ATLAS WODER E
- ATLAS WODER W,
- ATLAS WODER S,
- ATLAS WODER DUO,
- ATLAS WODER DUO EXPRESS.

Detailed indications of substrate preparation, depending on the type of substrate, are shown in the table at the end of the Technical Sheet.

Fixing the cladding

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 1 hour.

Application of adhesive

It is recommended to first rub a thin layer of adhesive into the substrate and then apply a thicker layer of adhesive, immediately profiling with a notched trowel. It is recommended that the toothed trowel is guided in one direction as much as possible. 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 back surface of the tile).

Fixing the cladding

After spreading 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 tile surface). Excess adhesive appearing in the joints when pressing the tiles should be removed continuously. Maintain the width of the joints depending on the size of the tiles and operating conditions.

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

ATLAS grouts are 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 4 hours after the tiles have been stuck. The mortar reaches its service life after 3 days (see Technical Data). Expansion joints between tiles, joints along wall corners, joints at sanitary facilities should be filled with ATLAS ELASTIC SANITARY SILICONE or ATLAS SILTON S.

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	1,3
	flooring	4	1,3
10 x 10	wall	4	1,3
	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
plank-type tiles*, e.g. 20 x 90 or 25 x 100	wall	8	2,5
	flooring	10	3,0

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.

Packaging

Plastic bag 25 kg

Safety information

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

The product has a Radiation Hygiene Certificate.

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. When the adhesive does not stick to the 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 CEMENT AWAY.

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. The 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: 2021-11-02

The table below shows the specific requirements for substrate preparation. Before starting work, 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 cement subfloors 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 cement subfloors 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 cement subfloors 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 cement subfloors 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 cement subfloors 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 cement subfloors 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
Other cement screeds	Compressive strength of at least 12 MPa. Seasoning minimum 28 days Optimum moisture content < 4% by weight Prime with one of the emulsions: - ATLAS UNI-GRUNT - ATLAS UNI-GRUNT ULTRA - ATLAS UNI-GRUNT PLUS
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 Moisture content of the screed 0.5 % CM (when heating) - approx. 7 days for a thickness of 0.5-3.0 cm Prime with one of the emulsions: - ATLAS UNI-GRUNT - ATLAS UNI-GRUNT ULTRA - ATLAS UNI-GRUNT PLUS
Newly manufactured anhydrite screed 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 Moisture content of the screed 0.5 % CM (when heating) - approx. 18 days for a thickness of 2.5-4.0 cm - approx. 28 days for a thickness of 4.1-6.0 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. Prime with one of the emulsions: - ATLAS UNI-GRUNT - ATLAS UNI-GRUNT ULTRA - ATLAS UNI-GRUNT PLUS
Newly manufactured anhydrite screed ATLAS SAM 500	Moisture content of the screed 1.0 % CM - approx. 4 days for a thickness of 2.0-4.0 cm - approx. 7 days for a thickness of 4.1 to 6.0 cm Moisture content of the screed 0.5 % (when heating) CM - approx. 7 days for a thickness of 2.0-4.0 cm - approx. 18 days for a thickness of 4.1-6.0 cm Prime with one of the emulsions: - ATLAS UNI-GRUNT - ATLAS UNI-GRUNT ULTRA - ATLAS UNI-GRUNT PLUS

Cement and anhydrite screeds with underfloor heating (heating underlay)	Preparation in accordance with the same instructions as for normal primers. In addition, the subfloor must be heated prior to fixing the cladding.
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 unevenness using ready-made mortars. Prime with one of the emulsions: - ATLAS UNI-GRUNT - ATLAS UNI-GRUNT ULTRA - ATLAS UNI-GRUNT PLUS
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 Prime with one of the emulsions: - ATLAS UNI-GRUNT - ATLAS UNI-GRUNT ULTRA - ATLAS UNI-GRUNT PLUS
Other cement and cement-lime plasters	Minimum CS category III Minimum curing time of 7 days for each 1 cm of thickness Prime with one of the emulsions: - ATLAS UNI-GRUNT - ATLAS UNI-GRUNT ULTRA - ATLAS UNI-GRUNT PLUS
Gypsum plasters	Recommended compressive strength > 4 MPa Prime with one of the emulsions: - ATLAS UNI-GRUNT - ATLAS UNI-GRUNT ULTRA - ATLAS UNI-GRUNT PLUS If the gypsum plaster is made in a wet room, then it should be carefully protected against moisture, e.g. by applying an insulating coating of ATLAS WODER E or WODER W Gypsum plaster should be removed
Mortar levelled substrates ATLAS ZW 330	Moisture content of the screed 1.0 % CM - 5 hours at 5 mm film thickness - 10 hours at a film thickness of 10 mm - 20 hours for a layer thickness of 20 mm - 48 hours for layer thicknesses over 20 mm
Concrete floors	Minimum class C16/20 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 TEN-10 - ATLAS ZW 330 - ATLAS FILER S Prime with ATLAS ULTRAGRUNT
Newly installed waterproofing with ATLAS WODER DUO, ATLAS WODER DUO EXPRES, ATLAS WODER E, ATLAS WODER W and ATLAS WODER S.	- ATLAS WODER E - possibility to install cladding after 2 hours for damp insulation and after 4 hours for water insulation - ATLAS WODER W, ATLAS WODER S - possibility to install the cladding after 24 hours - ATLAS WODER DUO - possibility to install the cladding after 12 hours - ATLAS WODER DUO EXPRESS - cladding installation possible after 3 hours
Terrazzo	Thoroughly degrease the surface and, in the case of pasted terrazzo, 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 and plank flooring	- the layering should be designed and executed so as to prevent deformation that could damage the cladding - OSB/3 and OSB/4 (in accordance with EN 300:2007) with a thickness of at least 25 mm can be used for floors and at least 18 mm for walls.

	- the system must not buckle under operating loads. - for proper adhesion to the tile adhesive, roughen the surface of the substrate with abrasive paper grit 40-60 and clean off any dust. - prime with ATLAS ULTRAGRUNT - In rooms with higher humidity, possible swelling of the OSB boards (check the values declared by their manufacturer) or deformation of the boards must be taken into account. In this case, the system constituting the substrate for the tiles should be protected against moisture. ATLAS WODER W or WODER E waterproofing can be used for this purpose.
Existing ceramic or stone tile coverings	- the adhesion of the existing cladding to the substrate should be assessed by tapping the - Remove any old tiles that have become detached from the substrate. - fill cavities, e.g. with ATLAS ZW 330 mortar - Thoroughly clean and degrease the surfaces of the remaining tiles. - Glazed tiles are roughened with a diamond disc grinder. - clean all dust - Prime with ATLAS ULTRAGRUNT.
Metal and steel surfaces	Cleaning and rust removal required, priming with ATLAS ULTRAGRUNT
Plastic surfaces	Required cleaning, sanding and priming with ATLAS ULTRAGRUNT. In order to confirm the bonding capacity on plastic substrates, an adhesion test should be carried out on the substrate before the cladding is applied.