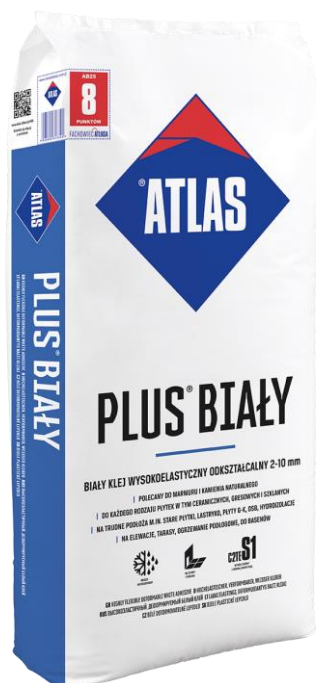




ATLAS PLUS WHITE

white highly flexible adhesive,
deformable 2-10 mm

- recommended for marble and natural stone
- for all types of tiles, including ceramic, porcelain and glass tiles
- on difficult substrates, e.g.: old tiles, terrazzo, plasterboard, OSB, waterproofing
- for facades, terraces, underfloor heating, for swimming pools



Polymer technology

The formulation of ATLAS PLUS WHITE adhesive uses polymer technology. Thanks to the high content of redispersible polymer resins, the cement 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 white cement limits the occurrence of discolouration of the cladding.

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

- the ability to bond any type of cladding, both absorbent and non-absorbent, thanks to the high adhesion provided by the high polymer resin content in the adhesive formulation
- possibility 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 its high deformability,
- exceptional ductility and homogeneity of the mass - **the adhesive is easy to work and spreads perfectly on the surface** - the adhesion forces prevent the adhesive from "rolling off" onto the trowel.

Properties

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

It does not cause discolouration of the cladding - which makes it ideal for fixing glass mosaics and for bonding fused glass - **due to** its high adhesion and white cement.

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 has enhanced adhesion - the adhesion achieved to the concrete substrate under standard conditions is twice the adhesion required according to EN 12004.

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 fixing cut tiles on its exposed surface.

Versatility of use - the adhesive is dedicated to practically all types of cladding, irrespective of the type and size of the tiles, on a variety of substrates, in different types of facilities, even with high operating loads on the cladding.

Recommended for cladding in drinking water tanks, the food industry, healthcare facilities, nurseries, kindergartens, etc.

Purpose

TYPES OF TILES TO BE FIXED	
glazed tiles	+
terracotta	+
porcelain tiles	+
laminated tiles	+
natural stone cladding (granite, marble, travertine, syenite, slate, etc.).	+
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 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 m ²	+
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 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	+
traffic routes (except external stairs)	+
facades (including on thermal insulation systems)	+
cladding of building plinths	+
process tanks, swimming pools, fountains, jacuzzis, balneotechnology (without aggressive chemicals)	+
drinking water tanks	+
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	+
screeds (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-bonded 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	+

Technical data

Bulk density	approx. 1.4 g/cm ³
Mixing ratio (water/dry mix)	0.26 ÷ 0.28 l / 1 kg 1.3 ÷ 1.4 l / 5 kg 6.50 ÷ 7.00 l / 25 kg
Min/max. adhesive thickness	2 mm ÷ 10 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 (stand-by time)	approx. 4 h
Open working time	min. 30 minutes
Correctability	approx. 10 minutes
Walking on the floor / grouting	after approx. 24 h
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.

Technical requirements

The product meets the requirements of PN-EN 12004+A1:2012 - type C2TE S1 - adhesive for tiles, cement tile adhesive with increased parameters, extended open time and reduced run-off, deformable, for indoor and outdoor use on walls and floors.

ATLAS PLUS WHITE (2019) Declaration of performance No. 1030/1/CPR EN 12004:2007+A1:2012	
Intended use: all indoor and outdoor tiling	
Reaction to fire	A2-s1, d0 A2fl -s1
Joint strength expressed as initial adhesion	≥ 1.0 N/mm ²
Durability of the joint under condition- ing/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

Substrate preparation

The substrate should be:

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

even - the maximum thickness of the adhesive is 10 mm, for levelling the substrate in case of larger irregularities, for example:

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

cleaned - from layers that could weaken the adhesion of the adhesive, in particular from dust, dirt, lime, oil, grease, wax, oil and emulsion paint residues; substrates with biological infestation, should be cleaned and protected with a preparation, e.g.:

- ATLAS MYKOS PLUS,

primed when the substrate has excessive or non-uniform absorbency,

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

covered with a bonding primer when the substrate has low absorbency or is covered with adhesion-restricting layers.

- ATLAS ULTRAGRUNT - recommended for critical substrates,
- ATLAS GRUNTO-PLAST.

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

- ATLAS FAST DRYING LIQUID FOIL WODER E,
- ATLAS LIQUID FOIL WODER W,
- ATLAS WODER SX,
- ATLAS WODER DUO,

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 4 hours.

Application of adhesive

It is advisable to first rub a thin layer of adhesive into the 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 undersurface of the tile).

For bonding large-format tiles 300 x 100 mm and larger, use one of the 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.

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 on an ongoing basis. 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. Climbing onto the cladding and commencing grouting is possible approximately 24 hours after bonding the tiles. 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 SANITARY SILICONE 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	1.4
	flooring	4	1.4
10 x 10	wall	4	1.4
	flooring	6	2.2
15 x 60	wall	6	2.2
	flooring	8	2.8
20 x 25	wall	6	2.2
	flooring	8	2.8
25 x 40	wall	6	2.2
	flooring	8	2.8
30 x 30	wall	6	2.2
	flooring	8	2.8
30 x 60	wall	8	2.8
	flooring	10	3.4
40 x 40	wall	8	2.8
	flooring	10	3.4
50 x 50	wall	8	2.8
	flooring	10	3.4
60 x 60	wall	10	3.4
	flooring	12	4.3
above 60 x 60 e.g. 90 x 90, 120 x 20, 300 x 100	wall	combined method	approx. 5.1 (depending on the adhesive used)
	flooring		
plank-type tiles*, e.g. 20 x 90 or 25 x 100	wall	8	2.8
	flooring	10	3.4

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

Alubag bags 5 kg, plastic bags 25 kg.

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 (shelf life) is: - for foil packs 12 months from the production date on the pack, - for alubag bags 24 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 the 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 may be considered positive if there are no differences in the tile surface shade differences between areas in contact and not in contact with the adhesive.

When fixing thin marble tiles, temporary discolouration may occur due to the high absorbency of marble. The fixed marble will return to its previous colour after approximately 7 days, i.e. after it has dried completely.

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 Information 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 data sheet and the designations and trade names used therein are the property of Atlas Ltd. Their unauthorised use will be sanctioned.

Update date: 2024-01-11

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 cement 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 cement 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 cement 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 cement 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 cement 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 cement screeds ATLAS SMS 30	Moisture content of the substrate 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 hybrid screeds ATLAS MMS 60	Required moisture content of the substrate 1 % CM - after approx. 21 days for a substrate thickness of 2.0 - 4.0 cm - after approx. 28 days for a substrate thickness of over 4.0 cm
Other cement mortar 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 GRUNT NKP (ready to use - without dilution) - ATLAS UNI-GRUNT - ATLAS UNI-GRUNT ULTRA
Newly manufactured anhydrite screeds ATLAS SAM 100	Moisture content of the substrate 0.5 % CM - approx. 4 days for a thickness of 0.5-3.0 cm Prime with one of the emulsions: - ATLAS GRUNT NKP (ready to use - without dilution) - ATLAS UNI-GRUNT - ATLAS UNI-GRUNT ULTRA
Newly manufactured anhydrite screed ATLAS SAM 200	Moisture content of the substrate 0.5 % CM - approx. 10 days for a thickness of 2.5-4.0 cm - approx. 21 days for a thickness of 4.1-6.0 cm If a white surface deposit has appeared while the substrate is drying, it should be removed mechanically by sanding and then the entire surface dusted. Prime with one of the emulsions: - ATLAS GRUNT NKP (ready to use - without dilution) - ATLAS UNI-GRUNT - ATLAS UNI-GRUNT ULTRA
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 WHITE can be adhered both on and off underfloor heating: - when the tiles are applied on a screed with the underfloor heating switched off , then the underfloor heating may be activated after a minimum of 14 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 +35 °C. For the next 14 days after the installation of the tiles, the temperature of the screed must not exceed +35 °C. It is not possible to adhere tiles to other types of operating (switched on) underfloor heating, embedded e.g. in an adhesive layer.

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 make the wall on a full joint (or to complete the joint), and to repair any defects and unevenness using ready-made mortars. Prime with one of the emulsions: - ATLAS GRUNT NKP (ready to use - without dilution) - ATLAS UNI-GRUNT - ATLAS UNI-GRUNT ULTRA
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 GRUNT NKP (ready to use - without dilution) - ATLAS UNI-GRUNT - ATLAS UNI-GRUNT ULTRA
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 GRUNT NKP (ready to use - without dilution) - ATLAS UNI-GRUNT - ATLAS UNI-GRUNT ULTRA
Gypsum plasters	Recommended compressive strength > 4 MPa Prime with one of the emulsions: - ATLAS GRUNT NKP (ready to use - without dilution) - ATLAS UNI-GRUNT - ATLAS UNI-GRUNT ULTRA If the gypsum plaster is made in a wet room, then it should be carefully protected against moisture, e.g. by making an insulating coating with ATLAS FAST DRYING LIQUID FOIL WODER E or ATLAS LIQUID FOIL WODER W. Plastering 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	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 made with ATLAS products	- ATLAS FAST DRYING LIQUID FOIL WODER E - possibility to install the cladding after 2 hours for waterproofing and after 4 hours for waterproofing - 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 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 boards (according to PN-EN 300:2007) with a thickness of at least 25 mm (22 mm in case of installation on ATLAS M-system) can be used on floors, and boards with a thickness of at least 18 mm on walls. - the system must not buckle under operating loads. - for proper adhesion to the tile adhesive, roughen the surface of the substrate with 40-60 grit sandpaper and clean off any dust that may have formed - 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	- assess the adhesion of the existing cladding to the substrate 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 other tiles - roughen glazed tiles with a diamond disc grinder. - clean all 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. In order to confirm the bonding ability on plastic substrates, an adhesion test should be carried out on the substrate before cladding.