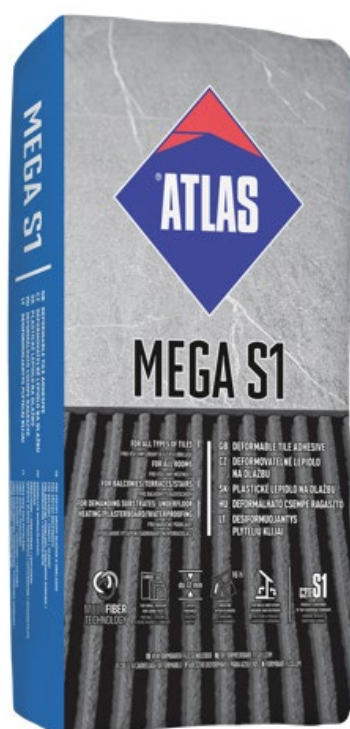
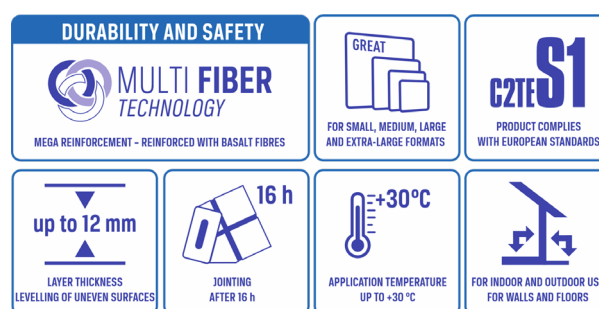




ATLAS MEGA S1

adhesive for large-format tiles

- for all types of tiles
- for all types of rooms
- for balconies, terraces and stairs
- for demanding substrates: underfloor heating / plasterboard / waterproofing



Multi Fiber Technology

A new generation of S1-class flexible adhesive featuring 'Multi Fiber Technology' – a unique combination of fibres:

- basalt,
- polypropylene,
- cellulose.

The fibre system used creates a three-dimensional, dispersed reinforcement within the mortar structure, which actively compensates for stresses arising during the setting of the adhesive and the service life of the cladding.

Multi Fiber Technology offers the following benefits:

- the synergy of the fibres protects the adhesive mortar against the formation of micro-cracks during the initial setting stage and against the transmission of cracks from the substrate. It ensures the durability of the bond even on substrates exposed to deformation and dynamic loads, maintaining high durability of the system.

ATLAS MEGA S1 contains three types of fibres:

- basalt – 5× higher tensile strength than traditional PP fibres; natural, non-flammable, alkali-resistant,
- PP – provide microcrack control and resistance to dynamic stresses,
- cellulose – stabilise the layer during the initial setting phase, limiting plastic shrinkage and improving performance parameters.

Properties

ATLAS MEGA S1 is produced as a dry mix of the highest quality cementitious binder, aggregates, 3 types of fibres (basalt, polypropylene and cellulose) and specially selected modifiers.

Stability and uniformity of structure

Fibres of varying lengths and elasticity ensure even distribution within the adhesive mortar, stabilising its structure as early as the setting phase. Three types of fibres – basalt, polypropylene and cellulose – limit local plastic shrinkage, which translates into the uniformity and durability of the adhesive layer.

Bond durability in all conditions

The "Multi Fiber Tech™" reinforcement enables the safe transfer of stresses between the substrate and the cladding, both during temperature changes and during use – this ensures long-lasting high adhesion and stability of the cladding even under difficult operating conditions.

It is highly elastic – deformation class S1 – the permissible deflection of the cured adhesive is between 2.5 and 5 mm (tested in accordance with PN-EN 12002).

The range of adhesive layer thicknesses (from 2 to 12 mm) allows for:

- thin-layer bonding of cladding to a level substrate,
- thin-layer bonding of cladding on uneven substrates, preceded by levelling with filler.

Extended open time – allows tiles to be applied to the adhesive up to 30 minutes after it has been applied to the substrate – it can be applied to a larger area in a single application, thereby significantly reducing working time.

Reduced slip – allows tiles to be laid 'from the top' – the correct consistency and layer thickness prevent the adhesive from sagging. This enables work to begin at the top of the wall and avoids having to lay cut-to-size tiles on its exposed surface.

Versatility of use – the adhesive is suitable for virtually all types of cladding, even large formats, on a variety of substrates, in all types of buildings, even under high operational loads on the cladding.

Intended use

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

*A description of the application test can be found in the 'Important additional information' section

FORMATS OF ADHESIVE ELEMENTS	
small, medium, large and extra-large format tiles	+
slim tiles	Use ATLAS ULTRA GEOFLEX

TYPES OF PROJECTS	
residential construction	+
public, educational, office and healthcare facilities	+
retail and service buildings	+
places of worship	+
industrial construction and multi-storey car parks	+
industrial warehouses	+
transport infrastructure	+
SPA facilities	+

TILE INSTALLATION LOCATION	
areas with low footfall	+
areas with medium footfall	+
high-traffic areas	+
kitchen, bathroom, laundry room, garage (in private housing)	+
terraces	+
balconies	+
external slab staircases	+
external beam staircases, e.g. cantilevered	+
transport links	+
facades (including on thermal insulation systems)	+
building plinth cladding	Use ATLAS PLUS or ATLAS GEOFLEX ULTRA
process tanks, swimming pools, fountains, jacuzzis, balneotherapy (without the use of aggressive chemicals)	Use ATLAS PLUS or ATLAS GEOFLEX ULTRA
drinking water tanks	Use ATLAS PLUS
saunas	+
showers, washrooms, areas washed with large amounts of water	+

TYPE OF SUBSTRATE FOR TILES - standard	
cement floors and screeds	+
anhydrite screeds	+
cement and cement-lime plasters	+
gypsum plasters in dry areas of rooms	+
gypsum plasters in damp and wet areas	+
aerated concrete walls	+
walls made of brick or silicate blocks	+
walls made of brick or ceramic blocks	+
walls made of gypsum blocks	+

TYPE OF SUBSTRATE FOR TILES – difficult*	
concrete	+
terrazzo	+
mineral, dispersion and reactive waterproofing coatings	+
dry screed systems (gypsum boards)	+
floor screeds (cement or anhydrite) with embedded water or electric underfloor heating	+
floor screeds with a heating mat embedded in the adhesive	+
plaster with embedded heating systems	+
plasterboard substrates	+
gypsum fibre boards	+
fibre cement boards	+
existing ceramic or stone cladding (tile-on-tile)	+
resin-based concrete coatings bonded to the substrate	+
dispersion and oil-based paints bonded to the substrate	+
plank flooring (thickness > 25 mm)	Use ATLAS PLUS or ATLAS GEOFLEX ULTRA
wood-based flooring panels with a minimum thickness of 22 mm, fixed to ATLAS M-System fasteners	Use ATLAS PLUS or ATLAS GEOFLEX ULTRA
OSB/3 boards, OSB/4 boards and chipboard on the floor (thickness > 25 mm)	Use ATLAS PLUS or ATLAS GEOFLEX ULTRA
OSB/3 boards, OSB/4 boards and chipboard on walls (thickness > 18 mm)	Use ATLAS PLUS or ATLAS GEOFLEX ULTRA
metal substrates	Use ATLAS PLUS or ATLAS GEOFLEX ULTRA
plastic surfaces	Use ATLAS PLUS or ATLAS GEOFLEX ULTRA

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

Technical data

Bulk density	approx. 1.4 g/cm ³
Mixing ratio (water/dry mix)	0,25–0,29 l / 1 kg 6,25–7,25 l / 25 kg
Adhesive layer thickness	2 to 12 mm
Temperature of the adhesive, substrate and ambient conditions during application	from +5 °C to +30 °C
Maturing time (slake time)	approx. 5 minutes
Pot life (working time) *	approx. 4 hours
Open working time*	min. 30 minutes
Adjustability*	approx. 10 minutes
Grouting of wall/floor tiles*	after approx. 16/24 hours
Walking on the floor*	after approx. 24 hours
Full operational loads – foot traffic*	after 3 days
Full service loads – vehicular traffic*	after 14 days

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

Technical requirements

The product complies with the requirements of PN-EN 12004+A1:2012 for class C2TE S1 adhesive – a cement-based tile adhesive with enhanced performance, extended open time and reduced slip, deformable, for indoor and outdoor use, on walls and floors.

ATLAS MEGA S1 (2026) Declaration of Performance No. 306/CPR EN 12004:2007+A1:2012	
Intended use: all types of tile laying indoors and outdoors	
Reaction to fire	A1/A1 _{fl}
Bond strength expressed as initial adhesion	≥ 1.0 N/mm ²
Durability of the bond under conditioning/thermal ageing conditions, expressed as adhesion after thermal ageing	≥ 1.0 N/mm ²
Durability of the joint under water/moisture conditions, expressed as adhesion after immersion in water	≥ 1.0 N/mm ²
Durability of the joint under freeze-thaw cycles, 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 from substances that reduce adhesion, and properly seasoned.

even – the maximum thickness of the adhesive is 12 mm; to level the substrate in the case of significant unevenness, the following may be used, for example:

- ATLAS ZW 330,
- ATLAS MMS, SMS, SAM or POSTAR floor screeds,

cleaned – of layers that may impair the adhesive's bond, particularly dust, dirt, lime, oils, greases, wax, and residues of oil-based and emulsion paints; substrates affected by biological growth should be cleaned and treated with ATLAS MYKOS PLUS,

primed, if the substrate has excessive or uneven absorptivity:

- ATLAS GRUNT NKP (ready to use – no dilution required),
- ATLAS UNI-GRUNT,
- ATLAS UNI-GRUNT ULTRA,

primed with a bonding primer, where the substrate has low absorptivity or is covered with layers that limit adhesion:

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

waterproofed – for laying tiles on surfaces exposed to water:

- ATLAS WODER E,
- ATLAS WODER W,
- ATLAS WODER SX,
- ATLAS WODER DUO.

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

Bonding of the cladding

Preparation of the adhesive

Pour the contents of the bag into a container with the measured amount of water (proportions given in the Technical Data) and mix with a low-speed mixer fitted with a mortar mixer until a uniform consistency is achieved. Leave the mixed adhesive to stand for 5 minutes and mix again. The adhesive prepared in this way must be used within approx. 4 hours (the prepared adhesive in the bucket should be stirred again).

Applying the adhesive

It is recommended to first rub a thin layer of adhesive into the substrate, then apply a thicker layer of adhesive, immediately smoothing it with a notched trowel. It is recommended to hold the notched trowel in one direction wherever possible. On walls, it is recommended to smooth the adhesive vertically.

For tiles laid on floors, external cladding and the installation of large-format tiles, it is recommended that full contact (coverage) should be achieved (if necessary, use a combined method involving the application of adhesive mortar to the substrate and the underside of the tile).

Bonding the cladding

Once spread on the substrate, the adhesive remains workable for approximately 30 minutes (at a temperature of approx. 23 °C and 55% humidity). During this time, place the tile into the adhesive and press firmly into place (the contact area between the tile and the adhesive should be even and as large as possible – at least 2/3 of the tile's surface). Any excess adhesive appearing in the joints when pressing the tiles down should be removed immediately.

The joint width should be selected according to the size of the tiles

and operating conditions.

Adjusting the position of the tile

The position of the tile can be adjusted by gently moving it within the bonding plane. This can be done for approximately 10 minutes after pressing the tile into place (at a temperature of approx. 23 °C and 55% humidity).

Grouting and use of the cladding

The use of ATLAS mortars is recommended for grouting the cladding. Grouting of wall cladding is possible 16 hours after the tiles have been laid. Walking on the floor cladding and grouting it is possible approximately 24 hours after the tiles have been laid. The mortar reaches its service strength after 3 days (information provided in the Technical Data). Expansion joints between tiles, joints along wall corners and gaps around sanitary fittings should be filled with ATLAS ELASTIC SANITARY SILICONE or ATLAS SILTON S SANITARY SILICONE.

Consumption for use as a tile adhesive

Tile size [cm]	Application area	Recommended trowel tooth size [mm]	Consumption [kg/m ²]
2 x 2	wall	4	1.5
	floor	4	1.5
10 x 10	wall	4	1.5
	floor	6	2.3
15 x 60	wall	6	2.3
	floor	8	2.9
20 x 25	wall	6	2.3
	floor	8	2.9
25 x 40	wall	6	2.3
	floor	8	2.9
30 x 30	wall	6	2.3
	floor	8	2.9
30 x 60	wall	8	2.9
	floor	10	3.5
40 x 40	wall	8	2.9
	floor	10	3.5
50 x 50	wall	8	2.9
	floor	10	3.5
60 x 60	wall	10	3.5
	floor	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 bonding method used)
	floor		
plank-style tiles*, e.g. 20 x 90 or 25 x 100	wall	8	2.9
	floor	10	3.5

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

*For plank-type tiles, the combined tiling method is recommended

When using the so-called combined method, adhesive consumption will increase.

Packaging

25 kg paper bag

Safety information

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

The product's shelf life is 12 months from the date of manufacture shown on the packaging.

Do not soak the tiles before bonding. When determining the thickness of the adhesive under the tiling, take into account geometric deviations in the shape of the tiles, e.g. warping of the surface.

Before fixing natural stone tiles or glass elements, it is essential to carry out an application test.

To do this, adhere a single tile to the substrate. The bonded area should be 60% (40% of the tile's surface should not be in contact with the adhesive). After 2–3 days, assess the appearance of the tile. The test result can be considered positive if there are no differences in shade between the areas of the tile that are in contact with the adhesive and those that are not.

The open time – from applying the adhesive to the substrate to placing the tiles on it – is limited. To check whether it is still possible to lay the tiles, it is recommended to carry out a simple test. This involves pressing your fingers against the applied adhesive. If the adhesive remains on your fingers, then you can lay the tiles. If the adhesive does not stick to your fingers, remove it from the substrate and apply a new layer.

Tools should be cleaned with clean water immediately after using the adhesive. Residual set adhesive that is difficult to remove should be washed off with ATLAS SZOP.

The information contained in this Technical Data Sheet constitutes basic guidelines for the use of the product and does not exempt the user from the obligation to carry out work in accordance with good building practice and health and safety regulations. With the publication of this Technical Data Sheet, all previous versions are superseded. Documents accompanying the product are available at www.atlas.com.pl.

The content of the technical data sheet, as well as the symbols and trade names used therein, are the property of Atlas sp. z o.o. Unauthorised use will be subject to sanctions.

Date of update: 25 February 2026

The table below sets out detailed requirements for substrate preparation. Before commencing work, please also refer to the Technical Data Sheets for the products listed in the table. The times given in the table are recommended for application and curing conditions at a temperature of approx. 20 °C and 50% humidity.

Newly laid ATLAS POSTAR 10 cement-based floor screeds	Substrate moisture content 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 laid ATLAS POSTAR 20 cement floor screeds	Substrate moisture content 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 laid ATLAS POSTAR 60 cement floor screeds	Substrate moisture content 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 laid ATLAS POSTAR 80 cement floor screeds	Substrate moisture content 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 laid ATLAS SMS 15 cement floor screeds	Substrate moisture content 4.0% CM - after approx. 8 hours for a screed thickness of 1–15 mm
Newly laid ATLAS SMS 30 cement floor screeds	Substrate moisture content 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-based screeds	Compressive strength minimum 12 MPa. Curing time: minimum 28 days Optimum moisture content < 4% by weight
Newly laid ATLAS MMS 60 hybrid floor screeds	Required substrate moisture content 1.0% CM - after approx. 14 days for a screed thickness of 2.0–4.0 cm - after approx. 21 days for screed thicknesses over 4.0 cm
Newly laid ATLAS SAM 100 anhydrite floor screeds	Substrate moisture content 1.0% CM - approx. 4 days for a thickness of 0.5–3.0 cm
Newly installed ATLAS SAM 200 anhydrite floor screeds	Substrate moisture content 1.0% CM - approx. 10 days for thicknesses of 2.5–4.0 cm - approx. 21 days for thicknesses from 4.1 to 6.0 cm If a white surface film appears during the drying of the screed, it should be removed mechanically by sanding, and then the entire surface should be vacuumed.
Cement and anhydrite screeds with underfloor heating (heated screeds)	Note: If the substrate is a floor screed with embedded underfloor heating, it must be thoroughly heated. Information on heating ATLAS floor screeds is provided in their technical data sheets. Tiles can be laid using ATLAS MEGA S1 adhesive on underfloor heating that is either switched on or switched off: - if tiles are laid on a subfloor with the underfloor heating switched off , the heating may be switched on after a minimum of 21 days, - when tiles are laid on a substrate with the underfloor heating switched on , its temperature must be stable and must not exceed +25 °C; for the next 21 days following tile installation, the substrate temperature must be maintained at no higher than +25 °C. It is not permitted to tile over other types of active (switched-on) under-tile heating, embedded, for example, in a layer of adhesive.
Walls made of brick or silicate, ceramic or aerated concrete blocks	A two-layer plaster finish (rough coat + finish coat) with a sharp finish is required. Bonding directly to an unplastered wall is only possible if the substrate meets the geometric requirements. In such cases, it is necessary to construct the wall with full-width joints (or to complete the jointing), as well as to repair any defects and unevenness using ready-mixed mortars.
Cement and cement-lime plasters made from ATLAS ready-mixed mortars	Curing time: minimum 3 days per 1 cm of thickness Optimum moisture content < 4% CM
Other cement and cement-lime plasters	Minimum category CS III Curing time: minimum 7 days per 1 cm of thickness
Gypsum plasters	Recommended compressive strength > 4 MPa If the gypsum plaster is applied in a damp room, it must be carefully protected against moisture, e.g. by applying an insulating coating of ATLAS WODER E or ATLAS WODER W. Gypsum finishing coats must be removed.
Substrates levelled with mortar ATLAS ZW 330	Substrate moisture content 1.0% CM - 5 hours for a layer thickness of 5 mm

	- 10 hours for a layer thickness of 10 mm - 20 hours for a layer thickness of 20 mm - 48 hours for a layer thickness of over 20 mm
Concrete substrates	Curing time: minimum 3 months Optimum moisture content < 4% by weight Thoroughly clean off any residues of concrete release agents and other substances that may impair adhesion Repair any defects, spalling or other damage using one of the following mortars: - ATLAS ZW 330 - ATLAS FILER S Prime with ATLAS ULTRAGRUNT
New waterproofing systems using ATLAS products	- ATLAS WODER E - cladding can be installed after 2 hours for damp-proofing and after 4 hours for waterproofing - ATLAS WODER W - cladding can be installed after 24 hours - ATLAS WODER DUO – cladding can be installed after 12 hours - ATLAS WODER SX – cladding can be installed after 40 hours
Terrazzo	Thoroughly degrease the surface; in the case of trowelled terrazzo, remove the top layer or the entire surface and apply a new primer. Prime with ATLAS ULTRAGRUNT.
Oil-based paint coatings and resin varnishes	Coatings with poor adhesion to the substrate should be removed mechanically. Stable coatings that are well bonded to the substrate: sand down, dust off; prime oil-based coatings with ATLAS ULTRAGRUNT. Remove any gypsum-based fillers used to level the substrate.
Existing ceramic or stone tile cladding	- assess the adhesion of the existing cladding to the substrate by tapping - tiles from the old cladding that have become detached from the substrate must be removed - fill any voids, e.g. with ATLAS ZW 330 - thoroughly clean and degrease the surfaces of the remaining tiles - Matt the glazed tiles using a grinder with a diamond disc - Clean all surfaces of dust - Prime with ATLAS ULTRAGRUNT