

ELASTIFIED ADHESIVE MORTAR ATLAS

general-use adhesive 2-10 mm

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



Elastified formula

Improvement of the adhesive working parameters makes use of the mortar more pleasant and easier.

Enhancing the adhesive with plasticizing additives makes it to meet the expectation of a tiler at each stage of work.

Mixing. The adhesive is less susceptible to aeration and forms homogenous mixture – uniform in terms of distribution of the components within the whole mass volume. This property, backed up with the perfect selection of the aggregate composition guarantees the highest durability of the adhesive layer.

Scooping with trowel. The adhesive is characterized by optimum viscosity guaranteeing lossless transfer from the container onto the trowel and from the trowel onto the substrate.

Application onto the substrate. The adhesive spreads perfectly upon the surface – the bonding strength of the mortar is high enough to prevent the adhesive from “rolling” onto the trowel (for properly primed substrate).

Fixing the tile. The ideally selected viscosity allows for easier handling of the fixed tile.

Properties

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

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

Use

CLADDING TYPE	
glazed tiles	+
terracotta	+
porcelain gres	+
natural stone cladding (granite, marble, travertine, syenite, slate, etc.)	*perform application test
clinker	+
ceramic mosaic	+
concrete/cement mortar tiles	+

SIZE OF INSTALLED ELEMENTS	
small, medium and large sized tiles (≤ 0,1 m ²), greater edge size ≤ 40 cm	+

OBJECT TYPE	
residential buildings	+
public access, educational, office, healthcare commercial and service facilities, sacral buildings – rooms with low exploitation loads	+

INSTALLATION AREA	
surfaces with low traffic	+
surfaces with low exploitation loads in any type of buildings	+
kitchen, bathroom, laundry, garage (in residential buildings)	+
corridors	+
external post stairs (e.g. cantilever stairs)	+
cladding on a plinths	+

SUBSTRATE TYPE	
concrete	+
anhydrite screeds	+
cement, cement-lime plasters	+
gypsum plasters in dry room areas	+
walls made of cellular concrete	+
walls made of silicate brick or hollow blocks	+
walls made of ceramic brick or hollow blocks	+
walls made of gypsum blocks	+

Technical data

Mass bulk density (after mixing)	approx. 1.6 g/cm ³
Mixing ratio (water/dry mix)	0.21 – 0.24 l / 1 kg 1.05 – 1.20 l / 5 kg 2.10 – 2.40 l / 10 kg 5.25 – 6.00 l / 25 kg
Min./max. adhesive thickness	2 mm / 10 mm
Adhesive preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Maturing time*	approx. 5 minutes
Pot life*	approx. 4 hours
Open time*	min. 30 minutes
Adjustability time*	10 minutes
Floor access/ grouting*	after approx. 24 hours
Full operation load – foot traffic*	after approx. 3 days


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

Detailed guidelines concerning the substrate preparation, depending on its type.

Substrate type	Recommendations
Freshly applied cement screeds ATLAS POSTAR 80, ATLAS SMS 15 or SMS 30	Stabilized min. 24 hours; optimum moisture content < 4% by weight.
Freshly applied cement screed ATLAS POSTAR 20	Stabilized min. 2 days; optimum moisture content < 4% by weight.
Other cement screeds	Stabilized min. 28 days; optimum moisture content < 4% by weight. Prime with ATLAS UNI-GRUNT or ATLAS UNI-GRUNT PLUS.
Anhydrite screeds ATLAS SAM 100, SAM 150, SAM 200 or SAM 500	Stabilized min. 2-3 weeks; optimum moisture content < 0.5% by weight. Prime with ATLAS UNI-GRUNT or ATLAS UNI-GRUNT PLUS. If, white surface tarnish forms during screed drying, it should be removed mechanically (grinded) and the surface dedusted. Screed grinding accelerates the process of drying.
Walls made of silicate or ceramic bricks and hollow blocks, cellular concrete	Levelling coat required (plaster). Direct fixing onto rough wall is possible in case of appropriate substrate dimensional tolerance. In such case it is necessary to execute full joint wall (or re-fill the joints) and repair any gaps or irregularities with ready-to-use mortars. Prime with ATLAS UNI-GRUNT.
Cement and cement-lime plasters of ready-to-use ATLAS mortars	Stabilized min. 3 days* for each 10 mm of thickness; optimum moisture content < 4% by weight.
Other cement and cement-lime plasters	Stabilized min. 7 days*. Prime with ATLAS UNI-GRUNT.
Gypsum plasters (in dry room areas only)	Prime with ATLAS UNI-GRUNT. If gypsum plaster is applied in a wet room it should be thoroughly protected against moisture. If dampness has form of short term action or moderate water splash, then the plaster should be coated with a preparation improving resistance against damp penetration, e.g. ATLAS GRUNTO-PLAST.
Substrates levelled with ATLAS ZW 330 mortar	Stabilized min. 5 h for layer thickness 5 mm. Stabilized min. 10 h for layer thickness 10 mm. Stabilized min. 20 h for layer thickness 20 mm. Stabilized min. 48 h for layer thickness above 20 mm.
Concrete	Stabilized min. 21 days; optimum moisture content < 4% by weight. Remove residues of formwork oils and other substances which would impair adhesion. Prime with ATLAS ULTRAGRUNT. Holes, cracks and other gaps should be filled with ATLAS TEN-10 or ATLAS ZW 330 mortars.

*) The time shown in the table is recommended for application at the temperature 20°C and humidity 50%.

Technical requirements

 2007,0767	PN-EN 12004+A1:2012 (EN 12004:2007+A1:2012)
ELASTIFIED ADHESIVE MORTAR ATLAS (2019)	
Intended use:	for any internal and external application of the tiles, for indoor and outdoor use.
Reaction to fire	A1 WT/A11fWT
Bonding strength defined as: - initial bonding	≥ 0,5 N/mm ²
Bonding strength in conditions of conditioning/thermal ageing defined as: - bonding after thermal ageing	≥ 0,5 N/mm ²
Bonding strength in conditions of action of water/humidity defined as: - bonding after immersion in water	≥ 0,5 N/mm ²
Bonding strength in conditions of freeze/thaw cycles defined as: - bonding after freeze/thaw cycles	≥ 0,5 N/mm ²

Substrate preparation

The substrate should be:

- **stable** – sufficiently sound, resistant to deformation, free from materials which would impair adhesion, stabilized.
- **even** – maximum adhesive thickness is 10 mm, in case of larger irregularities use, e.g. ATLAS ZW 330 mortar, screeds ATLAS SMS, SAM or POSTAR.
- **clean** – free from layers which can impair adhesion, especially dust, dirt, lime, oils, greases, wax, residues of oil and emulsion paints. The substrate coated with algae, fungi, etc. must be cleaned and protected with ATLAS MYKOS NO 1 or ATLAS MYKOS PLUS agent.
- **primed with:**
 - ATLAS UNI-GRUNT or ATLAS UNI-GRUNT PLUS – substrates of excessive or heterogeneous absorptiveness,
 - ATLAS GRUNTO-PLAST OR ATLAS ULTRAGRUNT – if the substrate absorptivity is low, or it is coated with layers limiting the adhesion.

Cladding installation

Adhesive preparation

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

Adhesive application

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

Installing the tiles

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

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

Tile adjustment

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

Grouting and cladding use

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

Exemplary technological cycle of cladding installation.

Step (following layer)	Product	Conditioning of the layer before execution of the next step*
Substrate levelling	mortar ATLAS ZW 330	approx. 5 hours
	mortar ATLAS ZW 50	approx. 12 hours
	scree ATLAS POSTAR 80 scree ATLAS SMS 15 scree ATLAS SMS 30	approx. 1 day
	scree ATLAS POSTAR 20	approx. 2 days
	scree ATLAS POSTAR 10 scree ATLAS SAM 100	approx. 14 days
	scree ATLAS POSTAR 100 scree ATLAS POSTAR 40 scree ATLAS SAM 150 scree ATLAS SAM 200 scree ATLAS SAM 500	approx. 21 days
Installation of tiles	ELASTIFIED ADHESIVE MORTAR ATLAS	approx. 24 h
Grouting of tiles	grouting mortar ATLAS	-

*detailed conditions regarding conditioning are shown in Technical Data Sheets of relevant products.

Consumption

Average consumption listed in the table below refers to application upon even substrates. Substrate irregularities increase the actual mortar consumption. In case of mixed method of fixing the adhesive consumption is greater.

Tile size [cm]	Area of application	Recommended notch size [mm]	Consumption [kg/m ²]
2 x 2	wall	4	1.3
	floor	4	1.3
10 x 10	wall	4	1.3
	floor	6	2.0
20 x 25	wall	6	2.0
	floor	8	2.5
25 x 40	wall	6	2.0
	floor	8	2.5
30 x 30	wall	6	2.0
	floor	8	2.5

Important additional information

- The tiles must not be soaked before fixing. When determining the adhesive thickness under the cladding, one should consider the geometric deviation of tiles shape, e.g. plane warpage.
- Conduct test application prior to fixing elements made of natural stone – apply a single tile. Keep the 60% of surface bonding (leave 40% of a tile with no contact with adhesive). Check the tile appearance after 2-3 days. The test is passed when there is no difference of shade of tile surface in contact and not in contact with adhesive.
- When fixing the tiles on weak substrates which bearing capacity is difficult to establish (e.g. dusty, difficult to clean), it is recommended to perform an adhesion test by fixing a tile and checking the bond after 48 hours.
- Open time – from the moment of application of the adhesive to the moment of placing the tiles upon it – is limited. In order to check if it is still possible to fix tiles, performing a test is recommended. It consists in pressing your fingers against the adhesive. If the adhesive remains on the fingers, you may fix the tiles. If the fingers are clean, the old layer of the adhesive has to be removed and a new one applied.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set adhesive can be removed with the ATLAS AGENT FOR REMOVAL OF CEMENT DEPOSITS AND STAINS.
- Contains cement. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions of the Safety Data Sheet.
- The adhesive must be transported and stored in closed, original and labelled packaging, in dry conditions (most preferably on pallets). Keep away from direct sunlight. Keep in dry, cool and well ventilated room, away from incompatible materials (see Section 10 of Safety Data Sheet), food and beverages. Protect against humidity - product gets irreversibly solid after exposure to the humidity. Shelf life of mortar packed in foil bags in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

Packaging

Paper bags: 5 kg, 10 kg, 25 kg.

The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations.

At the time of publication of this product data sheet all previous ones become void. An up-to-date product technical documentation available at www.atlas.com.pl/en. Date of update: 2019-02-15