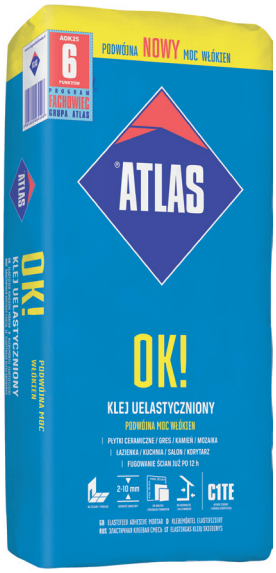

C1TE
PRODUCT CONFORMS TO THE EUROPEAN STANDARD

OK! – ELASTIFIED ADHESIVE
Double strength of fibres

- improved mechanical strength
- for ceramic tiles, including mosaic and porcelain-gres
- compensation of contraction during the process of binding
- greater cladding stability
- grouting just after 12/24 hours
- temperature of application from +5°C up to +30°C

Technology of double fibres

ATLAS DOUBLE FIBRES TECHNOLOGY is based on a mix of polypropylene and cellulose fibres.
The polypropylene fibres used in this technology are materials characterised by high chemical resistance to acid, alkali, solvent or salt action. They are hydrophobic, almost nonabsorbable, therefore resistant to microbiological corrosion. The fibres improve mechanical performance of the mortar as they form diffused reinforcing within the mortar structure.
The cellulose fibres get elastic and ductile under water action. They increase their volume and enable free transport of water along fibres, therefore significantly influence the mortar workability – improve mortars rheology, reduce slip, extend open time and increase the substrate wettability. Cellulose fibres prevent too quick water retention by the substrate, therefore set OK! – ELASTIFIED ADHESIVE gets the best technical performance, such as bonding to the substrate and strength.

TECHNOLOGY OF DOUBLE FIBRES in OK! – ELASTIFIED ADHESIVE gives the following advantages:

- improvement of strength parametres,
- improvement of water retention in the mortar: fibres reduce the result of sudden water retention both on joint with absorbable substrate and absorbable tile as well as within the evaporation zone; during adhesive binding and drying (particularly when applied with maximum coat) the fibres accumulate and transport water and keep its uniform level within the whole coat,
- limitation of the effect of tile "sinking",
- significant improvement of workability,
- improvement of tiles stability just after fixing to the substrate.

Properties

OK! – ELASTIFIED ADHESIVE is manufactured as a dry mix of high quality cement binder, aggregates, fibres and special composition of modifiers with polymers. Improved formula gives the product the greatest technical parametres in its class and allows to use widely in residential housing. The technology used in the mortar ensures:

- **wide range of layer thickness (2-10 mm),** therefore enables thin coat installation of cladding, also on uneven substrates, as well as mineral substrates levelling,
- **extended open time** - allows placing tiles on adhesive even 30 minutes since application upon the substrate – it can be once applied onto larger surface and therefore significantly reduce 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.

Use

TYPE OF FIXED CLADDING	POSSIBILITY OF USE
glazed tiles	+
terracotta	+
porcelain-gres tiles	+
natural stone cladding (granite, marble, travertine, syenite, slate, etc.)	application test required
clinker	+
ceramic mosaic	+
concrete/ cement tiles	+

SIZE OF FIXED ELEMENTS	POSSIBILITY OF USE
max. tile size 40 x 60 cm	+

OBJECT TYPE	POSSIBILITY OF USE
residential housing	+
public access, educational, office, healthcare buildings commercial and service buildings sacral buildings	+ refers to rooms of low operational loads

PLACE TYPE	POSSIBILITY OF USE
surfaces of low traffic	+
surfaces of low operational load in any building type	+
kitchen, bathroom, laundry, garage (individual housing)	+
corridor	+
external slab stairs	+
plinth cladding	+

SUBSTRATE TYPE	POSSIBILITY OF USE
concrete	+
cement screeds and floors	+
anhydrite screeds	+
cement, cement-lime plasters	+
gypsum plasters in dry zones of rooms	+
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

Bulk density	approx. 1.6 g/cm^3
Mixing ratio (water/dry mix)	0.22 – 0.25 l / 1 kg 1.10 – 1.25 l / 5 kg 4.95 – 5.60 l / 22.5 kg 5.50 - 6.25 l / 25 kg
Min./max. adhesive thickness	2 mm / 10 mm
Adhesive preparation temperature, substrate and ambient temperature during application	from +5°C to +30°C
Maturing time	5 minutes
Pot life*	approx. 4 hours
Open time*	min. 30 minutes
Adjustability*	10 minutes
Grouting of wall/floor cladding*	after approx. 12/24 hours
Foot traffic*	after approx. 24 hours
Full operation load – foot traffic*	after 3 days

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

Technical requirements

The product conforms to PN-EN 12004+A1:2012 standard for C1TE class - cement adhesive for tiles, normal setting, of extended open time and reduced slip, for indoor and outdoor use, for walls and floors

CE 0767,1614	
19 OK! ELASTIFIED ADHESIVE (2019) EC Declaration of Performance no 223/1/CPR. EN 12004:2007+A1:2012 (PN-EN 12004+A1:2012)	
Reaction to fire	A1 $A1_{fl}$
Bonding strength defined as: - initial bonding	**≥ 0.5 N/mm²**
Bonding strength in conditions of conditioning/thermal ageing defined as: - bonding afrer thermal ageing	**≥ 0.1 N/mm²**
Bonding strength in conditions of action of water/humidity defined as: - bonding afrer immersion in water	**≥ 0.1 N/mm²**
Bonding strength in conditions of freeze/thaw cycles defined as: - bonding afrer freeze/thaw cycles	**≥ 0.1 N/mm²**

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

SUBSTRATE TYPE	PREPARATION
Freshly applied cement screeds ATLAS POSTAR 80, ATLAS SMS 15 or ATLAS SMS 30	Stabilized min. 24 hours; optimum moisture content < 4% by weight.
Freshly applied cement screeds ATLAS POSTAR 20	Stabilized min. 5 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, ATLAS SAM 150, ATLAS SAM 200 or ATLAS 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 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	Leveling 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 made of ready 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	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. In environment more subject to dampness it is necessary to apply a watertight coating, e.g. ATLAS WODER E.
Substrates leveled 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 obligatorily. 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 the application in the temperature 20°C and humidity 50% (approx.).

Substrate preparation

The substrate should be:

- **stable** – sufficiently sound, resistant to deformation, free from materials which would impair bonding, stabilized.
- **even** – maximum adhesive thickness is 10 mm, in case of larger irregularities use ATLAS ZW 330 leveling mortars or ATLAS SMS, SAM or POSTAR screeds.
- **clean** – free from layers which can impair adhesive bonding, especially dust, dirt, lime, oils, greases, wax, residues of oil and emulsion paints; substrate coated with algae, fungi, etc. must be cleaned and protected with ATLAS MYKOS PLUS or ATLAS MYKOS NO 1 agent.
- **primed:**

- with ATLAS UNI-GRUNT or ATLAS UNI-GRUNT PLUS – substrates of excessive or heterogenous absorptiveness,
- with ATLAS GRUNTO-PLAST or ATLAS ULTRAGRUNT – if the substrate absorptivity is poor or it is coated with layers limiting bonding.

Cladding installation

Adhesive preparation

Pour adhesive from a bag into a container with 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 remixed then after. 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, distributed uniformly and shaped (possibly in one direction) with 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 vertically.

Fixing the tiles

After application, the adhesive retains its properties for approx. 30 minutes (in temperature approx. 23 °C and 55 % humidity). Within this time, the tiles must be placed and pressed well (the contact surface between adhesive and tile should be uniform and as large as possible – min. 2/3 of the tile surface). Remove excessive adhesive pressed into the joints immediately. In case of floor tiles or tiling outdoors it is advisable to keep the full bonding technique (use the mixed method consisting in application of adhesive on the substrate and the back of a tile, if needed). Keep the joint width appropriate for the tile size and operational conditions (check data in the data sheets of ATLAS grouts).

Tile adjustment

The position of a tile can be adjusted with delicate moves along the plane of bonding. 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

It is advisable to use ATLAS mortars for grouting. Grouting of cladding applied on a wall is possible after 12 hours since the tiles fixing. Foot traffic and grouting of floor cladding is possible after 24 hours since the tiles fixing. The mortar reaches operational strength after 3 days (check the Technical Data section). 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 phases for tiling

PHASE (subsequent layer)	PRODUCT	Stabilization before execution of the next phase*
Substrate leveling	ATLAS ZW 330 mortar	approx. 5 hours
	ATLAS POSTAR 80 screed ATLAS SMS 15 screed ATLAS SMS 30 screed	approx. 1 day
	ATLAS POSTAR 20 screed	approx. 2 days
	ATLAS POSTAR 10 screed ATLAS SAM 100 screed	approx. 14 days
	ATLAS POSTAR 100 screed ATLAS POSTAR 40 screed ATLAS SAM 150 screed ATLAS SAM 200 screed ATLAS SAM 500 screed	approx. 21 days
Tiles fixing	OK! – ELASTIFIED ADHESIVE	approx. 12 hours - walls approx. 24 hours - floors
Grouting	ATLAS grouts	-

*detailed information on stabilization is given in Technical Data Sheets of individual 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]	Place of application	Recommended notch size [mm]	Consumption [kg/m²]
2 x 2	wall	4	1.7
	floor	4	1.7
10 x 10	wall	4	1.7
	floor	6	2.2
20 x 25	wall	6	2.2
	floor	8	2.9
25 x 40	wall	6	2.2
	floor	8	2.9
25 x 40	wall	6	2.2
	floor	8	2.9
40 x 40	wall	8	2.9
	floor	10	3.4
40 x 60	wall	8	2.9
	floor	10	3.4

Packaging

Paper bags: 5 kg, 22.5 kg, 25 kg

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 natural stone tiles or glass elements fixing – 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 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 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 fingers against the adhesive. If the adhesive remains on fingers, one can fix the tiles. If fingers are clean, the old layer of 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 set adhesive can be removed with the ATLAS AGENT FOR REMOVAL OF TOUGH CEMENT DEPOSITS agent.
- 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 tightly sealed bags, in dry conditions (most preferably on pallets). Do not expose product to direct sunlight. Keep in dry, cool and well ventilated room, away from incompatible materials (see Section 10 of Safety Data Sheet), beverages and food. Protect against humidity - products gets irreversibly solid after contact with humidity. While maintaining conditions above, no adverse reactions known. 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%.

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 technical product documentation is available at www.atlas.com.pl/en
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