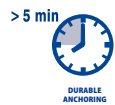


ATLAS MONTER T-5

fast setting assembly mortar

- for anchoring of construction elements
- beginning of setting just after 5 minutes
- compressive strength after 1 hour not less than 10.0 MPa
- blocks local water leakages
- for non-structural repairs of concrete and ferroconcrete elements (mortar with addition of sand)



Use

Anchoring of steel and plastic elements on vertical and horizontal surfaces.
Non – structural repairs of prefabricated elements – filling cracks and gaps in ceiling and wall slabs, floors and cement plasters (after mixing with sand in 1:1 ratio).

Temporal sealing of local water leakages – effectively fills the point of leakage.

Type of surface in which the element can be anchored	
cement mortars	+
ferroconcrete and concrete elements	+

Properties

ATLAS MONTER T-5 is manufactured as a dry mix of high quality cement binder, quartz fillers and modifiers.

Fast-setting – characterized by very short time of setting.

Rapid build-up of compressive strength – not less than 10.0 MPa after 1 hour.

Gives stable anchoring just after 5 minutes.

Can be used for filling gaps up to 40 mm wide – when mixed with quartz sand (grain size up to 2 mm) in 1:1 ratio.

Does not cause chloride corrosion of metal elements.

Technical data

Bulk density (of dry mix)	approx. 1.3 kg/dm ³
Mixing ratio (water/dry mix)	approx. 0.25 l/1 kg approx. 1.25 l/5 kg approx. 6.25 l/25 kg
Min./max. thickness	1 mm/ 25 mm for wider gaps (from 25 mm up to 40 mm) quartz sand (grain size up to 2.0 mm) can be added in 1:1 ratio
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +30°C
Pot life	approx. 5 minutes
Open time	approx. 5 minutes

Technical requirements

The product has been given:

- Domestic Technical Assessment ITB-KOT-2017/0185 edition 1 (Domestic Declarations of Performance no. K105 and K105-P of 24.10.2017)
- Certificate of Factory Production Control no. 020-UWB-0781/Z
- Radiation Hygiene Certificate
- Hygiene Certificate no. HK/W/0335/01/2013.

Declared Performance

Principal characteristic of construction product for intended use or uses	Declared performance of ATLAS MONTER T-5 mortar	Declared performance of ATLAS MONTER T-5 mortar mixed with quartz sand (grain size 0÷2 mm) in 1:1 ratio
Compressive strength of mortar: - after 1 hour - after 3 hours - after 6 hours - after 24 hours - after 28 days	≥ 10.0 MPa ≥ 12.0 MPa ≥ 15.0 MPa ≥ 20.0 MPa ≥ 44.0 MPa	≥ 10.0 MPa ≥ 12.0 MPa ≥ 15.0 MPa ≥ 20.0 MPa ≥ 44.0 MPa
Compressive strength of mortar hardening in temp. +5°C: - after 1 hour - after 3 hours - after 6 hours - after 24 hours - after 28 days	≥ 4.0 MPa ≥ 8.0 MPa ≥ 9.0 MPa ≥ 14.0 MPa ≥ 28.0 MPa	≥ 4.0 MPa ≥ 7.0 MPa ≥ 9.0 MPa ≥ 12.0 MPa ≥ 28.0 MPa
Modulus of elasticity at compression after 28 days	≥ 15.0 GPa	≥ 15.0 GPa
Flexural strength	≥ 9.0 MPa	≥ 7.5 MPa
Shear strength	≥ 10.5 MPa	≥ 9.5 MPa
Bonding to concrete at shear of steel coated with mortar	≥ 50.0 kN	no testing required
Bonding to concrete of Ø16 mm ribbed bars coated with mortar : - in dry conditions - in damp conditions	≥ 12.5 MPa ≥ 13.5 MPa	no testing required
Displacement of Ø16 mm ribbed bars coated with mortar at load of 75 kN : - in dry conditions - in damp conditions	≤ 0.6 mm ≤ 0.6 mm	no testing required
Bonding to concrete: - mortar with quartz sand, aged in laboratory conditions - mortar with quartz sand, aged in temp. +5°C	no testing required	≥ 0.8 MPa ≥ 0.8 MPa
Bonding to damp concrete: - mortar with quartz sand, aged in laboratory conditions - mortar with quartz sand, aged in temp. +5°C	no testing required	≥ 1.8 MPa ≥ 0.9 MPa
Thermal compatibility (freezing-thawing), 50 cycles, defined with: - change of bonding to concrete - bonding to concrete - change of appearance	no decrement not tested no cracks and debonding	not tested ≥ 0.6 MPa no cracks and debonding
Content of chloride ions	≤ 0.05%	≤ 0.05%
Condition of reinforcement coated with mortar (mortar without sand tested)	passive	passive
Bonding of plastic to mortar in concrete at shear	≥ 0.5 kN	no testing required
Capillary absorption	≤ 0.1 kg/m ² ·h ^{0.5}	≤ 0.1 kg/m ² ·h ^{0.5}
Linear thermal expansion coefficient	≤ 0,5 · 10 ⁻⁴ °C ⁻¹	≤ 0,5 · 10 ⁻⁴ °C ⁻¹
Linear shrinkage	≤ 0.02%	≤ 0.02%
Blocking properties	stops leakage of water just after application	stops leakage of water just after application
Water permeability under increased pressure – no leakage at pressure	≥ 0.3 MPa	≥ 0.3 MPa

Elements anchoring

Substrate and anchored element preparation

The substrate should be dense, sound and free from layers which would impair mortar bonding, in particular dust, dirt, lime, oil, grease, wax. The surface should be coarse and porous.

Prepare the element to be anchored in a similar way, i.e. clean of rust and old paint coatings. In order to reduce the absorptivity, wet the substrate surface until matt-wet before application of the mortar.

Preparation of mortar with no addition of sand

Pour the mortar from the bag into a container with appropriate amount of water (see Technical Data for ratio) and mix using a mixer with a drill until homogenous. The mortar should be used up within approx. 5 minutes.

Preparation of mortar with addition of sand

Mix the material from a bag with sand of grain size up to 2 mm, keep the 1:1 ratio. Pour the mixed components into a container with appropriate amount of water (see Technical Data for ratio) and mix using a mixer with a drill until homogenous. The mortar should be used up within approx. 5 minutes.

Element anchoring

Size of clearance to be filled with mortar between the sides of the opening and fixed element should be 25 mm large. The anchored element should be placed in the prepared opening or groove and properly stabilized in order to prevent displacement during the mortar pouring. The free space around the element should be filled with ATLAS MONTER T-5 mortar.

Note: Do not change the position of the anchored element when the mortar is setting.

Surface repairs

The mortar prepared with addition of sand should be pressed against the substrate and the expected shape formed. The surface can be floated with a steel trowel or a sponge.

Temporal sealing of local water leakages

The gap should be broadened, form so called "swallow tail" shape and clean.

Option I – leakage not yet occurring (prevention). Prepare the mortar (with or without additional sand) with standard amount of water, press into a gap and keep with a hand (by foil) until it hardens completely (approx. 5 minutes).

Option II – leakage occurring. Prepare the mortar (without additional sand) of damp earth consistency, press into a gap and keep with a hand (by foil) until it hardens completely (approx. 5 minutes).

Consumption

The average consumption is 1.8 kg of dry mix for 1 dm³ of filling mass.

Important additional information

- Due to the phenomenon of metal corrosion in moist environment, the surface of ATLAS MONTER T-5 mortar used for anchoring and embedding in conditions exposed to permanent damp should be protected against the access of aggressive environment.
- Addition of quartz sand (in 1:1 ratio, for layers from 25 mm up to 40 mm wide) reduces the strength of the anchoring.
- Time of setting (defined for 5 minutes) depends on temperature: in low temperature (approx. 5°C) will extend, in high temperature (approx. 30°C) will shorten.
- During application and directly after, the surface should be protected against precipitation and excessive drying (moist with water or cover with foil, if needed).
- Water reservoirs designated for drinking water should be washed with water after the product stabilization.
- Tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with the ATLAS SZOP 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 mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets). Protect against humidity. Shelf life 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

Foil bags: 5 kg, paper bags: 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. Date of update: 2017-11-13