



ATLAS MONTER T-5

rapid-set assembly mortar

- firmly fixed after 5 minutes
- for fixing steel and plastic parts
- 10 MPa strength after 1 hour
- for sealing point water leaks



Properties

ATLAS MONTER T-5 is produced as a dry mixture of the highest quality cement binder, quartz fillers and modifying additives.

It is a **fast-setting product** - it has a very short curing time

Very rapid increase in compressive strength - no less than 10.0 MPa after just one hour.

Allows a **permanent fix** to be achieved in as little as 5 minutes.

Allows **filling of fissures up to 40 mm wide** - when mixed with quartz sand (grain size up to 2 mm) at a ratio of 1:1.

Does not cause **chloride corrosion of metal components**.

Purpose

Fixing of steel and plastic components on vertical and horizontal surfaces.

Non-structural repair of prefabricated elements - filling cracks and cavities in floor and wall slabs, floors and cement plaster (after adding sand 1:1) ceiling and wall slabs, floors and cement plaster (after adding sand in a 1:1 ratio)

Temporary sealing of point water leaks - effectively fills the leak area.

Type of components to be installed	
foundation bolts, anchors, hooks, dowels, dowels	+
grilles	+
guide or corner mouldings	+
manholes: manholes, ladders, covers, etc.	+
technology pipework, wall penetrations: installation of pipe clamps, fixing of installation pipes at wall or ceiling penetrations	+
door joinery: fixing of anchoring elements (hinges, so-called "moustache"), fitting of steel frame brackets	+
fencing: installation of posts in sockets left in the foundation, installation of gate hinges and fence gates,	+
electrical, water, gas installation of boxes, sockets, covers, electrical boxes, brackets and other installation elements in walls	+
linear and point drainage: for the fitting of linear drainage troughs and point drains including pipe penetrations through floors	+
balconies and terraces: for fitting railings in masonry, for fitting balustrade posts in structural slabs or sleepers	+

Type of surface in which the component can be anchored	
cement mortars	+
reinforced and concrete elements	+

Technical data

Bulk density (dry mix)	approx. 1.3 kg/dm ³
Mixing ratio water / dry mix	0.25 l / 1 kg 1.25 l / 5 kg 6.25 l / 25 kg
Min. / max. thickness	1 mm / 25 mm for larger joint widths (from 25 to 40 mm), quartz sand (grain size up to 2 mm) at a ratio of 1:1
Temperature of mortar preparation and substrate and ambient temperature during the work	from +5 °C to +30 °C
Pot life	approx. 5 minutes
Open working time	approx. 5 minutes

The times indicated in the table are recommended for application conditions of approx. 20 °C and 50-60 % humidity.

Technical requirements

ATLAS MONTER T-5 has a National Technical Assessment ITB-KOT-2017/0185 2nd Edition National Declaration of Performance:

- No K105/2022,
- No K105-P/2022.

A table with information can be found at the end of the Technical Sheet.

Assembly of components

Preparation of the substrate and the anchored element

The substrate should be compact, load-bearing and cleaned from layers that could weaken the adhesion of the mortar, especially from dust, dirt, lime, grease, wax. The surface should be rough and porous.

The anchored element should be prepared in the same way, among other things it is advisable to remove rust and old paint from its surface. In order to reduce absorption, the substrate surface should be moistened with water to a dull wet state before the mortar is applied.

Mortar preparation without sand

Pour the material from the bag into a vessel with a measured quantity of water (proportions given in the Technical Data) and mix with a drilling machine with an agitator until a homogeneous consistency is obtained. The mortar should be used within approx. 5 minutes.

Preparation of mortar with sand

Mix the material from the bag with sand of grain size up to 2 mm at a ratio of 1:1 by weight. Pour the mixed components into a vessel with a measured amount of water (proportions given in the Technical Data) and mix with a drilling machine with an agitator until a homogeneous consistency is obtained. The mortar should be used within approx. 5 minutes.

Element attachment

The size of the mortar-filled clearance between the walls of the hole and the element to be fixed should be 25 mm. The element to be anchored should be placed in the prepared hole or groove and stabilised so that it is not displaced during grouting.

The free space around the element should be filled with mortar. The free space around the element should be filled with ATLAS MONTER T-5 mortar.

Caution. Do not change the position of the anchored element while the mortar is setting.

Surface repair

Press the mortar prepared with sand firmly into the substrate and mould to the desired shape. The surface can be smoothed with a steel trowel or sponge.

Temporary sealing of point source water leaks

Widen the gap, shape it into a so-called "dovetail" and clean.

Variant I - leakage not yet present (prevention). Prepare mortar (with or without sand) with the normal amount of water, press firmly into the joint and hold in place by hand (through foil) until completely hardened (approx. 5 minutes).

Variant II - occurs. Prepare mortar (without sand) to the consistency of wet earth, press firmly into the joint and hold in place with your hand (through the foil) until completely hardened (approx. 5 minutes).

Consumption

On average, approximately 1.8 kg of dry matter per 1dm³ of filler is used.

Packaging

- 5 kg alubag,
- 25 kg paper bags.

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 (best before use) is 12 months from the date of manufacture on the packaging.

Important additional information

Due to the occurrence of corrosion of metal components in humid conditions it is recommended that the ATLAS MONTER T-5 assembly mortar used for anchoring and embedding of and embedding of metal elements in conditions of permanent dampness should be surface-protected against the access of aggressive environment.

The addition of quartz sand (at a ratio of 1:1, when using layers between 25 mm and 40 mm wide), reduces the anchorage strength.

The setting time (set at 5 minutes) depends on the temperature: at low temperatures (approx. 5°C) it will lengthen, and at high temperatures (approx. 30°C) it will shorten.

Protect the surface to be treated during and immediately and immediately after completion of the work from precipitation and excessive drying (if necessary, dampen with water or cover with plastic sheeting).

Water tanks for human consumption should be thoroughly rinsed with water after the products have been seasoned.

Tools should be cleaned with clean water, immediately after use. Difficult to remove remains of the set mortar are washed with ATLAS CEMENT AWAY

The information contained in this Technical Data Sheet is a basic guideline for the use of the product and does not release you from 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 Technical Data Sheet and the designations and trade names used therein are the property of Atlas Ltd. Their unauthorised use will be sanctioned.

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Essential characteristics of the construction product for the intended use or uses	Declared performance characteristics for ATLAS MONTER T-5 mortar	Declared performance properties for ATLAS MONTER T-5 mortar mixed with quartz sand fraction (0+2 mm) in weight ratio 1:1
Mortar compressive strength: - 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	≥ 8.0 MPa ≥ 10.0 MPa ≥ 12.0 MPa ≥ 16.0 MPa ≥ 38.0 MPa
Compressive strength of mortar hardening at +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 under compression after 28 days	≥ 15.0 GPa	≥ 15.0 GPa
Bending strength	≥ 9.0 MPa	≥ 7.5 MPa
Shear strength	≥ 10.5 MPa	≥ 9.5 MPa
Adhesion of mortared steel to concrete in shear	≥ 50.0 kN	not subject to testing
Adhesion of mortar-wrapped $\varnothing 16$ mm ribbed bars to concrete: - in dry conditions - in wet conditions	≥ 12.5 MPa ≥ 13.5 MPa	not subject to testing
Displacement of mortar lagged $\varnothing 16$ mm ribbed bars, under a load of 75 kN: - in dry conditions - in wet conditions	≤ 0.6 mm ≤ 0.6 mm	not subject to testing
Adhesion to concrete substrate: - mortar with quartz sand, matured under laboratory conditions - mortar with quartz sand, maturing at +5 °C	-	≥ 0.8 MPa ≥ 0.8 MPa
Adhesion to damp concrete substrate: - mortar with quartz sand, matured under laboratory conditions - mortar with quartz sand, cured at +5 °C	-	≥ 1.8 MPa ≥ 0.9 MPa
Thermal compatibility (freeze-thaw), 50 cycles, specified: - change in adhesion to concrete substrate - adhesion to concrete substrate - change in appearance	-	not tested ≥ 0.6 MPa No cracks or separations
Chloride ion content	$\leq 0.05\%$	$\leq 0.05\%$
Condition of reinforcement in mortar cover (test on mortar without sand)	-	passive
Shear adhesion of plastic to mortar in concrete	≥ 0.5 kN	Not subject to testing
Capillary absorption	$\leq 0.1 \text{ kg/m}^2 \cdot \text{h}^{0.5}$	$\leq 0.1 \text{ kg/m}^2 \cdot \text{h}^{0.5}$
Coefficient of linear thermal expansion	$\leq 0.5 \cdot 10^{-4} \text{ }^\circ\text{C}^{-1}$	$\leq 0.5 \cdot 10^{-4} \text{ }^\circ\text{C}^{-1}$
Linear shrinkage	$\leq 0.02\%$	$\leq 0.02\%$
Alloying properties	-	stops water leakage immediately after application
Water permeability under increased pressure - no leakage under pressure	0.3 MPa	0.3 MPa