



Up to five  
European Technical Approvals  
for ATLAS insulation systems



## ATLAS STOPTER K-20

### 2 in 1 - adhesive mortar for polystyrene and XPS and for mesh embedding

- very good bonding
- reinforced with microfibres
- resistant to cracks and scratches
- can be used in low temperature (even from 0°C)
- also for graphite polystyrene



FOR WALLS



FROST AND WATERPROOF



EASY TO USE



APPLY WITH FLOAT



APPLY WITH TROWEL



APPLY WITH NOTCHED TROWEL

## Use

**2 in 1** – for installation of thermal insulation boards and application of base coat of thermal insulation systems.

**Component of thermal insulation systems** – element of composite thermal insulation systems, which have been given both European (ETA) and domestic (AT) technical approvals.

**Recommended for insulation of passive and energy efficient buildings** – helps to reach the partition tightness required in passive housing, fixes insulation boards even 25 cm thick.

**Installation of various types of polystyrene and extruded polystyrene boards** – including graphite, graphite-enhanced and elastified ones.

**Enables work within wide range of temperature** – from 0°C during application and down to -5°C within 8 hours since the installation.

**Types of substrates** – concrete of any class, aerated concrete, cement and cement-lime plasters, sandstone, rough walls made of bricks, blocks, hollow blocks and other ceramic or silicate materials.

## Properties

**Improved resistance to cracking** – reinforced with cellulose microfibres.

**Highly flexible** – perfectly compensates stress resulting from thermal and operation loads.

**Very good bonding** – strongly bonds to difficult substrates, e.g. surfaces coated with strongly bonded paints.

**Water vapour permeable** – does not limit free transfer of water vapour through the insulated partition.

## Technical data

ATLAS STOPTER K-20 is manufactured as a dry mix of high quality cement binder, aggregates and modifiers, reinforced with cellulose fibres.

Bulk density (of dry mix)	approx. 1.55 kg/dm <sup>3</sup>
Mass bulk density (after mixing)	approx. 1.60 kg/dm <sup>3</sup>
Dry density (after setting)	approx. 1.47 kg/dm <sup>3</sup>
Mixing ratio (water/dry mix)	0.20 ÷ 0.22 l/1 kg 5.00 ÷ 5.50 l/25 kg
Min./max base coat thickness	2 mm/ 5 mm
Bonding to concrete in air-dry state	≥ 0.25 MPa
Bonding to polystyrene in air-dry state	≥ 0.08 MPa
Mortar preparation temperature, substrate and ambient temperature during work	from 0°C to +25°C
Maturing time	approx. 5 minutes
Pot life	approx. 4 hours
Open time	min. 25 minutes

## Technical requirements

ATLAS STOPTER K-20 is listed in the following technical approvals for thermal insulation systems:

System name	Technical Approval No.	Certificate No.
ATLAS	ETA 06/0081	EC 1488-CPD-0021
ATLAS XPS	ETA 07/0316	EC 1488-CPD-0075
ATLAS ETICS	AT-15-9090/2014	FPC No. ITB-0562/Z
ATLAS RENOTER	AT-15-8477/2010 + Annex 1	FPC No. ITB-0456/Z
ATLAS CERAMIK	AT-15-8592/2011 + Annex 1	FPC No. ITB-0472/Z

The product has been given the National Standard Authority of Ireland (NSAI) Certificate no. 10/0347 and the British Board of Agrément (BBA) Certificate no. 13/5018.

The product has also been given the ITB Technical Approval AT-15-3092/2013. Certificate of Factory Production Control Certificate no. ITB-0563/Z. Domestic Declaration of Conformity 003-1 of 22.04.2013. The product has been given the Hygienic Certificate and the Radiation Hygiene Certificate.

## Boards and base coat installation

### Substrate preparation for boarding

The substrate should be frost-free, stable, even and structurally sound, i.e. strong enough, free from layers which would impair the mortar bonding, in particular dust, dirt, lime, oil, grease, wax, remains of emulsion and oil paints. Prior to repair works substrate should be cleaned and, if excessively absorptive, primed with ATLAS UNI-GRUNT emulsion. Prime also weak cement, cement-lime plasters and rough walls made of cellular concrete or hollow cinder blocks. Major irregularities or cavities should be filled with ATLAS ZW 330 or ATLAS PLASTERING MIX.

### Boards preparation for base coat

The boards surface should be frost-free, even, clean, stable and dusted, if boards have been grinded since fixing. It is advisable to grind and dust graphite boards prior to base coat application.

### Mortar preparation

Pour the mortar from the bag into a clean container with the suitable amount of water (see Technical Data for ratio) and mix using a mixer with a drill until homogenous. Leave the mortar to rest for 5 minutes and remix. The mortar should be used up within approx. 4 hours.

### Boarding

Apply the mortar on the back side of a board with the "strip-point method", i.e. apply continuous circumferential bead (min. 3 cm wide) along the board edges and 6-8 patches (of diameter 8-12 cm) evenly distributed upon the board surface. In total, mass should coat min. 40% of the board surface (60% after pressing the board to substrate) and provide appropriate bonding between the board and the wall. Just after mortar application the board should be placed upon substrate and pressed onto expected place, so the mortar thickness beneath the board does not exceed 10 mm. In case of even and smooth substrates, it is acceptable to spread the mortar evenly with a notched trowel upon the whole board surface, so it forms layer 2-5 mm thick after fixing.

### Base coat application

Base coat can be applied when adhesive mortar used for boards fixing sets appropriately and after additional mechanical fixing (after 3 days on average). Apply mortar upon fixed insulation, spread with a notched trowel and embed the fiberglass mesh. Embed the mesh with vertical strips and float smooth, so it's fully coated and does not contact polystyrene boards directly.

### Finishing works

Rendering can commence when weather conditions meet the requirements listed in the technical data sheets of thin-coat renders, not earlier however than 3 days since the base coat installation.

## Consumption

The actual consumption depends on substrate parameters (e.g. evenness) and technology of boards installation.

Boarding: from 4.0 up to 5.0 kg/1 m<sup>2</sup>.

Base coat application: from 3.0 up to 3.5 kg/1 m<sup>2</sup>.

## Important additional information

- Do not fix heated graphite polystyrene. Protect graphite polystyrene against heating up during installation and initial adhesive setting. Heating graphite polystyrene during any of these phases can result in the adhesive loosening.
- The mortar parameters are used to its full advantage only when applied in combination with other system components and according to the technology of system installation.
- Use scaffolding covers during work. Do not carry out installation during snowfall, rain and in strong wind.
- When fixing the boards onto poor substrates of hard to determine bearing capacity (e.g. unstable, dusty, hard to clean), it is advisable to conduct a test of bonding. It consists in fixing 8-10 polystyrene cubes (10x10 cm large) at various façade points and checking the bond after 3 days. The substrate strength can be assumed as acceptable when polystyrene cube breaks within when teared off. If the cube tears off with mortar or substrate layer, then the substrate bearing capacity is insufficient. In such case further procedure, e.g. technology of weak layer removal, should be described in the external insulation design.
- 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

Paper bags: 25 kg

Pallet: 1,050 kg in 25 kg bags

*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.*

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