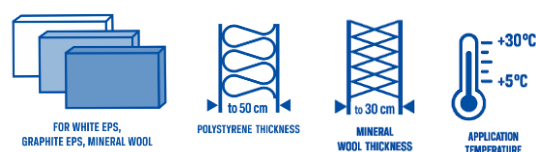


ATLAS STOPTER K-50

general-purpose adhesive mortar for external wall insulation

- no priming mass required
- for mineral wool and polystyrene (including graphite polystyrene)
- for boards and for the reinforcement layer
- reinforced with microfibres
- very good application parameters



Properties

ATLAS STOPTER K-50 is manufactured as a dry mixture of the highest quality cement binder, aggregates and modifying agents, reinforced with glass fibres.

High resistance to microscratch formation - thanks to a specially selected bulk stack of fine fillers and additional structural reinforcement using microfibres.

High durability during use - through the addition of redispersible polymers, microfibres and special additives and modifiers, an increase in the adhesive's durability and resistance to weathering was achieved.

On white cement - the use of white cement reduces the appearance of discolouration or translucence on the plaster (especially in white and pastel colours) and avoids additional painting.

It has high adhesion - due to its increased polymer dispersion content, it exhibits high adhesion to concrete and polystyrene boards. This parameter is also favourably influenced by the varied, tight bulk pile of the aggregate mixture. The mortar adheres strongly to difficult substrates, e.g. surfaces covered with strongly adhering coats of paint.

It is vapour-permeable.

No priming mass is required - the unique structure of the bonded adhesive creates a layer to which thin-coat plasters adhere strongly, and the white cement reduces the possibility of discolouration from grey cement on the surface of this type of plaster.

It has limited absorbability - together with the thin-coat plaster layer, it perfectly protects the thermal insulation against water.

Use

ATLAS STOPTER K-50 is a component of thermal insulation systems. It is used for:

- for fixing thermal insulation boards made from EPS (white and graphite) and for making a reinforced layer on them,
- for fixing mineral wool insulation boards (facade and lamella insulation) and for making a reinforced layer on them.

ATLAS STOPTER K-50 is recommended as a reinforced layer under plasters on large surfaces designed in dark, intensive colours - it extends the possibilities of free shaping of façade colours, e.g. it allows lowering the required HBW coefficient even up to 10%.

It is recommended for work where there is a need to combine two different insulation materials on the façade - mineral wool and EPS boards - especially for façades with fire protection.

Recommended for insulation work in conventional, energy-efficient and passive construction - for the permanent fixing of thermal insulation boards up to 25 cm thick.

FUNCTION IN THE INSULATION SYSTEM	
fixing thermal insulation in thermal insulation systems	+
Reinforced layer in thermal insulation systems under all ATLAS thin layer plasters	+

TYPES OF THERMAL INSULATION BOARDS	
EPS boards - white polystyrene	+
EPS boards - graphite polystyrene	+
XPS boards - extruded polystyrene	use ATLAS STOPTER K-20
mineral wool boards with a structured fibre structure (lamella)	+
mineral wool boards with unstructured fibre structure (façade)	+

TYPES OF FACILITIES	
housing construction	+
public, educational, office, healthcare, sports facilities	+
commercial and service construction	+
industrial construction	+
industrial warehouses	+
traffic construction	+
farm and livestock buildings	+
underground garages	use ATLAS ROKER G system
tall buildings >25 m	use ATLAS ROKER U
passive construction	+
energy-efficient construction	+

SUBSTRATE TYPE	
cellular concrete masonry	+
brick or silicate block masonry	+
brick or hollow brick masonry	+
concrete block wall	+
stone wall	+
site-made concrete walls	+
precast concrete walls	+
cement and cement-lime plasters	+
walls covered with highly adherent coatings of paint (each time requires an adhesion assessment)	+
ceilings on the side of ceilings, under heated rooms	use ATLAS ROKER G system

TYPE OF INSULATION SYSTEM	
traditional system (finished with thin-coat plaster)	+
renovation system (insulation of existing thermal insulation)	+
ceramic system (finished with ceramic tiles)	use ATLAS STOPTER K-20
garage system (insulation of ceilings on the outside)	use ATLAS ROKER G system

Technical data

Bulk density (dry mix)	approx. 1.4 kg/dm ³
Mixing ratio water / dry mix	0.2÷0.22 l / 1 kg 5.0÷5.5 l / 25 kg
Min/max. thickness of reinforced layer - on polystyrene - on wool	2 mm / 5 mm 4 mm / 6 mm
Air-dry adhesion to concrete	min. 0.25 MPa
Air-dry adhesion to mineral wool	min. 0.08 MPa
Air-dry adhesion to polystyrene foam	min. 0.08 MPa
Temperature of mortar preparation of the substrate and surroundings	from +5 °C to +30 °C
Maturation time	approx. 5 minutes
Pot life	approx. 4 hours
Open time	min. 25 minutes

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

Technical requirements

ATLAS STOPTER K-50 is a component of product sets for making thermal insulation systems:

Name of the system	National Technical Assessment
ATLAS ETICS	ITB-KOT-2020/1616 Issue 3
ATLAS ROKER	ITB-KOT-2021/1919 Issue 2
ATLAS RENOTER	ITB-KOT-2021/2020 Issue 1

Fixing of boards and reinforced layer

Preparation of the substrate for the boards:

The substrate should be:

unfrozen and dry,

stable - sufficiently load-bearing, resistant to deformation, free of substances that reduce adhesion and seasoned,

even - larger irregularities should be filled with mortar:

- ATLAS ZW 330,
- ATLAS PLASTERING MORTAR,

cleaned - from layers that could weaken the adhesion of the mortar, especially from dust, dirt, lime, oil, grease, wax, paint residues,

primed - apply primer to substrates that are excessively absorbent or absorbent unevenly (e.g. in the case of previous local repairs). Weak cement and cement-lime plasters as well as masonry made of cellular concrete, silicate blocks or cinder blocks also require priming. Use one of the emulsions for priming:

- ATLAS GRUNT NKP (ready to use - without dilution),
- ATLAS UNI-GRUNT or ATLAS UNI GRUNT COLOR,
- ATLAS UNI-GRUNT ULTRA.

Before starting to adhere the boards, the and level the plinth trim, which is the lower finish of the insulation.

Specific indications for substrate preparation, depending on the type of substrate.

Substrate type	Procedure
"Dull" plasters	absolutely remove
Paint coatings with low adhesion and other impurities that weaken the adhesion of the mortar to the substrate	remove mechanically, e.g. by hydrodynamic washing
Facades with microbial infestation on the surface (fungi, algae, lichen)	Clean the surface mechanically, then apply ATLAS MYKOS PLUS.
Buildings build in large-panel technology	In addition to assessing the condition of the substrate, the condition of the joints between the boards should be checked. These may be filled with mastic, which is inert to the thermal insulation materials. If any leaks, cavities, cracks or loose fragments are observed, they should be removed. Wherever the condition of the mastic is appropriate, it is advisable to cover it with adhesive compound, creating a barrier separating it from the thermal insulation.

Installation of the boards

Preparation of the adhesive

Pour the material from the bag into a vessel with a measured amount of water (proportions given in the Technical Data) and mix with a slow speed mixer with a mortar mixer until a uniform consistency is obtained. The mixed adhesive should be set aside for 5 minutes and mixed again. The adhesive prepared in this way should be used within approximately 4 hours.

Bonding mineral wool boards

The surface of the boards should be thinly mudded with mortar, then the 'proper layer' should be applied and dragged with a 10 x 10 mm toothed trowel.

Adhere the insulation boards in a staggered pattern of vertical joints. Immediately after the adhesive mortar has been applied, the board should be pressed into position. Fastening with mechanical fasteners can be carried out at the earliest 24 hours after the boards have been fixed. Use galvanised metal dowels in accordance with the thermal insulation design, min. 4 pcs/m².

Bonding polystyrene boards

The adhesive mortar should be applied to the inside of the board using the "strip and point" method. The width of the perimeter prism, laid along the edge of the board, should be at least 3 cm. The remaining surface should be evenly covered with 6÷8 patches of min. 8 cm. In total, you should put enough mass to cover at least 40% of the plasterboard surface (after pressing the plasterboard to the base - at least 60%) to ensure that the plasterboard is firmly fixed to the wall. The adhesive mortar is only applied to the surface of the insulation boards, never to the substrate. It is recommended, that the mortar thickness under the panel after pressing should not exceed 10 mm. With even and smooth substrates, it is permissible to spread the mortar evenly with a notched trowel over the entire surface of the board. The size of the trowel teeth should be no less than 10 x 10 mm.

Adhere the insulation boards in a staggered pattern of vertical joints. Immediately after the adhesive mortar has been applied, apply the boards to the substrate and then tap them into position using a patch. Fastening with mechanical fasteners may be commenced at the earliest one day after the boards have been fixed. For additional fixing, plastic or steel studs should be used in accordance with the thermal insulation design, min. 4 pcs/m².

Reinforced layer

Preparation of the adhesive

Pour the material from the bag into a vessel with a measured amount of water (proportions given in the Technical Data) and mix with a slow speed mixer with a mortar mixer until a uniform consistency is obtained. The mixed adhesive should be set aside for 5 minutes and mixed again. The adhesive thus prepared should be used within approximately 4 hours.

Preparation of mineral wool boards for the reinforcement layer

The surface of the boards should be frost-free, even, clean and stable.

Reinforced layer on mineral wool boards

The reinforced layer can be applied no earlier than three days after the boards have been adhered. The reinforced layer consists of a reinforcing mesh made of glass fibre embedded in adhesive mortar. Apply a layer of mortar in 2/3 of the final quantity to the fixed boards and spread it evenly over the surface with a notched trowel. Sink a taut strip of mesh into the mortar. Then apply the remaining 1/3 of the mortar quantity and smooth the surface thoroughly. Any remaining irregularities after the mortar has dried must be sanded down, as they may prevent the plaster from working properly. To avoid cracks at the corners of the openings, additional mesh strips of at least 20 x 35 cm should be adhered in at an angle of 45 degrees. 20 x 35 cm. The reinforcements should be placed under the actual reinforced layer.

Preparation of polystyrene boards for the reinforced layer

The surface of the boards should be frost-free, even, clean, stable and dust-free before the reinforcement layer is applied to them. The boards should be sanded and dusted off before the reinforcement layer is applied.

Reinforced layer on polystyrene boards

The reinforced layer can be applied no earlier than three days after the boards have been adhered. The reinforced layer consists of a reinforcing mesh made of glass fibre embedded in adhesive mortar.

The reinforced layer is made in one operation by applying the mortar evenly with a trowel (e.g. a toothed trowel with 6-10 mm tooth size) and then spreading the reinforcing mesh and sinking it with the trowel, while trowelling smoothly. It is important that the reinforcing mesh is invisible and completely embedded in the adhesive. It is important that the mesh is invisible and completely embedded in the adhesive. 10 cm.

Any remaining irregularities after the mortar has dried must be sanded down, as they may prevent the plaster from being applied correctly.

To avoid scratches at the corners of the openings, additional mesh strips of at least 20 x 35 cm should be adhered in at an angle of 45 degrees. 20 x 35 cm. The reinforcements should be placed under the actual reinforced layer.

Finishing work

The plastering work can be commenced after the mortar has dried (approx. 3 days) and when atmospheric conditions correspond to the requirements indicated in the Technical Data Sheets for thin-coat plasters.

Consumption

The exact unit consumption of the material depends on the parameters of the substrate (e.g. the degree of evenness) and on the panel bonding technology adopted.

Bonding of polystyrene boards: 4.0 to 5.0 kg/m².

Reinforced layer: 3.0 to 3.5 kg/m².

Bonding wool boards: 4.5 to 5.5 kg/m².

Reinforced layer: 5.5 to 6.5 kg/m².

Packaging

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

Do not adhere heated graphite polystyrene. Do not allow graphite polystyrene to become hot during installation or during the initial setting of the adhesive. If the graphite polystyrene foam is heated at any of these stages, it may result in the polystyrene foam becoming detached from the adhesive.

The parameters of the mortar are fully utilised when used together with the other components of the system and in accordance with the system technology.

It is necessary to use covers on scaffolding during the works. Work must not be carried out during snow or rainfall or in strong winds.

If it is necessary to adhere polystyrene boards on weak substrates with a bearing capacity that is difficult to determine (e.g. unstable, dusty, difficult to clean), an adhesion test is recommended. The test consists in gluing in characteristic (important, representative) places on the façade, polystyrene cubes measuring 10x10x10 cm and checking the joint:

- after 3 days under normal conditions,

- after 5 days when the temperature is below 10 °C and the humidity is above 80 %.

The strength of the substrate can be considered sufficient if the polystyrene foam is torn off during detachment by hand. If the cube is torn off together with the mortar and substrate layer then the substrate is not sufficiently load-bearing. How to proceed in such a case, e.g. determining how to remove the weak layer, should be described in the technical design of the insulation.

Clean the tools with clean water, directly after use. Difficult to remove residues of already set mortar are washed off 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. Up-to-date technical product documentation is available at www.atlas.com.pl.

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Update date: 2023-03-30