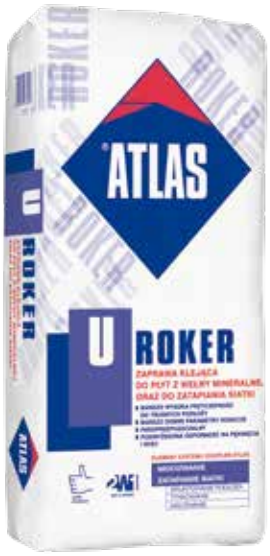

Up to five
European Technical Approvals
for ATLAS insulation systems

ATLAS ROKER U

adhesive mortar for mineral wool boards fixing and for mesh embedding

- very high bonding to difficult substrates
- perfect workability
- water vapour permeability
- reinforced with fibres
- improved resistance to cracking and scores

Properties

ATLAS ROKER U is manufactured as a dry mix of high quality cement binder, aggregates, polymer dispersions and modifiers.

Very high bonding – owing to the content of polymer dispersions, adhesive shows high adhesion to mineral and ceramic substrates and to mineral wool boards. This performance is additionally improved by mortar diversified tight aggregate mix. The mortar adheres well even to difficult substrates, e.g. surfaces coated with well bonded paints.

Great flexibility – greater content of dispersions increases mortar flexibility and allows for perfect compensation of stress resulting from thermal and operational pressure put on the system layers.

Improved resistance to cracking and scores – owing to structural fiber reinforcement the mortar offers improved resistance to:
- microcracking at initial phase of binding,
- cracking during system operational use.

Great water vapour permeability – does not limit water vapour permeability through partition which is particularly significant when system based on mineral wool insulation is in use.

Use

USE IN THERMAL INSULATION SYSTEM	
thermal insulation fixing	+
application of base coat	+

TYPE OF THERMAL INSULATION SYSTEM	
traditional (finished with thin-coat render)	+
garage (thermal insulation of ceilings bottom side)	+

TYPE OF INSULATING MATERIAL	
mineral wool boards of arranged structure of fibers (lamella)	+
mineral wool boards of non-arranged structure of fibres (façade)	+

TYPE OF OBJECTS	
residential housing	+
public access, educational, offices, healthcare, sport	+
commercial and service	+
industrial buildings	+
industrial warehouses	+
infrastructure	+
outbuildings	+
underground garages	+
high buildings > 25 m	+
passive housing	+
energy efficient buildings	+

TYPE OF SUBSTRATE	
walls made of cellular concrete	+
walls made of silicate brick or hollow blocks	+
walls made of ceramic brick or hollow blocks	+
walls made of concrete blocks	+
stonewall	+
walls made of site cast concrete	+
walls made of prefabricated concrete	+
cement and cement-lime plasters	+
walls coated with strongly bonded paints (check quality of bonding for each individual case)	+
ceilings beneath heated rooms (from the bottom side)	+

Technical data

Bulk density	approx. 1.43 kg/dm^3
Mixing ratio (water/dry mix)	0.22 ÷ 0.24 l/1 kg 5.50 ÷ 6.00 l/25 kg
Min./max base coat thickness	4 mm / 6 mm
Temperature of application (substrate and ambient)	from +5°C to +30°C
Maturing time*	approx. 5 minutes
Pot life*	approx. 2 hours
Open time*	min. 30 minutes
Absorption of water after 24h	< 0.5 kg/m^2
Bonding to concrete	≥ 0.25 MPa
Bonding to mineral wool	≥ 0.08 MPa
Compressive strength acc. to PN-EN 1015-11:2001 + A1:2007	category CS IV (>20 N/mm^2)
Flexural strength acc. to PN-EN 1015-11:2001 + A1:2007	>5.5 kN/mm^2
Reaction to fire acc. to PN-EN 13501-1	Class A2-s2,d0 for ATLAS ROKER system with mineral and silicate renders, class B-s1,d0 for system with silicone render

*The time shown in the table is recommended for the application in the temperature 20°C and humidity 50% (approx.).

Technical requirements

ATLAS ROKER U is listed in the following technical approvals for thermal insulation systems:

System name	Technical Approval No.	Certificate No.
ATLAS ROKER G	AT-15-7314/2016	No. ITB-0222/Z
ATLAS ROKER	AT-15-2930/2016	No. ITB-0436/Z

Boards fixing and base coat application

Substrate preparation for boards fixing

The substrate should be:

- **frost-free and dry,**
- **stable** – appropriately sound, resistant to deformation, free of substances reducing bonding, stabilized,
- **even** – larger irregularities should be filled with, e. g. ATLAS ZW 50, ATLAS ZW 330, ATLAS CEMENT PLASTER,
- **clean** – free from layers which would impair mortar bonding, especially dust, dirt, lime, oil, grease, wax, residues of paints,
- **primed** – too absorptive substrates or those of inhomogeneous absorptiveness (e.g. in case of previous point repairs) should be primed with ATLAS UNI-GRUNT emulsion; always prime poor cement and cement-lime plasters as well as walls made of cellular concrete, silicate blocks or cinder blocks.

Fix and level the starting track which forms the bottom of thermal insulation system before commencement of boards fixing.

Detailed substrate requirements:

Substrate type	Method of preparation
"Dull" plasters	Remove obligatorily
Poorly bonded paint coats and other residues impairing the mortar bonding	Remove mechanically, e.g. with hydrodynamic wash
Façades with microbiological corrosion (algae, fungi, lichen)	Clean the surface mechanically, use ATLAS MYKOS agent then
Buildings constructed in the technology of panelaks	Evaluate quality of substrate and of joints between panels. They can be filled with putty which can interact with thermal insulation. In case of any leakage, gaps, cracks or loosening – remove faulty elements. If quality of putty is correct it is advisable to coat it with a layer of adhesive mortar in order to form a barrier separating it from the thermal insulation.

Boards preparation for base coat application

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

Mortar preparation

Pour the mortar from a bag into a clean container with suitable amount of water (see ratio in Technical Data section) and mix using a mixer with a drill for mortars until homogenous. Leave the mortar to rest for 5 minutes and remix. The mixed mortar should be used up within approx. 2 hours.

Boards fixing

Float the board surface with mortar, leave for initial setting and apply the main mortar coat with the "strip-point method". Circumferential mortar bead along the board edges should be min. 3 cm wide. Apply 6-8 patches (of diameter min. 8 cm) uniformly distributed upon the board surface. In total, adhesive mass should coat min. 40% of the board surface (60% after pressing the board against substrate) and provide appropriate bonding between board and wall. In case of even and smooth substrates it is acceptable to apply with a steel float an uniform coat of mortar on the whole board surface. Just after mortar application the board should be placed upon substrate and pressed into expected place. Fixing the boards with mechanical anchors can commence min. 24 hours since the boards installation. Use fixings with metal galvanized pins, min. 4 pcs/m^2, follow the thermal insulation technical design.

Base coat application

Base coat can be applied not earlier than 3 days since the boards installation. It consists of fiberglass reinforcing mesh embedded in the adhesive mortar coat. Apply a thin, approx. 1 mm thick, mortar coat upon the fixed boards. After initial mortar setting, apply subsequent mortar coat with a smooth float (use 2/3 of total mortar amount) and spread uniformly with a notched trowel. Embed mesh strips – press them at some points into the mass and embed with a notched trowel – the mesh strips should be fully coated with mortar. Apply the remaining 1/3 of mass and smooth the surface. Grind any irregularities as they can preclude correct application of renders.

Top finish application

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 application.

Consumption

The actual consumption depends on substrate parametres (e.g. evenness) and technology of boards fixing.
Boards fixing: from 4.5 up to 5.5 kg/m^2.
Base coat application: from 5.5 up to 6.5 kg/m^2.

Important additional information

- The mortar parametres are used to its full advantage only when it is applied in combination with other elements of ATLAS external thermal insulation system.
- For installation of ATLAS external thermal insulation systems one should use mineral wool which meets requirements of PN-EN 13162 standard. Detailed description of the technology of installation is given in appropriate technical approvals, manufacturer's guidelines and other technical manuals available for download on www.atlas.com.pl/en.
- Use scaffolding covers during application. Do not carry out installation during snowfall, rain and in strong wind.
- When fixing 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 wool cubes (10x10 cm large) at various façade points and checking the bonding quality after 3 days. The substrate strength can be assumed as acceptable when cube breaks within when teared off. If the cube tears off with mortar or with 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 and followed during application.
- Tools must be cleaned with clean water directly after use. Difficult to remove residues of set mortar can be removed with 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

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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