

ATLAS KS

dual-function liquid for sealing injections

- forms structural insulations and diaphragms
- eliminates capillary rising of moisture in walls
- effectively seals the masonry structure
- closes capillaries during the crystallisation process
- hydrophobises the surface of the capillaries
- reinforces mineral bases and floors



Properties

ATLAS KS is an aqueous solution of silicates, silicone resins and modifying agents.

Very high substrate penetration capacity - the formulation has a low viscosity and a fine-molecular structure, so it fills the pore structure quickly and effectively.

Closes the cross-section of the capillaries responsible for transporting moisture - in the silicification process, converts free calcium compounds into insoluble crystalline compounds).

Hydrophobises the inner surface of the capillaries - eliminates wetting of the pore surface, blocking capillary transport.

Creates an effective secondary structural diaphragm throughout the masonry section.

Structurally reinforces weak substrates, primers and mineral floors - using a silicate process.

Purpose

For use when waterproofing and renovating buildings in the plinth zone as well as foundation walls and basement walls, inside or outside buildings.

Recommended for waterproofing work in damp buildings, especially for conservation work in historic architecture.

It allows horizontal masonry waterproofing to be restored where it has not been done before or where it is operating inefficiently.

Can be used for structural insulation and diaphragms. also when insulating internal walls from external walls.

Effectively interrupts capillary transport of moisture in the masonry.

For gravity or pressure injection.

It can be used for priming mineral substrates: plaster bases and floors.

Structurally reinforces primers and cement floors - improves abrasion resistance, effectively reduces dusting of primed surfaces.

Technical data

Density of the product	1.2 g/cm ³
Temperature of mortar preparation, ambient during work and during setting	from + 5 °C to + 25 °C
Substrate reinforcement (depending on substrate material, moisture content and external conditions)	up to 40%
pH	11-13

Application

The work technology when restoring insulation depends on the existing local soil and water conditions, the thickness of the walls and the degree of dampness.

Preparatory work

Damaged plaster must be chipped to a height of at least 80 cm above the damp or saline zone and the masonry surface cleaned. Determine the drilling points for the injection holes. The drilling depth should be chosen so that the hole ends 5 - 7 cm in front of the face of the masonry.

It is advisable to carry out a control drill to confirm the actual thickness of the masonry.

Injection holes should pass through at least one horizontal joint, for thick masonry (over 60 cm) it is recommended to pass through 2 joints. Pneumatic drills or core drills that cause as little shock as possible should be used for drilling. Walls over 100 cm thick and the corners of walls should be drilled on both sides.

Hollow internal spaces of the masonry, incompletely filled joints and places of cracks should be filled with ATLAS TRP mortar. After the mortar has hardened, the injection holes should be drilled again in the same areas.

Before injecting, the drilled holes should be cleaned of dust.

Pressure injection

The injection holes should be made at intervals of no more than 15 cm axially, in one or two rows, approximately 10 cm apart. In the case of two-row injection, the second row should be made with an offset of half the distance between the holes. The diameter of the holes should be between 13 and 18 mm (depending on the size and type of packers) and the angle down to 30°.

Suitable equipment should be used, saturating the masonry with ATLAS KS filler at a pressure of 0.2 to 0.7 MPa. The choice of injection pressure depends on the technical condition of the masonry. The preparation can be injected into the masonry by means of pacers or lances.

The next day, the holes can be filled with ATLAS TRP mortar.

Gravity injection

The injection holes should be made at intervals of no more than 15 cm axially, in one or two rows approximately 10 cm apart. In the case of two-row injection, the second row should be made with an offset of half the distance between the holes. The diameter of the holes should be between 28 and 30 mm and the angle should be 30° - 45°. Injection funnels should be used to administer the preparation. ATLAS KS injection fluid is poured into the boreholes. and maintains its level for at least 24 hours until the recommended consumption is achieved.

Once the injection is complete, the holes can be filled with ATLAS TRP mortar.

Post-injection work

After injection with ATLAS KS, additional auxiliary activities should be carried out. These include, above all, the execution of renovation plasters, the execution of external waterproofing.

ATLAS KS should be applied to the surface using a sprinkler or pump and then spread evenly with a brush, roller or brush over the entire surface until it is fully absorbed into the substrate. Porous substrates may require more than one coat to be applied. The next coat can be applied after the previous coat has dried. Do not allow puddles to form on the substrate to be reinforced - they will form a shiny non-stick surface when dry.

Further work can be carried out after ensuring that the surface is already dry.

Consumption

Consumption is:

- approx. 15 kg/m² of horizontal masonry section,
- from 0.3 kg/m² surface when reinforcing subfloors and floors, consumption depends on the absorbency of the substrate, a test should be carried out on site.

Packaging

Plastic canister 30 kg.

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 production date on the packaging.

Reinforcing subfloors and floors mineral

Important additional information

When carrying out injection work, an injection diary should be kept, such a document should include information on the date of the work, the numbering of the injection holes, the method of injection, the values of the fluid supply pressure and the amount of fluid administered to each injection hole with a calculation of the average consumption per masonry.

This technical data sheet is not exhaustive of all technical aspects of the product's application, if in doubt please contact ATLAS Technical Support.

The decision regarding the selection of technological and material solutions during waterproofing restoration works should be made after analysing the local soil and water conditions, the type of wall construction material, the moisture content, the degree of salinity and the technical condition of the foundations, as well as other aspects relevant to the object in question.

Injection should be carried out long enough to produce a continuous waterproof layer across the entire width of the wall.

When working on exposing foundation walls and carrying out vertical insulation, adhere to the principles of safety and sectional exposure of foundations.

Tools should be cleaned with clean water, immediately after use.

The information contained in the Technical Data Sheet is a basic guideline for the use of the product and does not exempt 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. The documents accompanying the product are available at www.atlas.com.pl.

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