



Up to five European Technical Approvals for ATLAS insulation systems



## Use

Thin-coat render for application of finishing coats with decorative spotted texture.

For indoor and outdoor use.

Recommended as a finishing coat during installation of building insulation with the use of polystyrene, XPS or mineral wool boards.

For façades where it is crucial to keep high water vapour permeability of external partitions – perfect for buildings made of cellular concrete, walls of old buildings, swimming pools or kitchens.

**Types of rendered buildings** – single- and multi – family, public access, industrial buildings.

**Types of substrates** – concrete, traditional plasters on walls made of bricks, blocks and ceramic, cellular or silicate hollow bricks, plasterboards, base coats of thermal insulation systems with polystyrene, XPS and mineral wool boards.

## Properties

Modern thin-coat render based on unique mix of organic and inorganic binder. Characterised by very high water vapour permeability assisted by low water absorptiveness and, which is typical for pure silicone renders, great resistance to dirt.

Forms dense and very clear spotted texture 1.5 mm or 2.0 mm thick.

Render with aggregate 1.5 mm thick is also recommended for machine application with rendering units.

**BIO PROTECTION** – creates unfavorable conditions for fungi and algae growth due to low water absorption and acid-alkaline reaction.

**ELASTICITY AND STRENGTH** – formula providing improved elasticity and resistance to impacts; render compensates stress resulting from surface hits better, keeps consistent, does not chip off.

**COLOUR DURABILITY** – advanced technology provides colour durability resulting from the use of modern pigments, automatic system of dosing and permanently supervised process of manufacturing – render keeps its initial colour, is more resistant to bleaching and UV radiation.

**ENVIRONMENTALLY FRIENDLY** – render recipe was designed in accordance to the sustainable development aspects: maximally reduced amount of volatile organic compounds and use of natural fillers only.

**RESISTANT TO CRACKING** – improved resistance resulting from the presence of dispersed microfibers, which strengthen the render within its entire volume – render is protected against possible cracks caused by tension and alternate surface heating and cooling.

- |                       |   |
|-----------------------|---|
| 400 colours           | – in accordance with SAH Colour Scheme for Renders and Paints |
| 1 texture             | – spotted – N   |
| Aggregate grain size: | – up to 1.5 mm – N-15<br>– up to 2.0 mm – N-20                |

# ATLAS SILICONE-SILICATE RENDER

## thin – coat silicone-silicate render

- very high water vapour permeability
- low water absorptiveness
- resistant to soiling
- very good bonding to substrates

## Technical data

ATLAS SILICONE-SILICATE RENDER is manufactured on the basis of organic binders and marble aggregate.

Density of the ready-to-use product	approx. 1.9 g/cm <sup>3</sup>
Mass preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Water vapour permeability g/m <sup>2</sup> d	V <sub>1</sub> > 150
Diffusion depending on the air layer thickness	S <sub>d</sub> < 0.14 m

## Technical requirements

ATLAS SILICONE-SILICATE RENDER conforms to PN-EN 15824 standard. EC Declaration of Performance No. 125/CPR.

<b>CE</b> 0767	PN-EN 15824:2010 (EN 15824:2009)
Thin-coat silicone-silicate render, water – dilutable	for use on internal and external walls, posts and partition walls
Reaction to fire – class	A2-s1, d0
Water vapour permeability – category	V <sub>1</sub> – high
Water absorption – category	W <sub>2</sub> – medium
Bonding	≥ 0.35 MPa
Durability (resistance to freeze-thaw cycles)	According to the standard PN-EN 1062-3:2008, for absorption W <sub>2</sub> ≤ 0.5 kg/m <sup>2</sup> ·h <sup>0.5</sup> testing of freeze – thaw resistance is not obligatory.
Thermal conductivity coefficient (average tabular value, P=90%)	0,67 W/mK (λ <sub>10,dr</sub> ) (EN 1745:2002 tab. A.12)

The render is listed in the following approvals for thermal insulation systems:

System name	Technical Approval No.	Certificate No.
ATLAS	ETA 06/0081	EC 1488-CPD-0021
ATLAS ROKER	ETA 06/0173	EC 1488-CPD-0036
ATLAS ETICS	AT-15-9090/2014	FPC-ITB-0562/Z

## Rendering

### Substrate preparation

The substrate should be:

- **stable** – sufficiently rigid and sufficiently long stabilized. The assumed stabilization time for substrates is respectively:
  - new cement plasters made of ATLAS mortars - min. 1 week for each 1 cm of thickness,
  - concrete walls – min. 28 days,
- **dry**,
- **even** – irregularities and gaps should be filled with, e. g. ATLAS ZW 50, ATLAS ZW 330, ATLAS PLASTERING MIX or adhesive mortars used for installation of base coats of thermal insulation systems; prime the surface with ATLAS UNI-GRUNT emulsion before repairs,
- **clean** – free from layers which would impair the render bonding, especially dust, dirt, lime, oil, grease, wax, residues of oil and emulsion paints; substrates infected by biological corrosion must be cleaned with ATLAS MYKOS agent,
- **primed** - with ATLAS SILKON ANX priming mass.

### Rendering mass preparation

The render is delivered as a ready to use mass. It must not be mixed with other materials, diluted, or thickened. Just before application, the mass should be mixed in order to unify the consistency.

### Mass application

Apply the rendering mass with a smooth stainless steel float, with coat of thickness equal to the aggregate grain size. Collect excessive material, put it back in the bucket and remix. Renders with aggregate 1.5 mm thick can be applied mechanically – the following units recommended:

- MAI 2MULTIPUMP with nozzle 6 mm, operational pressure 1 bar,
- GRACO Textspray RTX 1500 with nozzle 6 mm.

### Texture forming

Freshly applied mass requires texture forming with a plastic float, with circular moves. Machine-applied renders are not textured.

## Consumption

Average consumption for manual application depends on substrate and render type:

- 2.5 kg for 1 m<sup>2</sup> for N-15 render,
- 3.2 kg for 1 m<sup>2</sup> for N-20 render.

The average consumption for machine application is lower than the one listed above, which results from different rendering coat texture (smaller aggregate concentration).

The actual consumption can be established on basis of sample application upon particular substrate.

## Important additional information

- **ATTENTION! Bucket with a silicone-silicate render, apart from a description placed on the identification label, is highlighted also with an orange lid.**
- The maximum surface possible to render in a single technological cycle (application and floating; for particular substrate type and weather conditions) should be established experimentally.
- Apply the render with the "wet on wet method", prevent the textured coat from drying before application of the subsequent coat. Otherwise the seams will be visible. Technological breaks have to be planned in advance, e.g. in corners and angles of a building, under rainwater pipes, on lines of contact of two colours, etc.
- Protect the rendered surface both during application and render setting against direct sunlight, wind and precipitation.
- The setting time depends on substrate type, temperature and relative air humidity, and can vary from 12 up to 48 hours. In high humidity and temperature close to +5°C the setting time can extend.
- In order to avoid differences in colour shades an individual surface should be coated with silicone-silicate render of the same manufacturing date.
- When rendering external thermal insulation systems one should avoid the use of dark colours, of diffuse reflection coefficient lower than 20%. The share of these colours on façades should not exceed 10% of the surface.
- The tools must be cleaned with clean water directly after use. Difficult to remove residues of the set render can be removed with ATLAS SZOP 2000 agent.
- Harmful to aquatic life with long lasting effects. Keep out of reach of children. Avoid release to the environment. Dispose of contents/ container to appropriately labeled containers designed for selective waste treatment, emptied by an authorized company. Follow the instructions of the Safety Data Sheet.
- Keep in tightly sealed original and labeled containers. Keep in dry and cool places, protect against overheating (> 30 °C) and freezing - the product freezes and irreversibly loses its performance in temperature below 0 °C. Protect against direct sunshine. Incompatible materials: avoid contact with aluminum, copper and alloys of these metals. Shelf life in conditions as specified is 12 months from the production date shown on the packaging.

## Packaging

Plastic buckets: 25 kg

Pallet: 600 kg in 25 kg buckets

*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.*

*Date of update: 2016-05-09*