













# AVAL SILICONE HYBRID RENDER

# thin - coat acrylic - silicone render

- vapour permeable
- very low water absorptiveness
- highly resistant to dirt
- high adhesion to the substrate











#### Use

Thin-coat render for the execution of the finishing coats with a decorative spotted texture.

For indoor and outdoor use.

Recommended for surfaces insulated with EPS or XPS boards.

**Ideal for façades exposed to dirt and difficult operation conditions** – in the vicinity of roads, industrial zones and urban centres surrounded by green areas or with high pollution.

**Types of rendered buildings** – detached houses, apartment buildings and industrial or public access buildings.

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

## **Properties**

Up-to-date thin-coat render, based on an innovative formula of two binders hybrid – silicone and acrylic resins.

Characterised by the lowest water absorptiveness of all render types, perfectly protects the substrates against water.

Owing to the silicone resin has significantly higher resistance to dirt than the standard acrylic renders.

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

**ELASTICITY AND STRENGTH** – formula, which ensures better elasticity and resistance to impacts, leads to the compensation of tension when the surface of the render is hit, making it consistent and not chipping off.

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

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

**RESISTANT TO CRACKING** – increased resistance, achieved due to the presence of dispersed microfibers that reinforce the render within the entire volume – render is protected against possible cracks caused by the tension and alternate surface heating and cooling.

**400 colours** – in accordance with Renders and Paints SAH

Colour Scheme

1 texture - spotted - N Aggregate grain size: - up to 1.5 mm - N-15

## **Technical data**

AVAL ACRYLIC-SILICONE RENDER is manufactured on the basis of the water dispersion of synthetic resins and dolomite aggregate.

Density of the ready-to-use product	ca. 1.9 g/cm³
Mass preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Water vapour permeation g/m²d	15 < V <sub>2</sub> ≤ 150
Diffusion depending on the air layer thickness	0.14 ≤ S <sub>d</sub> ≤ 1.4m

## **Technical requirements**

AVAL ACRYLIC-SILICONE RENDER conforms to PN-EN 15824 standard. EC Declaration of Performance No. AVAL 124/CPR.

<b>( €</b> 0767	PN-EN 15824:2010 (EN 15824:2009)
Thin-coat acrylic-silicone 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>2</sub> – average
Water absorption – category	W <sub>2</sub> – average
Adhesion	≥ 0.35 MPa
Durability. Resistance to freeze-thaw cycles	According to standard PN EN 1062-3:2008, for absorption $W_2 \le 0.5 \text{ kg/m}^2 \cdot h^{0.5}$ testing of freeze – thaw resistance is not obligatory.
Thermal conductivity coefficient (average tabular value, P=90%)	0,67 W/mK (λ <sub>10,dry</sub> ) (EN 1745:2002 tab. A.12)

## Rendering

#### Substrate preparation

The substrate should be:

- stable sufficiently rigid,
- sufficiently long stabilized the assumed stabilizing time for substrates is, respectively:
- for new cement plasters from ready to use ATLAS plastering mortars, min.
   1 week for each 1 cm of thickness,
- for concrete walls at least 28 days,
- drv.
- even fill any larger irregularities and cavities with ATLAS LEVELING MORTAR, ATLAS ZW 330 or ATLAS PLASTERING MIX, or adhesive mortars for the execution of the reinforced layer in thermal insulation systems. Before repair, prime the surface with AVAL KT 17 (ATLAS UNI-GRUNT) emulsion,
- clean free from layers which can impair the render binding, especially dust, dirt, lime, oil, grease, wax, residues of oil and emulsion paints; substrate covered with algae, fungi, etc. must be cleaned with ATLAS MYKOS agent,
- primed with AVAL KT 16 (ATLAS CERPLAST)..

#### Rendering mass preparation

The render is delivered as the ready to use mix. It must not be mixed with other materials, diluted, or thickened. Mix the contents directly before application to equalize the consistency.

#### Render application

Apply the render with a coat equal to the aggregate grain size, with a stainless steel float. Remove the excess of the material, place it in the bucket and remix.

### **Texture forming**

The freshly applied coat requires texture forming with a float made of plastic. The spotted effect is obtained by floating the plaster with circular moves.

## Coverage

Average coverage (depends on a substrate and render type):

– approx. 2.5 kg for 1 m<sup>2</sup>

The exact coverage level can be confirmed with a test carried out on the rendered surface.

## Important additional information

- ATTENTION! Bucket with an acrylic-silicone render, apart from a description placed on the identification label, is highlighted also with a green lid.
- The maximum surface possible for rendering in one technological cycle (application and floating) must be established experimentally (for the given type of substrate and weather conditions).
- Apply the mass using the "wet on wet" method, preventing the floated coat from drying before applying the next one. Otherwise, the seams will be visible. Technological breaks have to be planned in advance, e.g. in the corners and angles of the building, under rainwater pipes, or place of contact of two colours, etc.
- Protect the rendered surface both during work and while setting against direct sunlight, wind and precipitation.
- The setting time, depending on the surface, the temperature and the relative air humidity, is from 12 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 while applying acrylic-silicone render, coat an individual surface with the render of the same manufacturing date.
- When rendering the 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 the 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: 2015-08-21

