

## SILICATE

## CALSLIT F

Silicate paint with an addition of hydrophobising substances



## MAIN ADVANTAGES

- Mineral character
- Resistance to adverse atmospheric conditions
- Extraordinary vapour permeability
- High dirt resistance
- Efficient protection against humidity
- High coverage
- Natural resistance to algae and fungal growth

## AREAS OF APPLICATIONS

A high-quality topcoat paint based on potassium water glass intended for the performing of paint coatings outside buildings and in **KABE THERM SM** and **KABE THERM SM RENO** EWI systems based on EPS and **KABE THERM MW** EWI system based on mineral wool. The product is intended for use only on mineral substrates (such as: concrete, traditional lime, cement-lime and cement renders as well as thin-layer mineral, silicate renders). It is especially recommended for primary and renovation painting of mineral substrates and for use at damp places on contemporary and historical buildings. It makes up a completely mineral, vapour permeable coating allowing for free evaporation of moisture from the walls and at the same time due to the application of hydrophobising substances, it efficiently protects the facade from precipitation. Prior to paint application, the substrate should be primed with **CALSILIT GF**. **Note:** Due to the specificity of the product, it is not recommended to use it on gypsum substrates (i.e. stucco).

## TECHNICAL SPECIFICATION

**Base binder:** potassium water glass;

**Pigments:** resistant to UV radiation and atmospheric conditions non-organic coloured pigments;

**The content of volatile organic compounds VOC:** cat. A/c. The product contains less than 40 g / l VOC;

**Density:** ca. 1.53 g/cm<sup>3</sup>;

**Colours:** white, colours from the KABE colour chart and selected NCS colours (can be obtained by adding non-organic pigments);

**Gloss level:** matt;

**Diluent:** water;

**Average coverage:** ca. 0.33 l/m<sup>2</sup> (with double painting on a smooth substrate);

**Temperature of application (air and substrate):** from +8°C to +25°C;

**Relative humidity:** ≤75%;

**Relative diffusion resistance of the layer with a thickness of 150 µm:**

$S_d = 0.02$  m (standard requirement  $S_d \leq 2.0$  m);

**Surface absorption coefficient:**  $w = 0.07 \text{ kg/m}^2 \cdot \text{h}^{0.5}$   
(standard requirement  $w \leq 0.5 \text{ kg/m}^2 \cdot \text{h}^{0.5}$ ).

**Packaging:** Single-use plastic packaging of 5 and 10 l.

**Storage:** The product should be stored in its sealed packaging in a cool, but frost-protected room. Opened packaging should be tightly closed and used as quickly as possible.

**Shelf life:** Originally sealed products have a 12-month shelf life from the date of production (this is printed on the side of the packaging).

## APPLICATION METHOD

**SUBSTRATE PREPARATION:** Apply to a sound/stable and clean mineral substrate (without cracks and delaminations), degreased, dry, and free of biological contamination or chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then wash with water and disinfect with **ALGIZID**. Any loose layers not bound to the substrate (i.e. loose render or flaked coatings) should be removed. Old and/or dirty substrates should be washed off and degreased with water and **CLEANFORCE** cleaning agent. For uneven substrates, first use levelling compound and then level the surface with **KOMBI FINISZ** levelling/finish render. Small unevenness can be at once levelled out with **KOMBI FINISZ** levelling/finish render. Absorbent substrates should be primed before finish levelling and smoothing compound and/or levelling compound is being applied. If the paint is applied on new mineral substrates (i.e. concrete, lime render, cement-lime render) — min. 2-week curing period is required. Before applying the paint in the **KABE THERM SM** and **KABE THERM SM RENO** and **KABE THERM MW** EWI systems, all coats of the systems must be made in accordance with the technology of the External Thermal Insulation Composite Systems - ETICS. Silicate paint can be applied to thin-layer mineral render only after 7 days of exposure (at +20 °C and 65% relative humidity). **Note:** Directly before applying paint, surfaces made of materials susceptible to alkalis (such as wood, metal, glass or clinker brick) should be protected against splashing.

**PRIMING:** Before paint application, the substrate should be primed with **CALSILIT GF**. Primer should be dry before applying a paint, curing period lasts about 24 hours.

**PAINT PREPARATION:** The packaging contains a ready-to-use product. If necessary, the paint can be diluted with a small amount of **CALSILIT GF** or water (by adding to the first painting max. 10% of volume and to the second one max. 5%). Quantity of added water or substance may vary for different substrate types, drying conditions and application method.

**APPLICATION:** Paint should be applied on the substrate in two layers with a brush, roller or by spraying (including the 'airless' method). The second paint layer should be applied only after the first one dries and sets completely, i.e. after min. 24 hours. It is recommended to use a special paint roller for facade paints made of woven polyamide with a bristle length of min. 18 mm. Use mechanical spraying only in windless weather. **Note:** The product is alkaline, therefore, it is necessary to protect eyes and skin. Safety clothing (PPE) must be worn while carrying out any installation work. In case of contact with eyes, immediately rinse them thoroughly with plenty of water. If irritation develops, seek medical assistance.

Spraying parameters for an airless type device:

Manufacturer	Device	Nozzle	Pressure [bar]	Filter [mesh]	Dilution [%]	Usage [l/min]
WAGNER	ProSpray 3.21	0552-519	200	60	10÷20	1.25
TITAN	Titan 450e	661-519	200	60	10	1.25
GRACO	UltraMax II 795	PAA621	200	60	5	3.6

**DRYING:** Typical drying time ca. 3 h for one paint layer applied to substrate (20°C, 55% RH). Complete setting (hardening) of paint coating made takes place after min. 24 hours. **Note:** Drying time may be longer due to low temperatures and high relative humidity. Protect the fresh coating against precipitation and condensation until it sets completely.

**USEFUL HINTS:** To avoid colour differences, a single batch product should be applied to entire facade or element in one working cycle. Application and curing of paint requires dry days at temperatures between 8-25°C. All tools must be cleaned with water after finishing work. Application during direct exposure to sunlight, in strong winds or high air humidity is not recommended. To protect wet coating against inclement weather conditions, scaffolding should be covered with some protective netting. **Note:** Low or high temperature as well as high air humidity may have an adverse effect on the shade of the paint coating. Both, too high and too low temperature during paint application and drying may lead to insufficient setting of the binder. As a result of it, further contact with water may cause washing out of the unset potassium water glass what may lead to the formation of durable patches or discolouration.

**ADDITIONAL OPTIONS:** If paint is applied on substrates covered with cracks with a width of up to 0.3 mm (such as small shrinking cracks of the top coat), it is recommended to use paint reinforced with microfibres for the first painting (an option available on request).