

## POLYSILICATE (LOW-ALKALINE)

## NOVALIT PLAN

Polysilicate for cracked substrates



## MAIN ADVANTAGES

- Efficient bridging and sealing of small scratches and cracks
- Mineral character
- Low-alkali reaction (pH 8÷9.5)
- Resistance to the changes of atmospheric conditions during application and setting
- Micro-porous texture which assures high vapour permeability
- Low surface absorption
- To be applied on both mineral substrates and polymer coated surfaces

## AREAS OF APPLICATIONS

Mineral paint produced based on innovative, low-alkali polysilicate technology. It is used for performing substrate paint coating under **NOVALIT F** topcoat paint on difficult substrates (non-uniform or cracked) outside buildings. It is used both for mineral substrates (such as concrete, lime render, cement-lime render, cement render) and on substrates covered with well set and bound polymer-based coats. It makes up a mineral coating permanently connected with the substrate which fills in the micro-cracks and evens non-uniform substrate properties. Due to the content of special micro-fibres it efficiently bridges scratches and cracks of the substrate with a width up to 0.3 mm. Mineral substrates, prior to paint application require priming with **NOVALIT GF**.

## TECHNICAL SPECIFICATION

**Base binder:** special modified 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;

**Consistency:** thixotropic;

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

**Gloss level:** matt;

**Average coverage:** ca. 0.25 l/m<sup>2</sup>;

**Temperature of application (air and substrate):** from +5°C to +25°C;

**Relative humidity:** ≤75%;

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

$S_d = 0.04$  m (standard requirement  $S_d \leq 2.0$  m);

**Surface absorption coefficient:**  $w = 0.05$  kg/m<sup>2</sup> · h<sup>0.5</sup> (standard requirement  $w \leq 0.5$  kg/m<sup>2</sup> · h<sup>0.5</sup>).

**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 date of production (this is printed on the side of the packaging).

## APPLICATION METHOD

**SUBSTRATE PREPARATION:** Apply to a sound/stable and clean substrate, degreased, even and dry, and biological or chemical efflorescence free. 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 applied. If paint is applied on new mineral substrates (such as concrete, lime render, cement-lime render and cement render), 2-week curing period is required.

**PRIMING:** Prior to paint application, the mineral substrates should be primed with **NOVALIT GF**. Primer should be dry before applying a paint, curing period lasts about 12 hours. **Note:** Substrates of low wettability (such as top coats based on polymers or dispersion coatings) should not be primed and should be only washed with water and **CLEANFORCE** cleaning agent.

**PAINT PREPARATION:** The packaging contains a ready-to-use product — do not dilute.

**APPLICATION:** Paint to be applied on the substrate by using a paint brush or roller until the expected layer thickness is assured. It is recommended to use a special paint roller for facade paints made of woven polyamide with a bristle length of min. 18 mm.

**DRYING:** Typical setting (hardening) time of one paint layer applied to substrate ca. 24-48 h (20°C, 55% RH). **Note:** Drying time may be longer due to low temperatures and high relative humidity. Protect the fresh coating against precipitation and condensation until it dries 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 5-25°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.