

SILICATE

HISTORICA KMS

Silicate levelling/crack filling compound



MAIN ADVANTAGES

- Aesthetic decorative texture
- Product has been classified as mineral
- Exceptional vapour permeability
- High adhesion to substrates
- Natural resistance to algae and fungal growth
- To be applied on mineral substrates outside and inside buildings

AREAS OF APPLICATIONS

Ready to use, silicate levelling/crack filling compound for manual application of mineral decorative-renovation layers both inside and outside buildings. Intended for filling shrinkage micro cracks in mineral substrates and for equalising substrate texture. Thanks to its mineral nature and extremely high vapour permeability the product is perfectly suitable for renovating historic buildings providing a decorative effect and equalising the substrate. The product is designed for exclusive use on mineral substrates e.g. lime plaster, cement-lime, clay and cement renders.

TECHNICAL SPECIFICATION

Base binder: potassium water glass;

Pigments: non-organic coloured pigments resistant to atmospheric conditions;

Colours: natural white and pastel colours from the KABE colour chart or according to samples provided /can be obtained by adding non-organic pigments/

Grain size: up to 0.5 mm;

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

Relative humidity: ≤ 75%;

Average coverage: ca. 0.5 kg/m² on even and smooth substrate.

Note: coverage depends on application method and layer thickness.

Concrete substrate adhesion: ≥ 0.3 MPa;

Vapour permeability: $S_d = 0.027\text{m}$ (cat. V1);

Water absorption: $w = 0.49\text{ kg/m}^2 \cdot \text{h}0,5$ (cat. W2);

Heat conductivity coefficient: $\lambda_{\text{avg},10} = 0.76\text{ W/(m}^2\text{K)}$;

Reaction to fire: class C at consumption < 3.5 kg/m²

Packaging: Single-use plastic packaging of 16 and 7 kg.

Storage: The product should be stored in its sealed packaging, in a cool, but frost-protected room. Keep out of the reach of children.

Shelf life: 12 months from the date of manufacture.

APPLICATION METHOD

SUBSTRATE PREPARATION: Apply to a sound/stable (without scratches and cracks), mineral, degreased, even, dry, and biological or chemical efflorescence free substrate. For new mineral substrates allow at least a 2-week seasoning time. The remnants of adhesive or lime paints should be thoroughly removed and the substrate washed and dedusted. Old and/or dirty substrates should be washed off and degreased with water and **CLEANFORCE** cleaning agent. Mould and/or fungal growth places: clean by mechanical means, rinse with water and disinfect with **ALGIZID** agent. Any layers not bound to the substrate (i.e. loose renders of flaked coatings) should be removed. Uneven areas or holes in the substrate: small, up to 5 mm – smoothen the whole surface with **KOMBI FINISZ G5** levelling compound; larger holes prior to smoothening should be filled with **KOMBI FINISZ G12** levelling compound or **MINERALIT RESTAURO W12** lime mortar. Newly made substrates should be seasoned depending on the thickness of its layer, assuming one drying day per 1 mm of layer applied.

PRIMING: Before levelling and crack filling compound application, the substrate should be primed with **CALSILIT GT** coloured to the colour of levelling compound. Typical setting time ca. 24 h under optimum weather conditions (temp. +20°C, 55% RH). The levelling compound can be applied when the primer is completely dry.

COMPOUND PREPARATION: Stir thoroughly prior to application, if necessary add some portable water (using max. 0.20 l water per 16 kg of compound). Quantity of added water may vary depending on the substrate type, drying conditions and application method. **Note:** Directly before applying the compound, surfaces made of material susceptible to alkalis (such as wood, metal, glass or clinker brick) must be protected against splashing.

APPLYING THE COMPOUND ON A SUBSTRATE: Depending on the expected decorative effect the compound should be applied with a thin even layer using a brush, wide brush, roller or a stainless-steel trowel. **Note:** The product is alkaline, therefore, it is necessary to protect eyes and skin. Safety clothing (PPE) must be worn while carrying out any work. In case of contact with eyes, immediately rinse them thoroughly with plenty of water. If necessary, consult a doctor, show the container or label.

DRYING: Typical drying time of one layer – ca. 24 h (at 20°C, 55% RH). **Note:** Setting time may be longer even up to a few days due to low temperatures and high relative humidity. Protect the compound against precipitation and condensation until fully hardened.

USEFUL HINTS: The final effect of the layer applied can depend on the substrate type. This is why if non-uniform substrate is present, it is recommended to prior level out and smoothen the whole substrate with levelling compound. To avoid colour differences, a single batch product should be used on a single application / architectural element. 'Wet on wet' method should be used. All tools should be cleaned with water after work is completed. The process of application and binding of the compound requires dry days and temperatures between +8°C to +25°C. Avoid working on surfaces directly exposed to sunlight and strong winds. To protect the unbound layer 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 compound coat. Both, too high and too low temperature while applying the compound and during setting may lead to insufficient setting of the binder. As a result, further contact with water may cause washing out of the unset potassium water glass what may lead to the formation of durable patches or discolourations.