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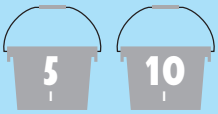
CALSILIT F

Silicate paint with the addition of hydrophobising substances



Main advantages:

- **Mineral character of coating;**
- **Exceptional vapour permeability;**
- **Effective protection against moisture;**
- **Very good covering power;**
- **High resistance to the unfavourable effects of atmospheric conditions;**
- **Significantly slows accumulation of dirt;**
- **Does not contain ingredients that allow the development of fungi.**

Purpose:

A high quality surface paint based on potassium sodium silicate for the application of paint coatings on building exteriors. It is especially recommended as the first paint coating of mineral bases and for use in moist places in modern and historical structures. It is used only on mineral bases (such as concrete, traditional calciferous, cement-calciferous, and cement renders as well as thin-coat mineral and silicate renders). It creates a totally mineral, vapour-permeable coating giving moisture freedom of escape from walls, and simultaneously, thanks to the use of hydrophobising substances, effectively protects facades against atmospheric precipitation. Before the paint is applied, the base must be primed using the **CALSILIT GF ▸ (pg. 39)**.
Note: Due to the nature of the product, it is not recommended for use on gypsum bases (such as stuccowork).

Technical data:

Basic binding agent: potassium sodium silicate;
Pigments: non-organic coloured pigments resistant to UV radiation and atmospheric conditions;
Density: about 1.53 g/cm^3;
Colours: white and colours from the KABE template as well as selected colours from the NCS template;
Degree of lustre: matte;
Solvent: water;
Average consumption: about 0.33 l/m^2 (for double painting on a smooth surface);
Temperature of use (of the air and base): from +8°C to +25°C
Relative air humidity: ≤75%;
Relative diffusive resistance of a coat with thickness of 150 urn: Sd=0.02 m (standard requirement Sd ≤2.0 m);
Coefficient of surface absorbability: w = 0.07 kg/m^{2}h0,5
(standard requirement w ≤ 0.5 kg/m^{2}h0,5).

Packaging: Single use plastic packaging containing 5 and 10 l of the product.

Storage: Store in the tightly sealed, original packaging in a cool area ensuring protection against frost. Opened packaging should be tightly closed and consumed as quickly as possible.

Period of suitability for use: 12 months from the date of production on the product packaging for factory sealed packaging.

METHOD OF USE:

Preparation of the base:

The base must be stable (no scratches and cracks), degreased, clean, and dry as well as free from stains and efflorescence of biological or chemical origin. In the case of algae and/or fungus growth, the base should be cleaned mechanically, then washed with pressurised water and safeguarded by the appropriate algae- and fungicide according to the manufacturer's guidelines. All loose layers not connected with the surface (loose render or flaking paint coatings) are to be removed. Old mineral bases should be cleaned using a dispersed stream of water.
When surface unevenness is significant, the wall should be initially evened using an evening mortar and then evened and smoothed using a putty mortar. For small unevenness, putty mortar may be used without the former. The use of the above mortars should be in accordance with the instructions of these products. Absorbent surfaces are to be primed with the appropriate preparations before applications of putty and/or evening mortars. In the case of the application of paint onto newly applied mineral bases (such as concrete, cement, calciferous, and cement-calciferous render), a seasoning period of a minimum of two weeks should be observed.
Note: Directly before the application of the paint, surfaces made from materials susceptible to alkalis (such as wood, metal, glass, or clinker bricks) are to be protected against splashing.

Priming:

Before paint is applied, the base should be primed using the **CALSILIT GF ▸ (pg. 39)**. The binding period of the preparation applied to the surface is about 24 hours under optimal weather conditions (for a temperature of +20°C and a relative air humidity of 55%). After the preparation applied to the surface has been fully bound, the paint may be applied.

Preparation of the paint:

The packaging contains a ready-to-use product. If necessary, the paint can be diluted with a small amount of the **CALSILIT GF ▸ (pg. 39)** water (by adding a maximum of 10% paint volume for the first paint coating, and a maximum of 5% for the second). When determining the amount of water or primer to be used, the following should be taken into account: the type of surface, drying conditions, and application technique.

Application:

The paint should be applied to the surface in two layers using a brush, roller, or through spraying (including the "airless" method). The second layer of paint should be applied only after the complete drying and binding of the first layer, that is, after a minimum of 24 hours have passed. The use of a special paint roller for facade paints made from woven polyamide with a hair length of at least 18 mm is recommended. Machine spraying is only to be used during windless weather.

Spraying parameters for an Airless type device:

Nozzle size - inches	Nozzle size	Spraying angle	Pressure	Filter	Diluent addition	Yield
[inches]	[mm]	[°]	[bar]	[mesh]	[%n]	[l/min]
0.017	0.43	50	200	60	about 10÷20	1.25

*) for use of the Wagner ProSpray 22 spraying device (Titan 340 – the device with the lowest power)
Note: The KOMBI mortar is a strong alkaline, eyes and skin should be protected. Protective clothing should be used during work. In case of contact with eyes, they should be washed immediately with a large amount of water, and if irritation occurs, a doctor should be contacted.

Drying:

The time of binding of one layer of paint applied to the surface (at a temperature of +20°C and relative air humidity of 55%) amounts to about three hours. Complete binding (hardening) of the applied paint coating takes places after a minimum of 24 hours.
Note: Low temperature and high air humidity lengthen the drying time of the paint. The newly applied paint coating should be protected against atmospheric precipitation and condensation of humidity until it is completely dry.

Guidelines for application:

In order to avoid differences in colour, it is necessary to apply surfaces constituting a separate architectural entirety within one work cycle. During the application and binding of the paint, the weather should be free of rain with an air temperature from +8°C to +25°C. Wash tools with water just after concluding work. Work on surfaces directly exposed to sunlight, strong wind, and high air humidity should be avoided. For the purpose of protection of the not fully bound paint coating against the harmful effects of atmospheric conditions, the use of the appropriate protective meshes on the scaffolding is recommended.
Note: High or low temperatures and high air humidity may have a disadvantageous influence on the shade of the paint coating. Temperatures that are too high as well as too low cause insufficient binding of the binding agent during application and binding of the paint. As a result of this, during later contact with water, washing out of the unbound potassium sodium silicate may occur, as an effect of which permanent runs or discolorations may occur.

Additional options:

In the case where the paint is used on surfaces with cracks of a width of up to 0.3 mm (such as slight compressive cracks of the render), the use of a microfiber reinforced paint for the first painting (option available on order) is recommended.

Farby KABE