

KEIM Concretal W Sol-silicate mineral paint for concrete



1. Product description

Sol-silicate protective concrete paint system Offers water repellency, vapour permeability and forms a chemical crystalline bond with the substrate. Keim Concretal W is made using pure inorganic mineral fillers, earth oxide colour pigments and potassium silicate binder.

2. Field of application

In-situ and precast concrete elements and structures, blockwork, lightweight concrete, asbestos cement and cementitious building boards. Keim Concretal W is used to protect concrete surfaces on exterior facades and interior concrete surfaces with a protective action providing protection from water and weathering by silicification and protection from chlorides.

3. Product properties

Keim Concretal W protects concrete from weathering and penetration of liquid water while simultaneously providing very good water vapour diffusion, it prevents water formation within concrete and thus corrosion of reinforcement steel (corrosion protection by keeping concrete dry).

Keim Concretal W prevents penetration of chloride salts and other pollutants, it has a matt mineral finish and preserves concrete surface textures.

Water vapour permeable
Colour fast
Resistant to mould and fungal growth
Easily cleaned
Free from solvents
Free from biocides
Easy to over-paint
Non flammable

Material characteristics

Resistance to vapour diffusion:

$$s_d (\text{H}_2\text{O}) = 0.02 \text{ m}$$

Density:

1.15-1.45g/cm³ depending upon colour and opacity

Water Absorption Co-efficient:

$$W = 0.1 \text{ kg/m}^2 \text{ h}^{0.5}$$

Carbonation protection:

$$s_d (\text{CO}_2) = 110 \text{ m}$$

Thermal Expansion:

Comparable to the mineral substrate onto which it is applied.

Colour shades

In accordance with the Keim Exclusiv swatch, with specials available.

4. Application instructions

Substrate preparation

All loose, flaking and unstable material must be identified and then thoroughly removed, all surfaces must be thoroughly washed down with clean cold water to remove all surface dirt and dust. When all surfaces are clean, sound, wind dry, dust free and free from all surface contaminants, decoration using Keim Mineral Paints may proceed.

Application

Keim Concretal W should be applied as a two coat system, the first coat to be diluted with up to 30% by weight Keim Concretal Dilution and applied by brush or roller, working well into all surfaces. After a minimum period of 12 hours a final coat of Keim Concretal W may be applied undiluted in a like manner.

Application conditions

Ambient and substrate temperature above 5°C and below 30°C. Do not apply in direct



sunlight or onto sun-heated surfaces, nor if it is raining or if there is an immediate likelihood of rain.

Consumption

Approx. 0.4kg/m² Keim Concretal and 0.06lt/m² Keim Concretal Dilution.

Consumption rates are offered for guideline purposes only and are quoted for smooth rendered surfaces. Actual rates are the responsibility of the applicator. Project specifications should be referred to for specific rates.

Cleaning of tools

Clean immediately after use with water

5. Packaging

5kg & 25kg containers

6. Storage

Approx. 12 months, if kept cool, but frost free in tightly closed containers.

7. Safety instructions

Cover surfaces which are not to be painted, in particular glass, natural stone, ceramics etc. Protect the eyes and skin from splashes. Keep out of reach of children.

Refer to COSHH data sheet.

The stated values and properties are the result of extensive development work and practical experience. Our recommendations for application, whether given verbally or in writing, are intended to provide assistance in the selection of our products and do not establish a contractual relationship. In particular, they do not release those purchasing and applying our products from the duty of establishing for themselves, with due care, the suitability of our products for the intended application. Standard building industry practices must be complied with. We retain the right to make modifications to improve the products or their application. This edition supersedes all earlier editions.

