Technical Data Sheet

KEIM Concretal®-C



1. Product description

Sol-silicate acrylic protective concrete paint according to ZTV-ING OS-B, OS-C and to DIN EN 1504-2 sect. 1.3, 2.2, 8.2.

2. Field of application

KEIM Concretal-C is applied onto concrete together with KEIM Silan-100 to OS-B of ZTV-ING or OS 2 of Rili-SIB (guidelines for the protection and renovation of concrete components published by the German committee on steel reinforced concrete (DAfStb)). Application together KEIM Concretal-Feinspachtel according to OS-C of ZTV-ING or OS 4 of Rili-SIB. In the case of very severe weathering or deicing salt exposure, the filler surface may additionally be treated with KEIM Silan-100. KEIM Hydrophobin 2000 may be used as an alternative to KEIM Silan-100. Keim Concretal-C is not suitable for horizontal and slightly inclined, weather-exposed surfaces.

3. Product properties

KEIM Concretal-C protects concrete from aggressive atmospheric pollutants. KEIM Concretal-C provides enhanced carbonation protection associated with very good water vapour permeability as well as protection from chloride loads. Mineral matt surface due to the silicate binder.

Binder

Binder combination of silica sol and pure acrylate.

Technical data

Solids content: approx. 58%
Density: approx. 1.4 g/cm³

Colour fastness: A1

(Fb-Code acc. to BFS instruction sheet No. 26)

Material characteristics acc. to DIN EN 1504:

Carbonation resistance: $s_d(CO_2) = 200 \text{ m}$

Water vapour diffusion

resistance: s_d (H₂O) = 0.07 m Water absorption coefficient: W \leq 0.09 kg/m²h^{0.5}

Tensile strength T _{standard}: 1.9 N/mm²

Tensile strength F-T

(freeze-thaw cycle): 1.5 N/mm²

Colour shades

Shades according to KEIM's Palette exclusiv.

4. Application instructions

Substrate preparation

The substrate must be dry, sound, clean and free of any loose material, dust, oil and other substances with a release action.

Application methods

KEIM Concretal-C is supplied ready-to-use. Application by brush, roller or airless spraying (nozzle size: 0.68 mm/0.027 inch; see technical data sheet "Airless technique" for further information).

Application

At least 2 coats are always necessary. Untreated concrete surfaces must be pretreated with KEIM Silan-100 to ZTV-ING OS-B.

Application conditions

From +5°C up to max. 30°C air and substrate temperature, up to max. 80% relative humidity.

Only apply in dry weather conditions. Do not apply in strong sunlight, onto substrates heated by the sun or in strong wind. After application, protect surfaces from excessively fast drying, wind and rain.

Drying times

Surface-dry after approx. 6 hours, completely dry after 2 days (+20°C, 60% rel. atmospheric humidity).

A drying time of at least 12 hours must be left between coats. After pretreatment with KEIM Silan-100, the priming coat should be applied after approx. 4-24 hours, while after KEIM Hydrophobin 2000 it should be applied after approx. 24 hours (at 20°C and 60% rel. atmospheric humidity).

Consumption

 0.3 kg/m^2 for two coats, correspondingly more with a rough substrate or stronger textured surface.

Dry film thickness

 $150\,\mu\text{m}$ on application of at least 0.3 kg/m² onto a flat substrate.

Cleaning of tools

Clean with water immediately after use.

5. Packaging

5 kg and 20 kg containers

6. Storage

6 months in sealed original containers in a cool, dry and frost-free area. Protect from frost.

7. Hazardous substances ordinance class

n/a

8. Transport hazard class

n/a

9. Disposal

EC Waste Code No. 08 01 12 Any residues must be emptied out of containers before recycling.

10. Safety instructions

Provide appropriate protection for surfaces which are not to be coated (e.g. glass, natural stone, ceramics etc.). Any splashes on surrounding surfaces or traffic areas must be rinsed off immediately with plenty of water. Protect the eyes and skin from splashes. Keep out of reach of children.

Product Code: M-DF 01

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.

Keimstraße 16

86420 Diedorf

Tel. 0821 4802-0 Fax 0821 4802-210