

## KEIM Concretal Feinspachtel (Fine filler for concrete)



### 1. Product description

Fine filler for KEIM Concretal concrete repair system to ZTV-ING TL/TP BE PCC and TL/TP OS and DAfStb guidelines.

### 2. Field of application

Filler layer after concrete repair with KEIM Concretal-Mörtel-R on vertical and non-traffic fair-faced concrete surfaces in civil engineering and bridge building to ZTV-ING and in building construction to DAfStb guidelines.

In building construction, as a filler layer after application of KEIM Concretal-Universalmörtel.

KEIM Concretal-Feinspachtel acts as a substrate for surface protection systems to ZTV-ING OS-C or DAfStb guidelines OS-4.

KEIM Concretal-Feinspachtel may be applied in layer thicknesses from approx. 0.5 mm to at most 4 mm.

KEIM Concretal-Feinspachtel may be used as a scratch filler to close pores and blowholes and can be applied by wet spraying.

With the addition of KEIM Concretal-Spezialvergütung to the mixing water, the product may be used as a blowhole grout.

### 3. Product properties

Low shrinkage and crack-free hardening, water resistant, frost resistant, resistant to de-icing salt and ageing, creates a level and blowhole-free surface.

### Material base

Single-component, polymer-modified, cement-bound filler, mixing liquid water.

### 4. Application instructions

#### Application methods

Smoothing trowel, float, wet spraying, scratch filling with hard rubber float, blowhole grout with brush.

#### Substrate preparation

The substrate must be clean, solid, open-pored and absorbent. It must be free of dust and sound. Roughen smooth or dense substrates. Remove dirt, laitance and unsound layers by jetting (for further details, see ZTV-ING, part 3, section 4, table 3.4.2., preparation of concrete substrate).

The surface tensile strength of the substrate must comply with the relevant technical regulations, ZTV-ING or Rili-SIB.

Depending on absorbency, the substrate must be prewetted from approx. 2 hours before application of KEIM Concretal-Feinspachtel. The substrate should be moistened but not saturated, and standing water should be avoided.

#### Application

Place at least 4.25 l (1.12 fl gal), at most 4.50 l (1.18 fl gal), of water\* into a clean container, add 25 kg of KEIM Concretal-Feinspachtel and mix for approx. 5 minutes until lump-free.

Low speed stirrers or compulsory mixers are suitable for mixing. Mixing by hand is not permissible.



Apply mixed KEIM Concretal-Feinspachtel with a float in layer thicknesses from a minimum of 0.5 mm up to 4 mm. In the case of full-cover filling, max. layer thickness per application 2 mm. Relatively large pores and blowholes should be closed with scratch filler applied using a hard rubber float.

KEIM Concretal-Feinspachtel may be used as a scratch filler to close pores and blowholes even if a full-cover coat is not applied. Variable delivery screw pumps are particularly suitable for wet spraying.

KEIM Concretal-Spezialvergütung (special additive) must be added to the mixing water when using the product as blowhole grout: 25 kg of dry filler are mixed with 4.50 l (1.18 fl gal) of water, itself mixed with 1.5 l (0.4 fl gal) of KEIM Concretal-Spezialvergütung.

It is advisable to add KEIM Concretal-Spezialvergütung in the case of very fine filler coats (3.50 l (0.92 fl gal) of water + 1 l (0.26 fl gal) Spezialvergütung for 25 kg of dry filler). See technical data sheet for KEIM Concretal-Spezialvergütung.

Once the filler has been applied, the surface is smoothed with a float and finished with a soft dry sponge or felt pad. When spray application is used, the as-sprayed surface may also be retained.

Stiffened filler must not be diluted with water or mixed with fresh KEIM Concretal-Feinspachtel.

\* Water is added depending on the desired consistency and temperature conditions (low temperature = low water requirement; high temperature = higher water requirement).

### Application conditions

KEIM Concretal-Feinspachtel should not be applied when substrate and air temperatures are below +5°C (41°F) and above +30°C (86°F) or when the substrate is exposed to high temperatures or strong wind.

### Consumption (dry filler)

Full-cover filling approx. 1.75 kg/m<sup>2</sup> at 1 mm layer thickness.

Scratch filling approx. 0.8-1.5 kg/m<sup>2</sup> (depending on pore volume).

### Cleaning of tools

Clean tools, machinery and mixers with water immediately after use. After hardening, mechanical removal is the only option.

### Special comments

When performing application in accordance with ZTV-ING, only whole containers may be used.

The specified after-treatment time for repair mortar can be interrupted in order to apply KEIM Concretal-Feinspachtel.

Once the filler has been applied, observe the after-treatment time of 5 days, for example by direct covering (masking with film) or spraying with water (see ZTV-ING). KEIM Concretal-Feinspachtel has been tested to ZTV-ING.

### Application data/Technical data

Quantity of mixing water

with 25 kg of dry filler: min. 4.25 l (1.12 fl gal)  
max. 4.5 l (1.18 fl gal)

Mixing period: 5 minutes



Maturing period: none

Fresh mortar bulk density: 2.08 kg/dm<sup>3</sup>

Working time: at + 5°C (41°F) 60 minutes  
at + 20°C (68°F) 45 minutes  
at + 30°C (86°F) 30 minutes

Application temperature: from +5°C to +30°C  
(41 - 86°F)

1st/2nd layer waiting time: at least 1 hour

Consumption (dry filler): 1.75 kg/m<sup>2</sup> at 1 mm  
layer thickness

Grain size: 0 to 0.2 mm

Compressive strength:  
after 7 days 27.0 N/mm<sup>2</sup>  
after 28 days 32.0 N/mm<sup>2</sup>

Bending strength:  
after 7 days 9.0 N/mm<sup>2</sup>  
after 28 days 10.0 N/mm<sup>2</sup>

## 5. Packaging

25 kg sack

## 6. Storage

12 months when stored under cool, dry conditions  
in original packaging.

## 7. Hazardous substances ordinance class

Xi Irritant,

R 38: Irritating to the skin.

R 41: Risk of serious damage to the  
eyes.

S 2: Keep out of reach of children.

S 22: Do not inhale dust.

S 24/25: Avoid contact with skin and  
eyes.

S 26: In case of contact with eyes, rinse  
immediately with plenty of water and  
seek medical advice.

S 37/39: Wear suitable gloves and eye /face  
protection.

S 46: If swallowed, seek medical advice  
immediately and show this container or  
label

## 8. Transport hazard class

n/a

## 9. Disposal

EC Waste Code No. 17 01 01

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.

Low chromate content to TRGS 613

Giscode: ZP 1



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.

