

# Technical Data Sheet

## StoCrete FB

Coating, cement-modified, crack-bridging



### Characteristics

#### Area of application

- as a crack-bridging coating for the protection of concrete structures at risk of cracking (concrete and reinforced concrete)
- for use in facilities for storing, filling, and transferring liquids hazardous to water
- as a waterproofing slurry for the waterproofing of buildings

#### Properties

- polymer-modified, cementitious coating
- structurally and dynamically crack-bridging
- prevents the ingress of water and harmful substances dissolved in water
- regulates the moisture balance
- increases electrical resistivity
- very good adhesive bond
- good carbon dioxide impermeability ( $S_d$  value for  $\text{CO}_2 > 50 \text{ m}$ )
- good water vapour diffusion capacity ( $S_d$  value for  $\text{H}_2\text{O} < 4 \text{ m}$ )
- watertight up to 3 bar
- high resistance to fuels, heating oil, used and new combustion engine oils and gearbox oils, as well as transformer and stain-blocking oils
- application: with a smoothing trowel, with an airless sprayer

#### Information/notes

- product is in accordance with EN 1504-2
- not suitable for surfaces subject to foot or vehicle traffic
- component of the StoCretec system in accordance with the DAfStb (German) Repair Guideline 2001-10
- surface protection system OS 5b (OS D I)
- use on areas with rising damp on request

### Technical data

| Criterion                                | Standard / test specification | Value/ Unit                                 | Notes  |
|------------------------------------------|-------------------------------|---------------------------------------------|--------|
| Density                                  | EN ISO 2811                   | 1,61 - 1,71 g/cm <sup>3</sup>               |        |
| Diffusion-equivalent air layer thickness | EN ISO 7783                   | 3,0 m                                       | V3 low |
| Water permeability rate w                | EN 1062-1                     | < 0,1 kg/(m <sup>2</sup> h <sup>0.5</sup> ) | W3 low |

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|                                                             |             |               |               |
|-------------------------------------------------------------|-------------|---------------|---------------|
| Water vapour diffusion-equivalent air layer thickness $\mu$ | EN ISO 7783 | 1.350         | average value |
| Bond strength                                               |             | > 1,0 MPa     |               |
| Gloss                                                       | EN 1062-1   | G3 - Matt     |               |
| Grain size                                                  | EN 1062-1   | < 500 $\mu$ m | S3 coarse     |

The characteristic values stated are average values or approximate values. Due to the natural raw materials in our products, the stated values can vary slightly in the same delivery batch; this does not affect the suitability of the product for its intended use.

### Substrate

#### Requirements

Requirements on the substrate:  
The substrate must be sufficiently wetted before applying the first layer (first time about 24 hours beforehand).

At the time of application the substrate must have dried until it is slightly damp.

Substrate temperature higher than +8 °C and 3 K above dew point.

Average bond strength 1.0 N/mm<sup>2</sup>

Bond strength of the single smallest value 0.6 N/mm<sup>2</sup>

#### Preparations

Prepare the substrate using a suitable mechanical method such as shot-blasting, milling and then shot-blasting, or abrasive blasting or ultra high pressure water blasting.  
Open pores and blow-holes sufficiently.

Remove less strong layers and laitance.

Seal all gaps and cavities in line with the rules of concrete repair.

Complete interior edges as fillets in containers, secondary containment tanks, and secondary containment rooms.

### Application

#### Application temperature

Lowest application temperature: +8 °C  
Highest application temperature: +30 °C  
relative humidity: max. 80 %

#### Time for application

At +10 °C: approx. 180 minutes  
At +20°C: approx. 120 minutes  
At +30°C: approx. 90 minutes

#### Mixing ratio

Component A (fluid): component B (powder form) = 1.0 : 1.0 parts by weight

#### Material preparation

First put component A (dispersion) and then component B (powder component)

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into a clean container.

Mix thoroughly using a slow-running paddle mixer (approx. 2 minutes at 300 rpm). Allow to mature for approx. 3 minutes and then stir again for approx. 30 seconds.

| Consumption | Type of application                       | Approx. consumption |                   |
|-------------|-------------------------------------------|---------------------|-------------------|
|             | Mixed material (roughness depth = 0.2 mm) | 4,5                 | kg/m <sup>2</sup> |
|             | Mixed material (roughness depth = 0.5 mm) | 4,7                 | kg/m <sup>2</sup> |
|             | Mixed material (roughness depth = 1.0 mm) | 5,1                 | kg/m <sup>2</sup> |

Material consumption depends on the application, substrate, and consistency, among other factors. The stated consumption values are only to be used as a guide. If required, determine precise consumption values on the basis of the specific project.

### Coating build-up

coating build-up OS 5b (OS D I)  
 1) Substrate preparation  
 2) Scratch coat of StoCrete FB  
 3) Coating of StoCrete FB  
 4) Coating of StoCrete FB

Coating build-up for facilities for storing, bottling, and processing substances hazardous to water (LAU) in accordance with the approval principles of the DIBT  
 Crack bridging 0.2 mm and 0.3 mm

1) Substrate preparation  
 2) Scratch coat of StoCrete FB  
 3) Coating of StoCrete FB  
 4) Coating of StoCrete FB

coating build-up of mineral waterproofing slurry for building waterproofing

1) Substrate preparation  
 2) Scratch coat of StoCrete FB  
 3) Coating of StoCrete FB  
 4) Coating of StoCrete FB

### Application

coating build-up OS 5b (OS D I)

1) Substrate preparation

Pre-wet the concrete substrate sufficiently before applying the scratch coat (for the first time approx. 24 h beforehand).

The concrete substrate must, however, have dried sufficiently by the time of applying the scratch coat so that it still only appears slightly damp.

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#### 2) Scratch coat of StoCrete FB

Apply/process the scratch coat using a suitable tool such as a square trowel or finishing trowel.

Consumption: approx. 1.0 kg/m<sup>2</sup>

At the earliest after 3 hours

#### 3) Coating of StoCrete FB

Consumption: approx. 1.5 kg/m<sup>2</sup>

At the earliest after 6 hours

#### 4) Coating of StoCrete FB

Consumption: approx. 2.0 kg/m<sup>2</sup>

Waiting time until resistant to rain and humidity:

at +10 °C: after approx. 24 hours

at +20 °C: after approx. 18 hours

at +30 °C: after approx. 12 hours

Depending on the roughness depth, a higher consumption may be necessary to obtain the necessary total layer thickness

Roughness depth 0.5 mm: additional consumption 200 g/m<sup>2</sup>

Roughness depth 1.0 mm: additional consumption 600 g/m<sup>2</sup>

For more detailed information, please refer to the specifications on StoCretec OS 5b.1

Coating build-up - LAU facilities in accordance with the approval principles of the DIBt

Crack bridging 0.2 mm

#### 1) Substrate preparation

Pre-wet the concrete substrate sufficiently before applying the scratch coat (for the first time approx. 24 h beforehand).

The concrete substrate must, however, have dried sufficiently by the time of applying the scratch coat so that it still only appears slightly damp.

#### 2) Scratch coat of StoCrete FB

Apply/process the scratch coat using a suitable tool such as a square trowel or finishing trowel.

Consumption: approx. 1.0 kg/m<sup>2</sup>

At the earliest after 3 hours

#### 3) Coating of StoCrete FB

Consumption: approx. 1.0 kg/m<sup>2</sup>

At the earliest after 6 hours

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### StoCrete FB

#### 4) Coating of StoCrete FB

Consumption: approx. 1.5 kg/m<sup>2</sup>

Waiting time until resistant to rain and humidity:

at +10 °C: after approx. 24 hours

at +20 °C: after approx. 18 hours

at +30 °C: after approx. 12 hours

Depending on the roughness depth, a higher consumption may be necessary to obtain the necessary total layer thickness

Roughness depth 0.5 mm: additional consumption 200 g/m<sup>2</sup>

Roughness depth 1.0 mm: additional consumption 600 g/m<sup>2</sup>

Further, more detailed information can be found in the national technical approval Z-59.12-336

Coating build-up - LAU facilities in accordance with the approval principles of the DIBt

Crack bridging 0.3 mm

#### 1) Substrate preparation

Pre-wet the concrete substrate sufficiently before applying the scratch coat (for the first time approx. 24 h beforehand).

The concrete substrate must, however, have dried sufficiently by the time of applying the scratch coat so that it still only appears slightly damp.

#### 2) Scratch coat of StoCrete FB

Apply/process the scratch coat using a suitable tool such as a square trowel or finishing trowel.

Consumption: approx. 1.0 kg/m<sup>2</sup>

At the earliest after 3 hours

#### 3) Coating of StoCrete FB

Consumption: approx. 1.5 kg/m<sup>2</sup>

At the earliest after 6 hours

#### 4) Coating of StoCrete FB

Consumption: approx. 2.0 kg/m<sup>2</sup>

Waiting time until resistant to rain and humidity:

at +10 °C: after approx. 24 hours

at +20 °C: after approx. 18 hours

at +30 °C: after approx. 12 hours

Depending on the roughness depth, a higher consumption may be necessary to obtain the necessary total layer thickness

Roughness depth 0.5 mm: additional consumption 200 g/m<sup>2</sup>

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Roughness depth 1.0 mm: additional consumption 600 g/m<sup>2</sup>

Further, more detailed information can be found in the national technical approval Z-59.12-336

coating build-up of mineral waterproofing slurry for building waterproofing

1) Substrate preparation

Pre-wet the concrete substrate sufficiently before applying the scratch coat (for the first time approx. 24 h beforehand).

The concrete substrate must, however, have dried sufficiently by the time of applying the scratch coat so that it still only appears slightly damp.

2) Scratch coat of StoCrete FB

Apply/process the scratch coat using a suitable tool such as a square trowel or finishing trowel.

Consumption: approx. 1.0 kg/m<sup>2</sup>

At the earliest after 3 hours

3) Coating of StoCrete FB

Consumption: approx. 1.5 kg/m<sup>2</sup>

At the earliest after 6 hours

4) Coating of StoCrete FB

Consumption: approx. 2.0 kg/m<sup>2</sup>

Waiting time until resistant to rain and humidity:

at +10 °C: after approx. 24 hours

at +20 °C: after approx. 18 hours

at +30 °C: after approx. 12 hours

Depending on the roughness depth, a higher consumption may be necessary to obtain the necessary total layer thickness

Roughness depth 0.5 mm: additional consumption 200 g/m<sup>2</sup>

Roughness depth 1.0 mm: additional consumption 600 g/m<sup>2</sup>

Further, more detailed information can be found in the national technical test certificate P 1763/02-149

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### Cleaning the tools

After every work interruption, clean tools and working equipment using water.

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### Notes, recommendations, special information,

The declaration(s) of performance can be obtained from the StoCretec Technisches InfoCenter

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### miscellaneous

General application instructions are available at [www.stocretec.de](http://www.stocretec.de) and in the notes of the latest Technical Manual.

The minimum material consumption is defined by the tested system!

StoCrete FB is delivered in the agreed units to the mixing ratio (A/B).

### Delivery

**Colour shade** grey

**Packaging** Pail and sack

| Article number | Name            | Container |
|----------------|-----------------|-----------|
| 00419/004      | StoCrete FB Set | 20 kg set |

### Storage

**Storage conditions** Component A (dispersion) cool and frost-free  
Component B (powder component) cool and dry

**Storage life** In the original container until ... (see packaging).  
This product has a low chromate content.

The product quality is best guaranteed in its unopened original container until its shelf life has expired. The first digit of the batch number is the final digit of the year. The second and third digits indicate the calendar week. Example: 1450013223 - shelf life until end of calendar week 45 in 2021.

### Certificates/approvals

Z-59.12-336 Coating system StoCrete FB in LAU facilities

### Identification

**Product group** Coating

**GISCODE** ZP1

### Safety

This product is subject to compulsory labelling in accordance with the current EU regulation.

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You will receive an EU Safety Data Sheet with your first order.  
Please observe the information regarding the handling of the product, its storage,  
and disposal.

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### Special notes

The information in this Technical Data Sheet serves to ensure the product's intended use, or its suitability for use, and is based on our findings and experience. Users are nevertheless responsible for establishing the product's suitability and use.  
Applications not specifically mentioned in this Technical Data Sheet are permissible only after prior consultation. Where no approval is given, such applications are at the user's own risk. This applies in particular when the product is used in combination with other products.

When a new Technical Data Sheet is published, all previous Technical Data Sheets are no longer valid. The latest version is available on the Internet.



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|                | OS 5 b (OS D I)       | LAU**                 |                       | DIN 18195             |
|----------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Crack bridging |                       | 0,2 mm                | 0,3 mm                |                       |
|                | [kg /m <sup>2</sup> ] | [kg /m <sup>2</sup> ] | [kg /m <sup>2</sup> ] | [kg /m <sup>2</sup> ] |
| Scratch coat*) | 1,0                   | 1,0                   | 1,0                   | 1,0                   |
| 1. Coating     | 1,5                   | 1,0                   | 1,5                   | 1,5                   |
| 2. Coating     | 2,0                   | 1,5                   | 2,0                   | 2,0                   |

|                        |     |
|------------------------|-----|
| *) Scratch coat at     |     |
| Roughness depth 0,2 mm | 1,0 |
| Roughness depth 0,5 mm | 1,2 |
| Roughness depth 1,0 mm | 1,6 |

\*\* LAU = Facility for storing, bottling, and handling water polluting substances in acc. to German Federal Water Act § 62

### StoCrete FB table

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