

# Technical Data Sheet

## StoCrete TF 250

Fairing coat, sulphate-resistant, polymer-modified, cementitious, layer thickness 2-5 mm



### Characteristics

#### Area of application

- as a scratch coat and levelling coat for protecting and repairing concrete structures
- for extremely aggressive water, e.g. in wastewater management, wastewater treatment plants

#### Properties

- polymer-modified, cementitious concrete repair product (PCC), very good adhesive strength on the concrete substrate, good application overhead, high resistance to flow, high protection against stress from frost/de-icing salt
- resistant to water containing sulphuric acid, ammonium, and sulphate in line with exposure class XA3 in accordance with EN 206-1:2001-07

#### Information/notes

- not for surfaces subject to foot or vehicle traffic
- product is in accordance with EN 1504-3

### Technical data

Criterion	Standard / test specification	Value/ Unit	Notes
Bulk density of fresh mortar	EN 1015-6	2.1 kg/dm <sup>3</sup>	
Maximum particle size		0.8 mm	
Bond strength (28 days)	EN 1542	> 1.5 MPa	
Compressive strength (28 days)	EN 12190	42 MPa	
Flexural strength (28 days)	TP BE-PCC	9 MPa	
Static modulus of elasticity (28 days)	EN 13412	16 GPa	

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 concrete substrate must be load-bearing and free from native and foreign release agents, as well as from corrosion-promoting components (e.g. chlorides). Remove weak layers and laitance.

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Damp in accordance with the definition in the DAfStb (German) Repair Guideline 2001-10.

Average bond strength 1.5 N/mm<sup>2</sup>  
 Lowest single bond strength value 1.0 N/mm<sup>2</sup>

### Preparations

Prepare the substrate using a suitable mechanical process, such as abrasive blasting or high-pressure water blasting (> 800 bar). Open pores and blow-holes sufficiently.

Seal any gaps or cavities in the area of the concrete substrate close to the surface, in line with the rules of concrete repair..

#### Note:

Rework any treated surfaces using a suitable process (abrasive blasting) if the substrate preparation process has led to joint faults in the area of the remaining existing concrete close to the surface. These can result from chiselling, knocking, milling, or flame cleaning.

### Application

#### Application temperature

Lowest application temperature: +5 °C  
 Highest application temperature: +30 °C

#### Time for application

At +5 °C: approx. 90 minutes  
 At +23 °C: approx. 45 minutes  
 At +30 °C: approx. 30 minutes

#### Mixing ratio

25 kg of material in accordance with the description / 4.0 l of water = 1.0 : 0.16 parts by weight  
 SMF technology: set sight glass to approx. 400 l water / h

#### Material preparation

Decant water first and add the pre-blended dry mortar.  
 Mix for approx. 2 minutes. Allow to mature for approx. 3 minutes. Remix for approx. 30 seconds.  
 SMF technology: mixing tube / 2-stage mixing shaft.

#### Note:

If using single mixing paddles, these must have two stirring rings that act using the principle of countercurrent flow. The speed should be up to approx. 500 rpm.  
 Before applying the material, shake it thoroughly in its original container.

#### Consumption

Type of application	Approx. consumption	
per mm of layer thickness (without rebound)	1.9	kg/m <sup>2</sup>

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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.

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### Coating build-up

- 1) Substrate preparation
  - 2) Scratch coat of StoCrete TF 250
  - 3) Levelling coat with StoCrete TF 250
- Layer thickness: 2 - 5 mm

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### Application

Suitable for application by hand and with Sto silo technology using the dense flow process.

Apply with plastering trowel

#### 1) Substrate preparation

Before applying StoCrete TF 250, seal any gaps or cavities in the area of the concrete substrate close to the surface in line with the regulations on concrete repair.

Sufficiently pre-wet the concrete substrate before applying StoCrete TF 250 (about 24 hours before the first application cycle). At the time of application, however, the concrete substrate must be dry to the point that it just appears slightly damp.

#### 2) Scratch coat

Apply StoCrete TF 250 by thinly scraping with a plastering trowel on the slightly damp concrete to close pores and blow-holes.

#### 3) Fairing coat

Apply the PCC fairing coat StoCrete TF 250, either manually or by machine, on to the fresh scratch coat. To ensure a good adhesive bond, always work wet on wet. In the final step, smooth the surface. Rub out spatula strokes with a sponge in a fresh state; when doing so, do not add any more water.

Consumption approx. 2.1 kg/m<sup>2</sup> and mm of layer thickness (mixed material)

A bucket trowel, spatula or plastering trowel is used for manually application of the fairing coat.

For application by machine, use:

SMF technology (silo, mixing and conveying) mixing and conveying technology is integrated into the silo.

Tube type: D 35 mm, conveying distance max. 40 m.

Reprofiler sprayer with a 12 mm nozzle tube.

Compressor performance: at least 3 m<sup>3</sup>/min.

It is possible to interrupt mixing at +25 °C for a max. of 30 minutes.

Other equipment for machine application:

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All standard wet spraying devices available on the market, such as the PFT-N2V or the WM-Variojet.

- 4) Curing  
Curing procedure:
- Cover with film or sheeting
  - Spray with water
  - Chemical curing

Under normal conditions, curing must last at least 3 days. Observe the relevant standard DIN 1045-3:2012-03, the B8 data sheet "Nachbehandlung und Schutz des jungen Betons" (4.2014) published by the Verein Deutscher Zementwerke e.V., and ZTV-ING (2014/12) (available in German only).

Note:  
Chemical curing may only be carried out if the subsequent work is compatible with this.

A uniform colour shade of the fairing coat surface is not possible due to the application method.

The foil must not touch the surface of the fairing coat.

A key part of curing is to adequately pre-wet the concrete substrate before application of the fairing coat so that the substrate is water-saturated and the fresh fairing coat does not extract mixing water. The substrate must be "damp", as described in the section on substrate preparation in the DAfStb (German) Repair Guideline.

<b>Drying, curing, ready for next coat</b>	At +20 °C and 65 % relative humidity, over-coatable with: Coating OS 4 / 5: after 1 day
<b>Notes, recommendations, special information, miscellaneous</b>	The Declaration(s) of Conformity can be obtained from the StoCretec Technisches InfoCenter For general application instructions, see <a href="http://www.stocretec.de">www.stocretec.de</a> (Products) and in the latest issue of the "Technical Data Sheets" manual, in the appendix.

#### Delivery

**Packaging** sack

Article number	Name	Container
00460-001	StoCrete TF 250	25 kg bag

#### Storage

**Storage conditions** Store in dry conditions.

**Storage life** In the original container until ... (see packaging).

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## StoCrete TF 250

This product has a low chromate content. We guarantee this property until maximum storage life expires. Please observe the guaranteed storage life data on the batch no. shown on the container.

Explanation of batch number: e.g. 6050017152

In this example, storage life until the end of week 05 in 2016 is guaranteed (digit 1 = last digit of the year, digits 2 + 3 = calendar week). For further explanation, see the price list.

### Certificates/approvals

070605_Kurzfassung	Acid resistance testing
071102_Kurzfassung	Testing ammonium and sulphate resistance

### Identification

**Product group** Fairing coats

### Safety

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

### 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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## StoCrete TF 250

Unit 3, Lyon Road  
Linwood Industrial Estate  
GB - Paisley PA3 3BQ  
Telephone : (44) 1505 324 262  
Telefax : (44) 1505 323 618  
[www.sto.co.uk](http://www.sto.co.uk)