StoCrete TF 250

Fairing coat, sulphate-resistant, polymermodified, cementitious, layer thickness of 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 (RM)
- very good adhesive strength on a concrete substrate
- good overhead application
- very good non-sag properties
- provides highly effective protection when exposed to ice and 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 suitable 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/dm³	
Maximum particle size		0.8 mm	
Bond strength (28 days)	EN 1542	> 1.5 MPa	
Compressive strength	EN 12190	42 MPa	
Flexural strength	TP BE-PCC	9 MPa	
Static modulus of elasticity	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 substances that could interfere with adhesion, as well as from corrosion-promoting components (e.g. chlorides). Remove less strong layers and laitance.



StoCrete TF 250

Damp in accordance with the definition in the DAfStb (German) Repair Guideline

2001-10.

Average bond strength: 1.5 N/mm²

Bond strength, lowest single value: 1.0 N/mm²

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 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 parts by weight SMF technology: set sight glass to approx. 400 l v		r = 1.0 : 0.16
Material preparation	Decant water, then add the pre-blended dry morta Mix for approx. 2 minutes. Allow to mature for approx. 30 seconds. StoSilo Technology: mixing tube / 2-stage mixing	orox. 3 minutes.	Remix for
	Note: If using single mixing paddles, these must have to principle of countercurrent flow. The speed should Before applying the material, shake it thoroughly in	d be up to appro	x. 500 rpm.
Consumption	Type of application	Approx. co	onsumption
	per mm of layer thickness (without rebound)	1.9	kg/m²



StoCrete TF 250

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

- 1) Substrate preparation
- 2) Scratch coat of StoCrete TF 250
- 3) Levelling coat with StoCrete TF 250

Layer thickness: 2 - 5 mm

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/m² 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 m³/min.

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

Other equipment for machine application:

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



StoCrete TF 250

4) Curing

Curing procedure:

- a) Cover with film or sheeting
- b) Spray with water
- c) 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.

Drying, curing, ready for next coat	At +20 °C and 65 % relative humidity, over-coatable with: Coating OS 4 / 5: after 1 day
Notes, recommendations, special information, miscellaneous	The declaration(s) of performance can be obtained from the StoCretec Technisches InfoCenter General application instructions are available at www.stocretec.de and in the notes of the latest Technical Manual.

Delivery			
Packaging	sack		
	Article number	Name	Container
	00460-001	StoCrete TF 250	25 kg bag
Storage			
Storage conditions	Store in dry condition	ns.	
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		



StoCrete TF 250

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. For further explanation, see the price list.

Certificates/approvals		
	070605_Kf	Acid resistance testing
	071102_Kf	Testing ammonium and sulphate resistance

Identification	
Product group	Fairing coat
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.

StoCretec GmbH Gutenbergstr. 6 D-65830 Kriftel

Tel.: +49 6192 401-104 Fax: +49 6192 401-105 stocretec@sto.com www.stocretec.de