

Technical Data Sheet

StoCrete RM F

Quick repair mortar for floors, polymer-modified, cementitious, layer thickness 2-40 mm



Characteristics

Area of application

- as non-sag repair mortar for reprofiling, touching up, and filling recesses and spalling in screeds and concrete
- for producing fillets and laying to falls
- to obtain level surfaces of height variations and uneven falls

Properties

- polymer-modified, cementitious concrete repair product (PCC)
- very good adhesive strength on a concrete substrate
- very good resistance to flow
- no separate bonding agent necessary
- quick-curing
- can be quickly over-coated
- impermeable to water
- resistant to salt and frost

Information/notes

- product is in accordance with EN 1504-3
- no separate bonding agent necessary

Technical data

Criterion	Standard / test specification	Value/ Unit	Notes
Bulk density of fresh mortar	EN 1015-6	2.0 kg/dm ³	
Maximum particle size		0.8 mm	
Bond strength (28 days)	EN 1542	> 1.5 MPa	(28 days)
Compressive strength (28 days)	EN 12190	40 - 50 MPa	(28 days)
Flexural strength (28 days)	TP BE-PCC	7 - 9 MPa	(28 days)
Static modulus of elasticity (28 days)	EN 13412	22 - 26 GPa	(28 days)

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

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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.

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

The preparation grade of the exposed reinforcing steel following substrate preparation: Sa 2½ - metallic bright in accordance with DIN EN ISO 12944, Part 4 (replacement for DIN 55928, Part 4) when coating the reinforcement with protection against corrosion

Average bond strength 1.5 N/mm²
Lowest single bond strength value 1.0 N/mm²

Preparations

Substrate preparation:
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.

Bevel the edges of the areas of spalling under approx. 45°.

Application

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

Time for application Temperature-dependent for approx. 10 - 15 minutes.

Mixing ratio 15 kg of material in accordance with the description / 2.4 - 2.55 l of water = 1.0 : 0.16 - 0.17 parts by weight

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.

Consumption	Type of application	Approx. consumption	
	per mm layer thickness	2.0	kg/m ²

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 1) Substrate preparation
2) Protection against corrosion with StoCrete TK (for exposed reinforcement)
3) Bonding agent StoCrete RM F
4) Reprofiling with StoCrete RM F

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Local reprofiling 2 - 40 mm
Filling over an area 2 - 20 mm

Application

1) Substrate preparation

Derust the exposed reinforcing steel in accordance with DIN EN ISO 12944-4 up to preparation grade Sa 2½. The derusted reinforcing steel must be free from dust and grease.

2) Corrosion protection

Derust the reinforcing steel in accordance with DIN EN ISO 12944, part 4. Then immediately coat it with StoCrete TK in two application cycles. Use a paint brush to coat the reinforcement steels evenly and without gaps.

Waiting time between the two application cycles is 4.5 hours.

The protection against corrosion must have hardened on the reinforcing steel to an extent that it cannot be loosened from the reinforcing steel during the next application cycle.

Application cycle 1:

StoCrete TK grey, consumption approx. 130 g/m for single application Ø up to 18 mm

Application cycle 2:

StoCrete TK light grey, consumption approx. 140 g/m for single application Ø up to 18 mm

or

Application cycle 1:

StoCrete TK grey, consumption approx. 150 g/m for single application Ø above 18 mm

Application cycle 2:

StoCrete TK light grey, consumption approx. 160 g/m for single application Ø above 18 mm

3) Reprofiling

Sufficiently pre-wet the concrete substrate before applying the product. At the time of application, however, the concrete substrate must be dry to the point that it just appears slightly damp.

Pre-fill the local areas of spalling with StoCrete RM F, then carry out reprofiling wet on wet. Apply manually using a mason's trowel, spatula, or square trowel. To ensure a good adhesive bond, always work wet on wet.

Please note:

When the reaction or stiffening has started, do not dilute StoCrete RM F any more with water.

Layer thickness of StoCrete RM F: 2 - 40 mm

Consumption of reprofiling mortar: approx. 20 kg/m² per cm of spalling depth/layer thickness (mixed material)

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4) Filling over a large area

If using as a fine filler over a large area, apply a scratch coat to seal pores and blow-holes, then apply StoCrete RM F as a filler wet on wet in the corresponding layer thickness. 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; when doing so, do not add any more water.

Layer thickness of StoCrete RM F: 2 - 20 mm

Consumption of reprofiling mortar: approx. 20 kg/m² per cm of spalling depth/layer thickness (mixed material)

5. Subsequent treatment

Subsequent treatment procedure:

- a) Cover with sheets or mats
- b) Spray with water
- c) Chemical subsequent treatment

Under normal conditions, the time for subsequent treatment to be observed is 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 subsequent work is compatible with this.

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

The film must not touch the surface of the mortar.

A key part of curing is adequately wetting the concrete substrate before applying the mortar, so that the substrate is water-saturated and the fresh mortar does not extract mixing water.

Observe the explanations in ZTV-W LB 219 (2013) (German only).

Drying, curing, ready for next coat

At +20 °C and 65 % relative humidity, over-coatable with:
Acrylic floor paint e.g. StoCryl BF 100: 4 h
EP water-based coating material e.g. StoPox WL 200, StoPox MS 200: 4 h

Cleaning the tools

Clean with water immediately after use; hardened material can only be removed mechanically.

Notes, recommendations, special information, miscellaneous

The Declaration(s) of Conformity can be obtained from the StoCretec Technisches InfoCenter
General application instructions can be found at www.stocretec.de (Products) and in the latest issue of the "Technical Data Sheets" manual, in the appendix.

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Delivery

Packaging Pail

Article number	Name	Container
09459-001	StoCrete RM F	15 kg pail

Storage

Storage conditions Store in dry conditions.

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

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.

Identification

Product group Repair mortar

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.

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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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