

Technical Data Sheet

StoCrete RM F

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



Characteristics

Area of application

- as a 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 (RM)
- very good adhesive strength on a concrete substrate
- very good non-sag properties
- no separate tack coat necessary
- rapidly 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 tack coat 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	EN 1542	> 1,5 MPa	(28 days)
Compressive strength	EN 12190	40 - 50 MPa	(28 days)
Flexural strength	TP BE-PCC	7 - 9 MPa	(28 days)
Static modulus of elasticity	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

Requirements

Requirements on the substrate:

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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.

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 – bare metal in accordance with DIN EN ISO 12944, Part 4 (replacement for DIN 55928, Part 4) for coating the reinforcement with protection against corrosion

Average bond strength: 1.5 N/mm²
Bond strength, lowest single 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, then 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 of layer thickness / per litre of cavity

2,0

kg/m²

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

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- 2) Protection against corrosion with StoCrete TK (for exposed reinforcement)
- 3) bonding agent with StoCrete RM F
- 4) reprofiling with StoCrete RM F
- local reprofiling 2–40 mm
- levelling coat over a large 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. However, when applying the product, the concrete substrate must be dry enough that it appears only slightly damp.

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

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Please note:

Do not add any more water to dilute StoCrete RM F once the reaction or stiffening has started.

layer thickness of StoCrete RM F: 2–40 mm

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

4) levelling coat over a large area

If using as a fairing coat over a large area, apply a scratch coat to seal pores and blow-holes, then apply StoCrete RM F as a monolithic filler and levelling coat 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

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

5) 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.

It is not possible to achieve a uniform colour shade of the mortar surface for procedural reasons.

The foil 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.

Drying, curing, ready for next coat

At +20 °C and 65 % relative humidity, over-coatable with:

AY floor paint, e.g. StoCryl BF 700: 4 h

epoxy resin water-based coating material, e.g. StoPox WL 200, StoPox MS 200: 4

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Cleaning the tools

Clean with water after use.
Collect cleaning water/rinsing water and dispose of it professionally.
Remove bonded material by mechanical means.

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

Pail

Article number

09459-001

Name

StoCrete RM F

Container

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.
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.
For further explanation, see the price list.

Identification

Product group

Repair mortar

GISCODE

ZP1

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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