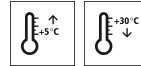


Technical Data Sheet

StoCrete GM

Repair mortar, polymer-modified, cementitious,
layer thickness 6-30 mm



Characteristics

Area of application

- as concrete repair product for the repair of concrete structures (concrete and reinforced concrete)

Properties

- polymer-modified, cementitious concrete repair product (PCC)
- very good adhesive strength on a concrete substrate
- good application overhead
- good resistance to flow
- no separate bonding agent necessary

Information/notes

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

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		2 mm	
Bond strength (28 days)	EN 1542	> 1.5 MPa	
Compressive strength (28 days)	EN 12190	45 MPa	
Flexural strength (28 days)	TP BE-PCC	9 MPa	
Static modulus of elasticity (28 days)	EN 13412	17 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 dry, load-bearing and free from native and foreign substances that have a separating action, as well as from corrosion-promoting components (e.g. chlorides).

Technical Data Sheet

StoCrete GM

Remove weak layers and laitance.

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

Preparation grade of the exposed reinforcing steel after substrate preparation: Sa 2½ in accordance with EN ISO 8501-1.

Average bond strength 1.5 N/mm²

Lowest single bond strength 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.

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

At +5 °C: approx. 90 minutes
At +10°C: approx. 60 minutes
At +30 °C: approx. 40 minutes

Mixing ratio

25 kg of material in accordance with the description / 2.75 l of water = 1.0 : 0.11 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	1.8 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) Reprofiling with StoCrete GM
- Layer thickness: 6 - 30 mm

Application

- 1) Substrate preparation
- Sufficiently pre-wet the concrete substrate before applying the product (about 24

Technical Data Sheet

StoCrete GM

hours before the first application cycle).

At the time of application, however, it must be dry to the point that it just appears slightly damp.

2) Protection against corrosion

Immediately after derusting the reinforcing steel in accordance with DIN EN ISO 12944, part 4, coat with StoCrete TK in two application cycles.

Coat the reinforcing steel completely and evenly using a paint brush.

Waiting time between the two application cycles: 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 application cycle 2.

Application cycle 1: StoCrete TK grey, consumption approx. 130 g/m single application Ø up to 18 mm

Application cycle 2: StoCrete TK light grey, consumption approx. 140 g/m single application Ø up to 18 mm

or

Application cycle 1: StoCrete TK grey, consumption approx. 150 g/m single application Ø over 18 mm

Application cycle 2: StoCrete TK light grey consumption approx. 160 g/m single application Ø over 18 mm

3) Reprofiling

When using StoCrete GM, no bonding agent is necessary.

Pre-fill the prepared and slightly damp areas of spalling with StoCrete GM, then reprofile wet-in-wet.

Apply manually or by machine.

To ensure a good adhesive bond, always work wet on wet.

Consumption: approx. 20 kg/m² per cm spalling depth (mixed material)

Manual application:

For manual application, use a bucket trowel, spatula, plastering trowel.

Machine application:

For machine application, we recommend sprayers such as PFT N2V.

To obtain the required technical properties of StoCrete GM, sufficient and careful curing is necessary.

4) Curing

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

Technical Data Sheet

StoCrete GM

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: Mineral slurry: after 24 hours Mineral fairing coat: after 24 hours
--	---

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.
---	--

Delivery

Article number	Name	Container
00708-001	StoCrete GM	25 kg bag

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.
---------------------	---

Technical Data Sheet

StoCrete GM

Identification

Product group Repair mortar

Safety

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