# StoCrete TG 204

Repair mortar, polymer-modified, cementitious, layer thickness of 12-50 mm







Area of application	<ul> <li>as concrete repair product for the repair of concrete structures (concrete and reinforced concrete)</li> </ul>
Properties	polymer-modified, cementitious concrete repair product (RM)
	<ul> <li>very good adhesive strength on a concrete substrate</li> </ul>
	<ul> <li>good overhead application</li> </ul>
	<ul> <li>very good non-sag properties</li> </ul>
	<ul> <li>provides highly effective protection when exposed to ice and salt</li> </ul>
	<ul> <li>very quickly over-coatable</li> </ul>
	<ul> <li>very high impermeability</li> </ul>
	very high mechanical resistance
	• solvent-free
Information/notes	product is in accordance with EN 1504-3
	• component of the StoCretec system in accordance with the DAfStb (German)
	Repair Guideline 2001-10; stress resistance class M 2 (PCC I, II)

### Technical data

Criterion	Standard / test	Value/ Unit	Notes
	specification	raido, emit	
Bulk density of fresh mortar	EN 1015-6	2.2 kg/dm³	
Maximum particle size		4 mm	
Bond strength (28 days)	EN 1542	> 2.0 MPa	_
Compressive strength	EN 12190	55 MPa	_
Flexural strength	TP BE-PCC	10 MPa	
Static modulus of elasticity	EN 13412	21 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



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components (e.g. chlorides). Remove less strong layers and laitance.

Damp in accordance with the definition in EN 1504-10.

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/mm<sup>2</sup>

Bond strength, lowest single 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.

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. 60 minutes At +30 °C: approx. 45 minutes			
Mixing ratio	25 kg of material in accordance with the description/3.0 - 3.125 l water = 1.0 : 0.12 - 0.125 parts by weight			
Material preparation	Compulsory mixer: decant water and add pre-blended dry mortar. Mix for approx. 2 minutes. Allow to mature for approx. 3 minutes. Remix for approx. 30 seconds.  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.			
Consumption	Type of application	Approx. consumption		
	per mm layer thickness	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: StoCrete TK (in case of exposed reinforcement)
- 3) Mineral bonding agent with StoCrete TH 200
- 4) Concrete repair with StoCrete TG 204

Layer thickness: 12-50 mm, partially up to 100 mm

Higher layer thicknesses are possible due to multi-layer work.

### **Application**

manually

as a regular building product:

- 1) Substrate preparation
- 2) Protection against corrosion (for exposed reinforcement).

Derust the reinforcing steel in accordance with DIN EN ISO 12944, part 4 and then coat it immediately 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 second application cycle.

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

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

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

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

#### 3) Mineral bonding agent

The concrete foundation must be sufficiently wetted before applying StoCrete TH 200 (first time about 24 hours beforehand).

However, when applying the product, the concrete substrate must be dry enough that it appears only slightly damp.

Apply the StoCrete TH 200 bonding agent using a suitable tool, such as a paint brush or brush.

Remove any cured bonding agent by abrasive blasting and renew it. Consumption approx. 1.9 kg/m<sup>2</sup>

#### 4) Concrete repair

Mix the material in a clean container using a stirrer or a compulsory mixer for larger surfaces. Decant water and add the pre-mixed dry mortar, mix for 2 minutes, then leave to mature for 3 minutes and remix again for 0.5 minutes.



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Apply StoCrete TG 204 to the fresh adhesive slurry. Apply with a mason's trowel, spatula or square trowel. To ensure adhesive bond always work fresh in fresh.

Consumption: approx. 22 kg/m² per cm spalling depth/layer thickness (mixed material)

Then roughly trowel off the surface without smoothing to ensure bonding to the subsequent smoothing filler.

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.

#### 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.

Note the information in ZTV-W LB 219 (2013).

Drying, curing, ready for next coat	At +20 °C and 65 % relative humidity, over-coatable with: StoCrete TF 200 or StoCrete TF 204 after 5 days		
Cleaning the tools	Clean with water.		
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
	00415-001	StoCrete TG 204	25 kg bag
Storage			
Storage conditions	Store in dry conditions.		



## StoCrete TG 204

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
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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