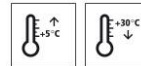


Technical Data Sheet

StoCrete TG 154

Screed material, sulphate-resistant, polymer-modified, cementitious, layer thickness 12-50 mm



Characteristics

Area of application

- for levelling unevenness on floor areas and for producing slopes
- for mineral floor areas contaminated with sulphate
- as concrete repair product for extremely aggressive sulphate-contaminated water
- communal wastewater treatment plants

Properties

- as a concrete repair product for the application case PCC I
- in accordance with the exposure classes XA 2 and XA 3 in accordance with DIN EN 206-1

Information/notes

- product is in accordance with EN 1504-3
- as a concrete repair product for communal wastewater treatment plants

Technical data

Criterion	Standard / test specification	Value/ Unit	Notes
Bulk density of fresh mortar	EN 1015-6	2.2 kg/dm ³	
Maximum particle size		4.0 mm	
Bond strength (28 days)	EN 1542	> 2.0 MPa	
Compressive strength (28 days)	EN 12190	45 - 50 MPa	
Flexural strength (28 days)	TP BE-PCC	6 - 8 MPa	
Static modulus of elasticity (28 days)	EN 13412	24 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 release agents, as well as from corrosion-promoting components (e.g. chlorides). Remove weak layers and laitance.

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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

Substrate preparation:
 Prepare the concrete substrate using a suitable method in accordance with ZTV-ING Part 3, section 4. 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. 60 minutes
 At +23 °C: approx. 30 minutes
 At +30 °C: approx. 15 minutes

Mixing ratio

25 kg of material in accordance with the description / 2.85 l of water = 1.0 : 0.114 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.

Consumption

Type of application	Approx. consumption	
Dry material per cm of spalling depth/layer thickness	20	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) Mineral bonding agent with StoCrete TH 250
 4) Concrete repair with StoCrete TG 154
 Layer thickness 12 - 50 mm, in places up to 100 mm
 Higher layer thicknesses possible due to multi-layer application.

Application

manually, suitable for application using a screed pump

1) Substrate preparation

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2) Protection against corrosion

Immediately after derusting of the reinforcing steel in accordance with EN ISO 12944, Part 4, coating with StoCrete TK is carried out in two application cycles. The reinforcing steels are coated uniformly without gaps using a paint brush.

Waiting time between the two application cycles is 4.5 hours.

The protection against corrosion must be sufficiently hardened on the reinforcing steel so that it cannot detach from the reinforcing steel during the second application cycle.

First application cycle: StoCrete TK grey Consumption approx. 130 g/m one-time application Ø to 18 mm

Second application cycle: StoCrete TK light grey consumption approx. 140 g/m one-time application Ø to 18 mm

or

First application cycle: StoCrete TK grey consumption approx. 150 g/m one-time application Ø above 18 mm

Second application cycle: StoCrete TK light grey consumption approx. 160 g/m one-time application Ø above 18 mm

3) Bonding agent

Pre-wet the concrete substrate sufficiently before applying the StoCrete TH 250 bonding agent (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.

Apply the StoCrete TH 250 bonding agent with pressure 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/m²

4) Concrete repair

Apply and compact StoCrete TG 154 on to the fresh adhesion promoter StoCrete TH 250 as a concrete repair product PCC I. (To ensure adhesive bond, always work wet on wet). Consumption: approx. 22.0 kg/m²/cm spalling depth/layer thickness. Apply the mortar manually on to horizontal surfaces, compact and adjust to the required layer thickness with screed templates.

Additional rubbing down is not necessary if swinging the screed board from side to side.

For large areas it is practical to use vibrating beam screeds. For multi-layer installation (layer thicknesses over 5 cm), do not trowel the preceding layer smooth. If it is, lightly blast the surface. Reapply the bonding agent. To achieve the technical properties required by StoCrete TG 154, sufficient and careful curing is necessary.

5) Curing

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Curing procedure:

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

Under normal conditions, curing must last at least 5 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 Bauberatung Zement, and ZTV-ING (2014/12).

Note:

Chemical curing may only be carried out if compatible with subsequent work. A uniform colour shade of the mortar surface is not possible due to the application method.

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

The substrate must be "damp", as described in the section on substrate preparation, in accordance with the DAfStb (German) Repair Guideline.

Mixing and conveying with the screed pump:

Decant one bag of material! Add water. Required W/F value 0.10

Add residual material.

Mixing time 1 min., apply immediately. Maximum hose length is 60 m, hose diameter is 50 mm.

Do not work pump residues into the surface!

On larger areas, surface treatment is carried out with plate or power trowel with metal blades size 60.

Cleaning the tools	Clean with water immediately after use; hardened material can only be removed mechanically.
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Notes, recommendations, special information, miscellaneous	The Declaration(s) of Conformity can be obtained from the StoCretec Technisches InfoCenter For general application notes, see www.stocretec.de (Products) and in the latest issue of the "Technical Data Sheets" manual, in the appendix.
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Delivery

Packaging	sack
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Article number	Name	Container
09400-001	StoCrete TG 154	25 kg bag

Storage

Storage conditions	Store in dry conditions.
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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.

Certificates/approvals

B 16.11.100.01	Testing the sulphate resistance
B 16.11.100.02	Testing the resistance to exposure XA1-XA3

Identification

Product group Screed materials

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.

Technical Data Sheet

StoCrete TG 154

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