Technical Data Sheet

StoCrete TH 110

Bonding agent with integrated protection against corrosion, polymer-modified, cementitious

Characteristics

Area of application

- as protection against corrosion for reinforcing steel
- as a bonding agent to ensure a permanent bond between the concrete substrate and the subsequent concrete repair system

Properties

- polymer-modified, cementitious protection against corrosion, and bonding agent
- very good adhesion to reinforcing steel
- very good protection against corrosion
- very good adhesive strength on a concrete substrate

Information/notes

- component of the StoCretec system in accordance with the DAfStb (German) Repair Guideline 2001-10
- component of the StoCrete PCC I.2 system
- component of the StoCrete PCC I.3 system
- product is in accordance with EN 1504-7

Technical data

Criterion	Standard / test specification	Value/ Unit	Notes
Bulk density of fresh mortar	EN 1015-18	2,3 kg/dm³	
Bond strength (28 days)	EN 1542	1,5 MPa	

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 components (e.g. chlorides). Remove less strong 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
Bond strength, lowest single 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

Mixing ratio

15 kg of material in accordance with the description / 3.75 l of water = 4.0 : 1.0 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	
as bonding agent	2,0	kg/m²
as protection against corrosion	0,13 - 0,20	kg/m
as protection against corrosion for reinforcing steel Ø up to 18 mm	0,13	kg/m (layer 1)
as protection against corrosion for reinforcing steel Ø up to 18 mm	0,15	kg/m (layer 1)
as protection against corrosion for reinforcing steel Ø up to 18 mm	0,14	kg/m (layer 2)
as protection against corrosion for reinforcing steel Ø over 18 mm	0,16	kg/m (layer 2)
as bonding agent	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
2) Protection against corrosion in 2 application cycles with StoCrete TH 110
3) Bonding agent StoCrete TH 110
4) Concrete restoration PCC I with StoCrete TG 114/StoCrete TG 118

Application

by paint brush, by brush

1) Substrate preparation

2) Protection against corrosion StoCrete TH 110
Immediately after derusting the reinforcing steel in accordance with EN ISO 12944, Part 4, apply StoCrete TH 110 in 2 application cycles with a total layer thickness of approx. 2 mm.
Coat the reinforcing steel completely and evenly using a paint brush.

Waiting time between the two application cycles at +20 °C is approx. 20 minutes.
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 TH 110 consumption approx. 130 g/m for single application Ø up to 18 mm
Application cycle 2: StoCrete TH 110 consumption approx. 140 g/m for single application Ø up to 18 mm
or
Application cycle 1: StoCrete TH 110 consumption approx. 150 g/m for single application Ø over 18 mm
Application cycle 2: StoCrete TH 110 consumption approx. 160 g/m for single application Ø over 18 mm

3) StoCrete TH 110 bonding agent
Sufficiently wet the concrete substrate before applying the bonding agent (about 24 hours before the first application cycle).
However, when applying the product, the concrete substrate must be dry enough that it appears only slightly damp.

Waiting time between the protection against corrosion and the adhesion promoter at +20 °C is approx. 30 minutes.

Apply the StoCrete TH 110 bonding agent using a suitable tool such as a paint brush or brush.
Remove any cured bonding agent by blasting abrasive and renew it.
Consumption approx. 2.0 kg/m² (dry material)

4) Concrete restoration product PCC I StoCrete TG 114/StoCrete TG 118
Then apply the already-mixed concrete restoration product StoCrete TG 114 or StoCrete TG 118 on to the fresh bonding agent. To ensure a good adhesive bond, always work wet on wet.

Cleaning the tools	Clean with water immediately after use. Hardened material can only be removed mechanically.Observe environmental protection.
Notes, recommendations, special information,	The declaration(s) of performance can be obtained from the StoCretec Technisches InfoCenter

miscellaneous	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
02557-001	StoCrete TH 110	15 kg bag

Storage

Storage conditions	Store in dry conditions.
Storage life	In the original container until ... (see packaging). Store for max. 6 months 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	Corrosion protection and bonding agent
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.

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.

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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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