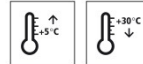


# Technical Data Sheet

## StoCrete TG 114

Screed material, polymer-modified, cementitious,  
layer thickness 10 - 40 mm



### Characteristics

#### Area of application

- as concrete repair product for the structural and non-structural repair of concrete structures (concrete and reinforced concrete)
- as concrete repair product in the case of additional demands on structural support
- for levelling uneven floor areas, for producing a slope, as a sub-base for a wearing layer on surfaces subject to vehicle traffic such as bridge decks, multi-storey car parks, underground car parks, industrial flooring, etc.

#### Properties

- polymer-modified, cementitious, two-component screed material (PCC)
- high resistance to stress from frost/de-icing salt
- low shrinkage and low residual stress
- high initial and final strength
- good water-retention capacity and low mixing liquid requirement (StoCryl EM 110)
- system test as anode and repair mortar for the repair principle of cathodic protection

#### Information/notes

- product is in accordance with EN 1504-3
- as repair system to restore the structural integrity of concrete members in accordance with RiLi-SIB, part 2 for use in the stress resistance classes M 2 and M 3 (PCC I)
- The product consists of two components. It is necessary to use StoCryl EM 110 for mixing.

### Technical data

Criterion	Standard / test specification	Value/ Unit	Notes
Bulk density of fresh mortar	EN 1015-6	2.14 - 2.34 kg/dm <sup>3</sup>	
Maximum particle size		4.0 mm	
Bond strength (28 days)	EN 1542	> 2.0 MPa	
Compressive strength (28 days)	EN 12190	45 - 55 MPa	
Flexural strength (28 days)	TL/TP PCC	10 - 11 MPa	

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Static modulus of elasticity (28 days)	EN 13412	22.3 GPa
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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.

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/mm<sup>2</sup>  
Lowest single bond strength 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.

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 +23 °C: approx. 45 minutes  
At +30 °C: approx. 30 minutes

#### Mixing ratio

StoCrete TG 114: 40 kg bag + 3.7 l StoCryl EM 110

#### Material preparation

Compulsory mixer: decant StoCryl EM 110 mixing liquid and add the StoCrete TG 114 ready mixed dry mortar with the mixer switched on.  
Mix for approx. 3 - 5 minutes.

#### Consumption

Type of application	Approx. consumption	
per mm layer thickness	2.0	kg/m <sup>2</sup>

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

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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) PCC I concrete repair product StoCrete TG 114
- Layer thickness 10 - 40 mm, in places up to 100 mm  
Higher layer thicknesses are possible due to multi-layer work.

#### Application

mix with StoCryl EM 110, apply with a plastering trowel

##### 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).

At the time of application, however, the concrete substrate must be dry to the point that it just appears 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 abrasive blasting and re-apply.

Consumption approx. 2.0 kg/m<sup>2</sup> (dry mortar)

##### 4) PCC I concrete repair product StoCrete TG 114

Mix the ready mixed dry mortar StoCrete TG 114 with StoCryl EM 110 in a compulsory mixer, or for smaller amounts in a clean container using a paddle

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mixer.

Apply and compact StoCrete TG 114 as a PCC I concrete repair product on to the fresh adhesion promoter StoCrete TH 110. To ensure a good adhesive bond, always work wet on wet.

Consumption: approx. 20.0 kg/m<sup>2</sup> per cm of spalling depth/layer thickness

Apply the concrete manually on to horizontal surfaces, compact it, and adjust it to the required layer thickness by striking off using a screed board.

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 4 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 114, sufficient and careful curing is necessary.

#### 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 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) (Additional technical terms of contract and guidelines for civil engineering, 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).

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#### Drying, curing, ready for next coat

Waiting time until suitable for foot and vehicle traffic at +5 °C: 2 days  
Waiting time until suitable for foot and vehicle traffic at +23 °C: 1 day  
Waiting time until suitable for foot and vehicle traffic at +30 °C: 1 day  
Waiting time until application of OS systems at +5 °C: 7 days  
Waiting time until application of OS systems at +23 °C: 5 days

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Waiting time until application of OS systems at +30 °C: 2 days

**Cleaning the tools** Clean with water immediately after use; hardened material can only be removed mechanically. Observe environmental protection.

**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](http://www.stocretec.de) (Products) and in the latest issue of the "Technical Data Sheets" manual, in the appendix.

### Delivery

**Packaging** sack

Article number	Name	Container
02543-001	StoCrete TG 114	40 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. We guarantee this property until maximum storage life expires.  
Please note the date of manufacture on the container and the information on the delivery note.

### Identification

**Product group** Screed material

**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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