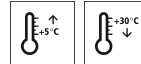


Technical data sheet

StoCrete TG 118

Screed material, polymer-modified, cementitious,
layer thickness 20 - 100 mm



Characteristics

Areas of application

- 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.
- as concrete restoration product for the structural and non-structural repair of concrete structures (concrete and reinforced concrete)

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 cathodic protection

Information/notes

- product is in accordance with EN 1504-3
- The product consists of two components. It is necessary to use StoCryl EM 110 for mixing.
- as a repair system for preserving the resistance to flow of concrete construction components in accordance with Rili-SIB, part 2 for use in stress resistance class M 2 and M 3 (PCC I)

Technical data

Criterion	Standard / test regulation	Value/ Unit	Notes
Apparent density of fresh mortar	EN 1015-6	2.27 - 2.47 kg/dm ³	
Maximum grain size		8.0 mm	

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Tensile strength (28 days)	EN 1542	> 2.0 MPa
Compressive strength (28 days)	EN 12190	55 - 65 MPa
Flexural strength (28 days)	TL/TP PCC	9 - 10 MPa
Static modulus of elasticity (28 days)	EN 13412	25.9 GPa

The characteristic values stated are average values or approx. values. We use natural raw materials in our products, which means that 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 have a separating action, as well as from corrosion-promoting components (e.g. chlorides). Remove less solid layers and laitance.

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

The cleanliness grade of the exposed reinforcing steel following substrate preparation: Sa 2 1/2 in accordance with EN ISO 8501-1.

Average tensile bond strength 1.5 N/mm²

Tensile bond strength of the single smallest 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

Processing time

At +5 °C: approx. 90 minutes
At +23 °C: approx. 45 minutes
At +30 °C: approx. 30 minutes

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Mixing ratio StoCrete TG 118: 40 kg bag + 3.4 l StoCryl EM 110

Material preparation Compulsory mixer: decant the StoCryl EM 110 mixing liquid and add the StoCrete TG 118 pre-blended dry mortar while the mixer is running. Mix for approx. 3 - 5 minutes.

Consumption	Type of application	Approx. consumption	
	per mm of layer thickness		2.0

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 procedure

- 1) Substrate preparation
- 2) Corrosion protection in 2 application cycles with StoCrete TH 110
- 3) Bonding agent StoCrete TH 110
- 4) Concrete restoration PCC I with StoCrete TG 118

Layer thickness 20 - 100 mm
Thicker layers are possible due to multi-layer work.

Application

- 1) Substrate preparation
- 2) Corrosion protection 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 corrosion protection 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

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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 corrosion protection and the adhesion-promoting agent 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 with solid blasting abrasive and re-apply.

Consumption approx. 2.0 kg/m² (dry mortar)

4) Concrete restoration PCC I StoCrete TG 118

Mix the pre-blended dry concrete StoCrete TG 118 with StoCryl EM 110 in a compulsory mixer, or for smaller amounts use a paddle mixer in a clean container. Apply and compact StoCrete TG 118 as a concrete restoration product PCC I on to the fresh adhesion-promoting agent StoCrete TH 110. To ensure a good adhesive bond, always work wet on wet.

Consumption: approx. 20.0 kg/m² per cm of palling 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 straightedge.

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

For large areas it is practical to use vibrating beam screeds.

For multi-layer installation (layer thicknesses over 10 cm), do not trowel the preceding layer smooth. If it is, lightly blast the surface. Reapply the bonding bridge.

To reach the technical properties required by StoCrete TG 118, sufficient and careful subsequent treatment is necessary.

5) Curing

Curing procedure:

- a) Cover with film or mats
- b) Spray with water
- c) Curing using chemicals

Under normal conditions, curing must last at least 5 days. Observe the relevant standard DIN 1045-3: 2001-07, the B8 data sheet "Nachbehandlung von Beton" (11.2002) published by the Bauberatung Zement, and ZTV-ING (2006-07)

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

Note:

Curing with chemicals 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 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.

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
 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.

Indications, recommendations, special information, miscellaneous

The Declaration(s) of Conformity can be obtained from the StoCretec Technical Information Centre
 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

Packaging

sack

Article number	Designation	Container
02544-001	StoCrete TG 118	40 kg bag

Storage

Storage conditions

Store in dry conditions.

Storage life

In the original container until ... (see packaging).
 Store for max. 6 months

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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.

Certificates/approvals

P 4221/09-359	StoCretec PCC I.3 System General building inspection test certificate
09/4221/09-359-366	StoCretec PCC I.3 System Certificate of Compliance
P 4221-3	Testing for use as PCC - silo material

Identification

Product group Screed material

Safety

This product is subject to compulsory designation 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.

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Special notes

The information or data 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. Nevertheless, users are responsible for establishing the suitability of the product for its intended use.

Applications other than those explicitly mentioned in this technical data sheet are only permissible after prior consultation. Where no approval is given, such applications are at the risk of the user. This applies particularly to combinations 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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