

Technical Data Sheet

StoCrete BE Mörtel grob

Screed material, polymer-modified, cementitious,
layer thickness 12-60 mm



Characteristics

Area 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 repair product PCC I in accordance with ZTV-ING

Properties

- polymer-modified, cementitious screed material (PCC / RM)
- low shrinkage and low residual stress
- high initial and final strength

Information/notes

- product is in accordance with EN 1504-3

Technical data

Criterion	Standard / test specification	Value/ Unit	Notes
Bulk density of fresh mortar	EN 1015-6	2,1 kg/dm ³	
Maximum particle size		4 mm	
Bond strength (28 days)	EN 1542	> 2,0 MPa	
Compressive strength	EN 12190	45 MPa	
Flexural strength	TP BE-PCC	8 MPa	
Static modulus of elasticity	EN 13412	19,8 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 dry, 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 strong layers and laitance.

Damp in accordance with the definition in the ZTV-ING

Preparation grade of the exposed reinforcing steel after substrate preparation: Sa 2½ in accordance with EN ISO 8501-1.

Technical Data Sheet

StoCrete BE Mörtel grob

Average bond strength: 1.5 N/mm²
Bond strength, lowest single value: 1.0 N/mm²

Preparations

Substrate preparation:
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 +10 °C: approx. 90 minutes
At +23 °C: approx. 60 minutes
At +30 °C: approx. 25 minutes

Mixing ratio

25 kg of material in accordance with the description / 3.5 l of water = 1.0 : 0.14 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	
per mm layer thickness	2,0	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) bonding agent with StoCrete BE bonding agent
3) reprofiling/PCC screed with StoCrete BE mortar, coarse
Layer thickness: 12 - 60 mm, partially up to 100 mm
Higher layer thicknesses are possible due to multi-layer work.

Application

1) Substrate preparation

2) Bonding agent
Pre-wet the concrete substrate sufficiently before applying the StoCrete BE bonding agent (about 24 h before the first application cycle).
The concrete substrate must, however, have dried sufficiently by the time of

Technical Data Sheet

StoCrete BE Mörtel grob

application so that it only appears slightly damp.

Apply the StoCrete BE bonding agent using a suitable tool such as a paint brush or brush.

Remove any cured bonding agents by abrasive blasting and renew them.

Consumption approx. 1.9 kg/m² kg/m²

3) Repair mortar/PCC screed

Mix the material in a clean container using a paddle mixer, or use a compulsory mixer for larger surfaces. Decant water and add the ready mixed dry render, mix for 2 minutes, leave to mature for 3 minutes, then remix for 0.5 minutes.

Apply StoCrete BE mortar, coarse as a repair mortar/PCC screed on to the freshly-applied bonding agent and compact it. To ensure a good adhesive bond, always work wet on wet.

Consumption: approx. 21.5 kg/m²/cm spalling depth/layer thickness (mixed material)

Apply using a bucket trowel, plastering trowel, and shovel. Then compact by tamping and work the surface using a plasterer's float.

Trowel off with a float, for larger areas, process the material using a vibrating beam screed. Undertake preliminary tests.

For multi-layer installation (layer thicknesses over 60 mm), do not trowel the preceding layer smooth. Apply the bonding agent again (ZTV-ING).

To obtain the required technical properties of StoCrete BE mortar, coarse, sufficient and careful curing is necessary.

4) Curing

Curing procedure:

- a) Cover the surface with sheeting or mats.
- b) Spray with water.
- c) Chemical curing

Under normal conditions, ensure a curing duration of 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 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

Technical Data Sheet

StoCrete BE Mörtel grob

extract mixing water.

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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Cleaning the tools	Clean with water.
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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.
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Delivery

Packaging	sack
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Article number	Name	Container
14057-002	StoCrete BE Mörtel coarse	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. 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.
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Identification

Product group	Screed materials
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GISCODE	ZP1
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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.
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Technical Data Sheet

StoCrete BE Mörtel grob

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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