

Technical Data Sheet

StoCrete LE

Screed material with lightweight aggregates, cementitious, layer thickness 20-80 mm



Characteristics

Area of application

- as smoothing coat or to achieve predetermined levelness on horizontal concrete members (concrete and lightweight concrete) such as balcony surfaces and access balconies

Properties

- cementitious screed material
- very good application
- low modulus of elasticity
- low mass per unit area
- building material class A1 (non-combustible) in accordance with EN 13501-1
- suitable for conveying by machine with a screed pump

Information/notes

- always apply with a finishing coat

Technical data

Criterion	Standard / test specification	Value/ Unit	Notes
Bulk density of fresh mortar	EN 1015-6	1.7 kg/dm ³	
Maximum particle size		4 mm	
Bond strength (28 days)	EN 13892-8	> 2.0 MPa	
Compressive strength (28 days)	EN 13892-2	> 30 MPa	
Flexural strength (28 days)	EN 13892-2	> 4.0 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 release agents, as well as from corrosion-promoting components (e.g. chlorides). Remove weak layers and laitance.

Damp in accordance with the definition in EN 1504-10.

Preparation grade of the exposed reinforcing steel after substrate preparation: Sa

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2½ in accordance with EN ISO 8501-1.

Tensile strength > 0.7 MPa

Preparations

Prepare the substrate using a suitable mechanical process, such as abrasive blasting or high-pressure water blasting (> 800 bar).

Note:

Rework any treated surfaces using a suitable process (abrasive blasting) if the substrate preparation process has led to joint faults in the area of the remaining existing concrete close to the surface. These can result from chiselling, knocking, milling, or flame cleaning.

Application

Application temperature

Lowest application temperature: +5 °C
Highest application temperature: +30 °C

Time for application

At +5°C: approx. 30 minutes
At +20 °C: approx. 25 minutes
At +30 °C: approx. 15 minutes

Mixing ratio

20 kg of material in accordance with the description/6 - 7.2 l water = 1.0 : 0.30 - 0.36 parts by weight

Material preparation

1. Compulsory mixer: 2 sacks StoCrete LE = 40 kg and 12 l water. Add water to the stirrer, add 2 sacks StoCrete LE and mix well. Mixing time approx. 3 minutes.
2. Counter-running hand mixer: 1 sack StoCrete LE = 20 kg and 6 l water. Add water to the mortar tub, add StoCrete LE and mix well. Mixing time approx. 3 minutes
3. Screed pump: 7 bags StoCrete LE = 140 kg + approx. 43.2 l water First decant one bag of StoCrete LE Pour in water and the remaining pre-mixed dry mortar into the mixer, then mix for 3 - 4 minutes.
The settings depend on the machine and should be checked before application.

Consumption

Type of application	Approx. consumption	
per mm layer thickness	1.4	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 200
- 4) Work StoCrete LE in, trowel off and level

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Layer thickness: 20 - 80 mm

Application

1) Substrate preparation

2) Protection against corrosion

Immediately after derusting the reinforcing steel in accordance with DIN EN ISO 12944, part 4, coat with StoCrete TK in two application cycles.

Coat the reinforcing steel completely and evenly using a paint brush.

Waiting time between the two application cycles: 4.5 hours.

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 TK grey, consumption approx. 130 g/m single application Ø up to 18 mm

Application cycle 2: StoCrete TK light grey, consumption approx. 140 g/m single application Ø up to 18 mm

or

Application cycle 1: StoCrete TK grey, consumption approx. 150 g/m single application Ø over 18 mm

Application cycle 2: StoCrete TK light grey consumption approx. 160 g/m single application Ø over 18 mm

3) Bonding agent

Pre-wet the concrete substrate sufficiently before applying the StoCrete TH 200 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 200 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) Apply the

StoCrete LE lightweight screed on to the StoCrete TH 200 fresh mineral bonding bridge, spread, compress, trowel, and coarsely rub down for the subsequent coating. Always work fresh on fresh to ensure bonding.

Consumption: approx. 17 kg/m²/cm (mixed material)

Apply StoCrete LE with a mason's trowel, square trowel, shovel, screeding level, spirit level, plasterer's float (Dallusch), if necessary, using a power float and screed blade.

If required, use a power float for repressing and smooth with the screed blade.

Manual application:

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For mixing, mixing devices such as the UEZ compulsory mixer, the Jetmix ZM 80, 140 l drum mixer approx. 60- 80 l mixture are recommended

Note! Not more than 2 sacks, as otherwise the stirrer will flow over!
Or use a counter-running, interlocking hand stirrer: e.g. Collomatic RGE 162 Duo and a mortar tub (by the sack, mix a max. of 2 sacks).

Machine conveyance using a screed pump for larger surfaces:
Mix in the screed pump for a duration of approx. 3 - 4 min.
Screed pump boiler pressure: 3 bar
Screed pump feed pressure: 4.5 - 5 bar
Screed pump conveyance time for each mixture: approx. 50 sec.
at a tube diameter of 50 mm and a tube length of 40 m

To achieve the required technical properties of StoCrete LE, sufficient and careful subsequent treatment is necessary.

5) Curing
subsequent treatment procedure:
a) cover with sheets or mats
b) spray with water
c) chemical subsequent treatment

Under normal conditions, the time for subsequent treatment to be observed is at least 3 days.

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 extract mixing water.

Drying, curing, ready for next coat	At +20 °C and 65 % relative humidity the next coat can be applied after approx. 48 hours. with StoPox 452 EP + StoPur EB 200 or StoPox 452 EP + StoPur EA
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Cleaning the tools	Clean tools with water immediately after use.
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Notes, recommendations, special information, miscellaneous	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.
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Delivery

Packaging sack

Article number	Name	Container
00767-001	StoCrete LE	20 kg bag

Storage

Storage conditions Store in dry conditions.

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.

Identification

Product group Lightweight screeding mortar

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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