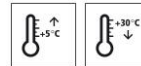


# Technical Data Sheet

## StoCrete LM

Wet-mix spray mortar, polymer-modified, cementitious, with lightweight aggregates, layer thickness of 6-30 mm



### Characteristics

**Area of application**

- as a concrete repair product for the non-structural repair of concrete structures in accordance with EN 1504-3

### Properties

- polymer-modified, cementitious concrete repair product (PCC / SRM)
- very good adhesive strength on a concrete substrate
- very good application overhead
- very good non-sag properties
- no separate tack coat necessary
- partial reprofiling up to 80 mm of layer thickness
- low mass per unit area

### Information/notes

- not suitable for surfaces subject to foot or vehicle traffic
- product is in accordance with EN 1504-3
- building material class A1 in accordance with DIN EN 13501-1
- suitable for restoration of fire resistance, tested in accordance with DIN 4102-2, fire resistance class F 120

### Technical data

Criterion	Standard / test specification	Value/ Unit	Notes
Bulk density of fresh mortar	EN 1015-6	1.7 kg/dm <sup>3</sup>	
Maximum particle size		2 mm	
Bond strength (28 days)	EN 1542	> 1.5 MPa	
Compressive strength	EN 12190	42 MPa	
Flexural strength	TP BE-PCC	7 MPa	
Static modulus of elasticity	EN 13412	12 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 load-bearing and free from native and foreign substances that could interfere with adhesion, as well as from corrosion-promoting

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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.

Tensile strength:  $\geq 0.7$  MPa

### 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.  $45^\circ$ .

### Application

#### Application temperature

Lowest application temperature:  $+5^\circ\text{C}$   
Highest application temperature:  $+30^\circ\text{C}$

#### Time for application

at  $+5^\circ\text{C}$ : approx. 60 minutes  
at  $+20^\circ\text{C}$ : approx. 40 minutes  
at  $+30^\circ\text{C}$ : approx. 20 minutes

#### Mixing ratio

20 kg of material in accordance with the description / 7.2-7.6 l of water = 1.00 : 0.36 - 0.38 parts by weight  
StoSilo Technology: sight glass setting approx. 650 - 700 l of water per hour

#### Material preparation

Compulsory mixer: decant water and add pre-blended dry mortar. Mix for approx. 3 - 5 minutes, allow to mature for 3 minutes and then mix again for approx. 30 seconds.  
StoSilo Technology: mixing tube / 2-stage mixing shaft

#### Consumption

Type of application	Approx. consumption	
per mm of layer thickness (without rebound)	1.3	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 specific project.		

#### Coating build-up

1) Substrate preparation  
2) Protection against corrosion: StoCrete TK (in case of exposed reinforcement)  
3) Mineral lightweight spray mortar: StoCrete LM  
Layer thickness: 6 - 30 mm

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### Application

Apply the product using the StoSilo Comb and the associated StoSilo Technology.

#### 1) Substrate preparation

Derust the exposed reinforcing steel in accordance with DIN EN ISO 12944-4 up to preparation grade Sa 2½. The derusted reinforcing steel must be free from dust and grease.

#### 2) Protection against corrosion

Using a paint brush, immediately apply StoCrete TK (grey) to all of the visible reinforcing steel evenly.

Consumption in case of a diameter < 18 mm: approx. 130 g/m for a single layer

Consumption in case of a diameter => 18 mm: 150 g/m

Wait 4.5 hours and until the first layer has hardened to the extent that it cannot detach from the reinforcing steel during the second application cycle. Then apply a second coat of StoCrete TK (light grey).

Consumption in case of a diameter => 18 mm: approx. 140 g/m for a single layer

Consumption in case of a diameter > 18 mm: approx. 160 g/m for a single layer

Approx. 24 h before applying the product, sufficiently pre-wet the concrete substrate for the first time.

However, when applying the product, the concrete substrate must be dry enough that it appears only slightly damp.

#### 3) Concrete repair product

Apply StoCrete LM manually using a bucket trowel, spatula or plastering trowel. Scratch the applied coat, or apply StoCrete TH 200 as a tack coat using a suitable tool. Then reprofile the area wet on wet to ensure a sufficient bond between the substrate and the concrete repair product.

In the case of application by machine, use the StoSilo Technology where the technology for mixing and conveying is already integrated into the silo

Hose diameter: 35 mm, max. conveying distance: 60 m

Reprofiling sprayer with a 12 mm nozzle tube.

Min. compressor performance: 4 m³/min.

Max. mixing interruption at +25 °C: 30 min.

Normal nozzle spacing: 0.40 - 1.00 m.

Mixing interruption at +25°C: 30 min.

Consumption: approx. 17 kg/m² per cm of spalling depth or layer thickness (mixed material)

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Sufficient and careful curing is necessary to obtain the required technical properties of StoCrete LM.

### 4) Surface treatment

Either leave the StoCrete LM surface as it is, e.g. in case of a subsequent fairing coat, or smooth the surface and eliminate visible spatula strokes using a sponge but without applying any additional water.

### 5) Curing

Curing procedure:

- Cover the surface with sheeting or mats.
- Spray the surface with water.
- Chemical curing

Curing duration: min. 5 days under normal conditions. 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 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.

If the mortar surface dries too quickly, it may not strengthen sufficiently.

Immediately after surface treatment and until further treatment (min. 5 days in accordance with ZTV-ING), protect freshly created mortar layers from losing too much moisture, for example, by using damp jute mats or wind-proof plastic sheeting, depending on the prevailing conditions.

### Drying, curing, ready for next coat

At +20 °C and 65 % relative humidity, over-coatable with:  
mineral slurry: after 7 days  
mineral fairing coat: after 7 days

### Cleaning the tools

Clean with water immediately after use. Hardened material can only be removed mechanically.

### Notes, recommendations,

The declaration(s) of performance can be obtained from the StoCretec

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### special information, miscellaneous

Technisches InfoCenter  
General application instructions are available at [www.stocretec.de](http://www.stocretec.de) and in the notes of the latest Technical Manual.

### Delivery

**Packaging** sack

Article number	Name	Container
00743-006	StoCrete LM	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.  
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** Repair 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.

### 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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## **StoCrete LM**

StoCretec GmbH  
Gutenbergstr. 6  
D-65830 Kriftel

Tel.: +49 6192 401-104  
Fax: +49 6192 401-105  
[stocretec@sto.com](mailto:stocretec@sto.com)  
[www.stocretec.de](http://www.stocretec.de)