StoCrete SM P

Quick repair mortar with integrated protection against corrosion, polymer-modified, cementitious, layer thickness 3-40 mm







| Area of application | as a concrete repair product for the repair of concrete structures (concrete, reinforced concrete, and lightweight concrete) as a fairing coat (3-5 mm) |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Properties | polymer-modified, cementitious concrete repair product (PCC / RM) |
| | very good adhesive strength on a concrete substrate |
| | very good application overhead |
| | very good non-sag properties |
| | no separate tack coat necessary |
| | rapidly curing |
| | can be quickly over-coated |
| | no separate protection against corrosion necessary |
| Information/notes | not suitable for surfaces subject to foot or vehicle traffic |
| | 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 | 1.9 kg/dm³ | |
| Maximum particle size | | 0.8 mm | |
| Bond strength (28 days) | EN 1542 | > 0.8 MPa | |
| Compressive strength | EN 12190 | 25 MPa | |
| Flexural strength | TP BE-PCC | 6 MPa | |
| Static modulus of elasticity | EN 13412 | 7.5 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 components (e.g. chlorides). Remove less strong layers and laitance.



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| | 2001-10. Preparation grade of the exposed reinforcing steel after substrate preparation: Sa 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). Open pores and blow-holes sufficiently. Beyel the edges of the areas of spalling under approx 45° |

| Application temperature | Lowest application temperature: +5 °C | | | |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-------|--|
| rippinounen temperature | Highest application temperature: +30 °C | | | |
| Time for application | At +10 °C: approx. 30 minutes At +20 °C: approx. 15 minutes at +30 °C: approx. 10 minutes | | | |
| Mixing ratio | 25 kg of material in accordance with the description / 4.0 - 4.25 l water = 1.0 : 0.16 - 0.17 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 | 1.7 | kg/m² | |
| | 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) Reprofiling with StoCrete SM P Fairing coat of StoCrete SM P. Layer thickness: local reprofiling: 3 - 40 mm full-surface fairing coat: 3 - 5 mm | | | |
| Application | Substrate preparation | | | |

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Derust the exposed reinforcing steel in accordance with DIN EN ISO 12944-4 up to preparation grade Sa $2\frac{1}{2}$. The derusted reinforcing steel must be free from dust and grease.

2) Protection against corrosion

no separate protection against corrosion of the reinforcing steel is required.

3) Reprofiling

The concrete substrate must be adequately wetted before applying StoCrete SM P (first time about 24 hours beforehand). At the time of application, however, it must be dry to the point that it just appears slightly damp.

Pre-fill the local areas of spalling with StoCrete SM P, then carry out reprofiling wet on wet. Apply manually using a bucket trowel, spatula, or plastering trowel. To ensure a good adhesive bond, always work wet on wet.

Please note: Once the reaction or stiffening has started, do not add any more water to dilute StoCrete SM P.

Consumption of reprofiling mortar: approx. 19 kg/m² per cm of spalling depth/layer thickness (mixed material)

For full-surface application as a fairing coat, apply a scratch coat to seal pores and cavities, then apply the StoCrete SM filler wet on wet in the corresponding layer thickness. To ensure a good adhesive bond, always work wet on wet.

In the final step, smooth the surface. Rub out spatula strokes with a sponge; when doing so, do not add any more water.

Consumption of fairing coat: approx. 1.9 kg/m² per mm of layer thickness (mixed material)

4) Curing

Curing procedure:

- a) Cover with film or sheeting
- b) Spray with water
- c) Chemical curing

Under normal conditions, curing must last at least 3 days. Observe the relevant standard DIN 1045-3: 2001-07, the B8 data sheet "Nachbehandlung von Beton" on the curing of concrete (11.2002) published by the Bauberatung Zement, and ZTV-ING (2006-07) (Additional technical terms of contract and guidelines for civil engineering).

Note:

Chemical curing may only be carried out if the subsequent work is compatible with this.



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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, over-coatable with: Mineral slurry: after 4 hours Mineral fairing coat: after 4 hours Sealer: after 24 hours |
|------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cleaning the tools | Clean with water immediately after use. Hardened material can only be removed mechanically. |
| Notes, recommendations, special information, miscellaneous | In case of concrete cover < 10 mm, select an elastic surface protection system. 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. |

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| Delivery | | | |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------|
| | Article number | Name | Container |
| | 00789-001 | StoCrete SM P | 25 kg bag |
| Storage | | | |
| Storage conditions | Store in dry condition | ns. | |
| 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. | |

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Observe the Safety Data Sheet! Safety instructions refer to the ready-to-use, unapplied product.

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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