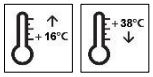
Technical Data Sheet

# StoCrete MB 100

Three component, self-smoothing
Epoxy-cement hybrid moisture barrier




## Characteristics

**Area of application**

- temporary moisture barrier (2 - 4 mm) for epoxy and polyurethane floor coating
- levelling uneven floor surfaces
- underlayment for carpet and vinyl floor

**Properties**

- three-component
- excellent self-spreading properties
- very good adhesion to dry and damp substrates
- excellent mechanical and early strength
- suitable for damp substrates and substrates subjected to rising damp
- compatible to wide range of StoCretec topcoats
- internal and external use

## Technical data

| Criteria | Standard / test specification | Value / Unit | Notes |
|---|---|---|---|
| Density (mixture @ 23°C) | EN ISO 2811 | 2.0 g/cm$^3$ | approx. |
| Compressive strength @ 28 days | ASTM C 579 | > 35 N/mm$^2$ | |
| Bond strength | ASTM D 4541 | > 1.5 N/mm$^2$ | |

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**

Cementitious screed in accordance with DIN 18560 or concrete in accordance with DIN 1045. (ZE 30 or C 20/25).

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.

Dry or damp in accordance with the definition in the DAfStb (German) Repair Guideline 2001-10.

Average bond strength ≥ 1.5 N/mm²
Lowest single bond strength value ≥ 1.0 N/mm²
Substrate temperatures must be higher than +16 °C and 3 K above dew point.

**Preparation**

Prepare the substrate using a suitable mechanical process such as shot-blasting, milling and then shot-blasting or abrasive blasting. Sanding the substrate is not sufficient.

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## Application

**Application temperature**

Lowest application temperature +16 °C
Highest application temperature +38 °C

**Time of application**

At +28°C: (air temperature), approx. 25 minutes
Protect from draughts and direct sunlight during application.

**Mixing ratio**

Component A : Component B : Component C = 3.5 : 1.5 : 19 parts by weight

**Material preparation**

Component A, B and C are supplied in the correct mixing ratio and should be mixed in accordance with the following instructions:

Shake component A and B thoroughly and then transfer it to a suitable mixing container and mix for few seconds. Then slowly add all of component C (powder component).

Mix thoroughly with a fast-running paddle mixer for approx. 2 minutes until a homogeneous, streak-free compound is obtained. Use a trowel to scrape down the sides of the mixing container from time to time, in order to prevent the build-up of lumps.

Suitable paddle mixers are, for example, MKN 140 N, KR 140 HF or DLX 152 M from Collomix (www.collomix.de).

The temperature of the individual components must be min. +15 °C when mixing.

**Consumption**

| Type of application | Approx. consumption | |
|---|---|---|
| per mm layer thickness | 2.0 | kg/m$^2$ |
| Recommended material application | 4.0 | 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**

1.0 As a temporary moisture barrier for industrial coating on substrates that are dry, damp or subject to rising damp

- 1.1. Substrate preparation
- 1.2. Prime coating of StoPox WG 100, loosely scatter with Sto Filler 30/60 (F3), size 0.25 - 0.60 mm
- 1.3. Intermediate moisture barrier layer of StoCrete MB 100
- 1.4. Seal coating of StoPox WG 100
- 1.5. Finishing coat of StoPox BB OS, StoPox KU 601, StoPox KU 405, StoPox WL 100, StoPox MS 200 and other StoCretec coating systems

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**Coating build-up** *(continued)*

2.0 As an overlayment to level uneven concrete floor

2.1. Substrate preparation
2.2. Prime coating of StoPox WG 100, loosely scatter with Sto Filler 30/60 (F3), size 0.25 - 0.60 mm
2.3. Intermediate moisture barrier layer of StoCrete MB 100
2.4. Seal coating of StoPox WL 150 transparent
2.5. StoDivers P 120 care treatment (optional)

**Application**

1.0 As a temporary moisture barrier (min. 2mm) for industrial coating on substrates that are dry, damp or subject to rising damp

1.1. Substrate preparation

1.2. Prime coating of StoPox WG 100
- Pour StoPox WG 100 diluted with 10% water onto the prepared substrate, spread it using a rubber squeegee, then roll it with a nylon roller
- It is essential to avoid forming puddles
- Immediately, while primer is still tacky, loosely scattered with Sto Filler 30/60 quartz sand
- It can be overcoated with StoCrete MB 100 when the colour of StoPox WG 100 has changed from translucent to transparent. This is usually the case after 120 to 180 minutes
- Approx. consumption:
  StoPox WG 100 at 0.15 - 0.2 kg/m²
  Sto Filler 30/60 at 0.1 - 0.3 kg/m²

1.3. Intermediate moisture layer of StoCrete MB 100
- Apply StoCrete MB 100 using a notched trowel/squeegee (notching 48, Art. Nr - 08373-019 or 78, Art. Nr - 08373-007) or adjustable pin rake (Sto-Pin-Type Squeegee, Art. Nr - 17402-001) and immediately de-air it with a standard spike roller (Art Nr - 17406-001/003)
- If finer texture is desire to receive thin finishing coats such as StoPox WL 100 or StoPox MS 200, use metal spike roller with spike Ø 0.4mm instead of standard spike roller
- Approx. consumption: min. 4 kg/m² at 2mm

1.4. Seal coating of StoPox WG 100
- Apply StoPox WG 100 diluted with 10% water with nylon roller
- Approx. consumption: 0.15 - 0.2 kg/m²

1.5. Finishing coat
- Apply finishing coat of StoPox BB OS, StoPox KU 601, StoPox KU 405, StoPox WL 100, StoPox MS 200 and other StoCretec coating systems

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**Application** *(continued)*

2.0 As an overlayment to level uneven concrete floor

2.1. Substrate preparation

2.2. Prime coating of StoPox WG 100
- Pour StoPox WG 100 diluted with 10% water onto the prepared substrate, spread it using a rubber squeegee, then roll it with a nylon roller
- It is essential to avoid forming puddles
- Immediately, while primer is still tacky, loosely scattered with Sto Filler 30/60 quartz sand
- It can be overcoated with StoCrete MB 100 when the colour of StoPox WG 100 has changed from translucent to transparent. This is usually the case after 120 to 180 minutes
- Approx. consumption:
  StoPox WG 100 at 0.15 - 0.2 kg/m²
  Sto Filler 30/60 at 0.1 - 0.3 kg/m²

2.3. Intermediate moisture layer of StoCrete MB 100
- Apply StoCrete MB 100 using a notched trowel/squeegee (notching 48, Art. Nr - 08373-019 or 78, Art. Nr - 08373-007) or adjustable pin rake (Sto-Pin-Type Squeegee, Art. Nr - 17402-001) and immediately de-air it with a standard spike roller (Art Nr - 17406-001/003)
- If finer texture is desire to receive thin finishing coats such as StoPox WL 100 or StoPox MS 200, use metal spike roller with spike Ø 0.4mm instead of standard spike roller
- Approx. consumption: min. 4 kg/m² at 2mm

2.4. Seal coating of StoPox WL 150 transparent
- Pour StoPox WL 150 transparent diluted with 15% water onto the moisture barrier, spread it using a 1mm rubber squeegee or nylon roller and immediately cross-roll with nylon roller (Art. Nr - 08278-004/17802-001)
- Approx. consumption: 0.13 - 0.15 kg/m²

2.5. StoDivers P 120 care treatment (optional)
- Apply one to two layers of care treatment evenly to the clean and cured seal coat. Apply material using a pre-dampened mop. Leave the floor to dry sufficiently. Approx. 20 - 30 min. between layers
- Approx. consumption: 30 - 50 ml/m$^2$

| | |
|---|---|
| **Drying, curing, ready for next coat** | At +22°C: approx. 48 h<br>At +28°C: approx. 40 h<br>At +32°C: approx. 36 h |
| **Cleaning the tools** | Clean tools with water immediately after use. |
| **Information / notes** | Shake component A & B well before use. |

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|---|---|
| **Delivery** | |
| **Colour shade** | Light grey, matt finish |
| **Packaging** | 24 kg set |
| **Storage** | |
| **Storage life & conditions** | This product has a shelf life of 12 months from the manufacturing date.<br>Product should always be stored in an unopened bag, dry place, protected from rain, direct sunlight and raised off the floor. |
| **Special notes** | |
| **Health & Safety** | Please refer to Safety Data Sheet |
| **Technical Support** | Please consult the local sales office for further information and any site assistance required. |
| | 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.<br>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.<br>When a new Technical Data Sheet is published, all previous Technical Data Sheets are no longer valid. The latest version is available on www.sto-sea.com. |


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