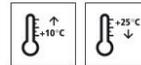


Technical Data Sheet

StoCrete VM 630

Self-levelling mortar, cementitious, medium compressive load



Characteristics

- Area of application**
- interior
 - on floors
 - as a levelling coating for industrial storage areas
 - as a levelling coat under StoCretec mineral self-levelling mortar
 - for levelling unevenness on cement screeds or in-situ concrete areas

Properties

- very good self-levelling properties
- very good adhesion to the substrate
- very low volume reduction during curing
- layer thicknesses: max. 50 mm, standard layer thickness: 8-15 mm
- for medium compressive loads
- non-combustible A1 (floor) in accordance with 96/603/EC

Information/notes

- product is in accordance with EN 13813

Technical data

Criterion	Standard / test specification	Value/ Unit	Notes
Compressive strength	EN 13892-2	> 20 MPa	
Flexural strength	EN 13892-2	4 MPa	
Shrinkage	EN 13872	< 0,4 mm/m	

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 substances that could interfere with adhesion, as well as from corrosion-promoting components (e.g. chlorides). Remove less strong layers and laitance.

Average bond strength: 1.5 N/mm²

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Bond strength, lowest single value: 1.0 N/mm²
 Substrate temperature higher than +8 °C and 3 K above dew point.

Preparations 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.

Application

Application temperature lowest application temperature: +10 °C
 highest application temperature: +25 °C

Time for application At +20°C: (air temperature), approx. 15 minutes
 Protect from draughts and direct sunlight during application.

Mixing ratio 25 kg of material in accordance with the description / 3.5 - 4.0 l water = 1.0 : 0.14 - 0.16 parts by weight (+20 °C max. water temperature)

Material preparation Manual application (areas up to 50 m²):
 Mix StoCrete VM 630 using a compulsory mixer (duo stirrer) or a high-performance hand paddle mixer with cold and clean tap water until it is homogeneous and without lumps. Mix material for approx. 3 minutes.

Machine application:
 Mix StoCrete VM 630 in a mixing pump (e.g. Inocomb M4 G or the PFT G4 plastering machine) with cold and clean tap water until it is homogeneous and without lumps.

Consumption	Type of application	Approx. consumption	
	Dry material per mm of layer thickness	1,7	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 Mineral coating for industrial use

- 1) Substrate preparation
- 2) Prime coating of StoCryl CP
- 3) Smoothing coat of StoCrete VM 630
- 4) Prime coating of StoCryl CP
- 5) Coating of StoCrete VM 640

Note:
 It is also possible to apply an epoxy resin primer to mineral substrates before applying the StoCrete VM 630/640 self-levelling mortar. Epoxy resin priming coats

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should generally be scattered with a slight surplus of quartz sand 0.6 - 1.2 mm graining over the entire surface; the scattered surface must be homogeneous and free from bald areas. Prime the scattered surface again with StoCryl CP so that a film forms and there is no surplus.

It is essential to add only the minimum amount of water indicated to the self-levelling mortar, due to the low absorption capacity of the dense epoxy resin substrate - the mixing water cannot penetrate downwards.

Please note that the reworking intervals for subsequent coatings are extended due to the self-levelling mortar releasing water at a delayed rate. If the next coating is to be a dense thick coating (e.g. StoPox BB OS or OS 11/F a/b), wait at least 7 days before lightly blasting and coating the self-levelling mortar.

Application

pumping and conveying by machine possible

Mineral coating for industrial use

1) Prepare the substrate using a suitable mechanical process.

Ensure that pores and blow-holes in the substrate are sufficiently opened, so that they can be completely wetted with the priming dispersion. For a strongly absorbent substrate, pre-wetting the prepared surface is recommended the evening before priming and coating.

Waterproof any door sills, gutters, and drains with self-adhesive foam strips before applying StoCrete VM 630.

2) Prime coating

For normally absorbent mineral substrates, dilute 1 part by weight StoCryl CP with 3 parts by weight water. Flood-apply the mixed primer over the floor using a broom until the substrate is evenly wet and can absorb no more.

It is essential to avoid forming puddles. Reroll thoroughly using a roller to remove remaining material in the recesses.

Usually 2 application cycles of primer are required. Depending on the absorption capacity of the substrate, carry out the second priming cycle after 2 - 12 hours.

Consumption: approx. 0.15 - 0.30 kg/m², depending on the absorption capacity of the substrate

3) Coating

After the prime coating has dried off, which can be seen from the change in colour shade from milky to transparent (still slightly sticky), apply the mixed StoCrete VM 630 manually using a screed rake or a pin leveller (e.g. Sto tool catalogue).

If applying manually (areas up to 50 m²), mix StoCrete VM 630 in a compulsory mixer with a duo stirrer or use a high-performance hand paddle mixer (mixing time

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approx. 3 minutes), then apply and process manually.

If necessary, convey manually-mixed material using a Vario screw pump (e.g. Inobeam F 21, Inotec GmbH) to the site of application.

If applying by machine, mix StoCrete VM 630 in a mixing pump (e.g. m-tec Duomix 2000 or the PFT G4 plastering machine). Convey (pump) the mixed material by machine and work it manually.

Layer thicknesses of 5 and 50 mm are possible in one application cycle.
max. layer thickness 50 mm

Carry out intermediate priming with StoCryl CP between the application cycles.

Consumption: approx. 1.7 kg/m² and mm of layer thickness (dry material)

A trailing squeegee is suitable for subsequent smoothing.

CAUTION!! Do not de-air StoCrete VM 630.

Ensure sufficient conveying output depending on the area to be covered and the layer thickness. If required the PFT G4 can be equipped with a rotor (33 l/min or 55 l/min) and stator. To change the rotor and stator, the PFT G4 must be equipped with an interchangeable flange. (Please observe the instructions for implementation!)

Note:

Please observe the implementation instructions for applying StoCrete VM 630! (Obtainable from the StoCretec Technical InfoCenter or at www.stocretec.de)

Divide large areas into sections of 4.00 to 12.00 m (depending on the conveying output of the mixing pump).

With large areas, we recommend setting levelling points to obtain as even a floor area as possible.

At normal temperatures, the area can be walked on after 2 - 3 hours.

The surface can be driven on after 7 days at normal temperatures.

Protect the surface from soiling.

The surface can be reworked with StoCrete VM 640 after approx. 8 hours (at +18°C).

The appearance of the surface is influenced by the conveying output and the machinery equipment.

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If reworking with water-based sealers or coatings, it is essential not to exceed the prescribed amount of water for StoCrete VM 640 or StoCrete VM 630.

This ensures that the strength is also developing well and the required bond strength will be achieved. From experience the final value of the bond strength (> 1.5 N/mm²) is only obtained after approx. 28 days.

However, the surface of StoCrete VM 640 is hard enough after 3 days (+20 °C) and can be shot-blasted.

Cleaning the tools	Clean with water immediately after use. Hardened material can only be removed mechanically. Observe environmental protection.
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Notes, recommendations, special information, miscellaneous	The abrasion resistance class specified in the CE marking refers to the smooth, not scattered covering. General application instructions are available at www.stocretec.de and in the notes of the latest Technical Manual.
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Delivery

Colour shade	grey, not a RAL colour shade
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Packaging	sack
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	Article number	Name	Container
	04337-005	StoCrete VM 630	25 kg bag

Storage

Storage conditions	Store in dry and frost-free conditions, 6 months
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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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Certificates/approvals

Rev.-Nr. 110518

Implementation instructions StoCrete VM

Identification

Product group Self-levelling mortar

GISCODE ZP1

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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