

Technical Data Sheet

StoCrete TG 104

Repair mortar for floors, polymer-modified, cementitious, layer thickness 10–50 mm



Characteristics

Area of application

- as a concrete repair product for the structurally relevant and non-structurally relevant repair of concrete screeds and floor areas in accordance with EN 1504-3
- for levelling unevenness on floor areas
- for creating an inclination
- as a substrate for a coating in building engineering, e.g. a balcony
- as a substrate for a coating on surfaces subject to vehicle traffic, e.g. industrial flooring
- interior and exterior

Properties

- polymer-modified, cementitious concrete repair product for the floor
- suitable for application by hand and by machine with mixing and pumping technology (e.g. InoComb Cabrio 0.2.)
- can be conveyed using a screed pump
- high resistance to ice and salt
- very good application properties
- very good compaction
- can be smoothed by hand and by machine
- long workable time
- building material class A1 in accordance with EN 13501-1

Information/notes

- product conforms to class R4 in accordance with EN 1504-3
- for surfaces subject to vehicle traffic in the non-regulated area

Technical data

Criterion	Standard / test specification	Value/ Unit	Notes
Bulk density of fresh mortar	EN 1015-6	2,2 kg/dm ³	
Maximum particle size		4 mm	
Bond strength	EN 1542	> 2,0 MPa	
Compressive strength	EN 12190	50 MPa	
Flexural strength	TL/TP PCC	7 MPa	
Static modulus of elasticity	EN 13412	25 GPa	

Technical Data Sheet

StoCrete TG 104

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

General:

- Load-bearing
- Free from separating, native, or foreign substances
- Remove weak layers.
- Remove any accumulation of fine concrete particles on the surface.
- Produce sufficient roughness, average roughness depth at least 1.0 to 1.5 mm
- Expose the maximum particle size of the aggregate in the concrete substrate in a domed manner

Damp substrate:

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

- Preparation grade of exposed reinforcing steel following substrate preparation: Sa 2½ in accordance with EN ISO 8501-1.

- Bond strength, average: 1.5 N/mm²
- Bond strength, lowest single value: 1.0 N/mm²

Preparations

Prepare all the above-mentioned substrates using a mechanical method, see "Substrate, requirements".

Example:

- Shot-blasting
- Milling followed by shot-blasting
- Abrasive blasting
- Water blasting at > 800 bar

Preparation grade of exposed reinforcing steel following substrate preparation: Sa 2½ in accordance with EN ISO 8501-1.

- Open pores and blow-holes sufficiently.
- Bevel the edges of the areas of spalling under approx. 45°.

Application

Application temperature

Application temperature:

- minimum temperature: +5 °C
- maximum temperature: +30 °C

Time for application

At +5 °C: approx. 90 minutes

Technical Data Sheet

StoCrete TG 104

At +23 °C: approx. 60 minutes
at +30 °C: approx. 30 minutes

Mixing ratio	<p>25 kg of material in accordance with description / max. 3.75 l water = 1.0 : 0.15 parts by weight; depending on the application, climatic conditions, and substrate, the addition of water can be reduced to min. 3.275 l water = 1.0 : 0.13 parts by weight</p> <p>Mixing and pumping technology: -addition of water is machine-dependent -determine prior to application -check regularly during building work</p>
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Material preparation	<p>Prepare material in compulsory mixer:</p> <ol style="list-style-type: none"> 1) Decant water. 2) Switch on the mixer. 3) Add the StoCrete TG 104 ready mixed dry render while mixing. 4) Mix the material for 2 minutes. 5) Allow the material to mature for 3 minutes. 6) Mix the material for 30 seconds. <p>Mixing and pumping technology and screed pump: - The settings are machine-dependent - Determine prior to application - Check regularly during building work</p>
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Consumption	Type of application	Approx. consumption	
	per mm layer thickness	2,0	kg/m ²
<p>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.</p>			

Coating build-up	<ol style="list-style-type: none"> 1) prepare the substrate 2) protection against corrosion (optional) <p>First application cycle: StoCrete TK grey Second application cycle: StoCrete TK light grey</p> <ol style="list-style-type: none"> 3) Mineral bonding agent: StoCrete TH 200 4) Concrete repair product: StoCrete TG 104 <p>Layer thickness: 10–50 mm, partially up to 100 mm Higher layer thicknesses are possible due to multi-layer work.</p> <ol style="list-style-type: none"> 5) curing
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Application

Technical Data Sheet

StoCrete TG 104

manual, can be mixed and pumped using mixing and pumping technology (e.g. InoComb Cabrio 0.2), can be pumped using a screed pump

1) Prepare the substrate.

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

2) protection against corrosion (optional)

StoCrete TK

- Immediately after derusting, coat the exposed reinforcement evenly and without any gaps in two application cycles. Tools: paint brush
- Waiting time between the two application cycles: 4.5 hours at approx. +20 °C
- Note: The protection against corrosion must have hardened on the reinforcing steel so that it cannot be loosened from the reinforcing steel during the next application cycle.

3) bonding agent

- StoCrete TH 200
- Pre-wet the concrete substrate approx. 24 hours beforehand.
- Allow the concrete substrate to dry so that it is slightly damp when it is applied.
- Apply the product. Tools: paint brush, brush
- coverage of bonding agent: 1.9 kg/m²

Note: Remove any cured bonding agent by abrasive blasting and re-apply.

4) Concrete repair product:

- StoCrete TG 104
- Mix the product with water in the compulsory mixer.
- In the case of smaller amounts, use agitating equipment to mix the mixture in a clean container.
- Apply and compact the product wet on wet with the bonding agent.

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- Manually apply and compact the concrete repair product. Tools: bucket trowel, plastering trowel, scoop
 - Adjust the concrete repair product to the desired layer thickness. Tools: screed board, straightedges, spirit level
 - If the screed board is guided swinging in a lateral motion, there is no need for additional abrasion.
 - Abrade the surface of the concrete repair product. Tools: plasterer's float, power trowel, pointed flooring trowel
 - For large areas use vibrating beam screeds. Carry out preliminary tests.
 - coverage of mixed product: approx. 22.0 kg/m² per cm spalling depth or layer thickness

Technical Data Sheet

StoCrete TG 104

Note:

- layer thicknesses of 10–50 mm can be applied in single layers
- layer thicknesses up to 100 mm can be applied in limited single layers in local areas, e.g. areas of spalling
- Higher layer thicknesses are possible due to multi-layer work.

Observe for layer thicknesses over 50 mm:

- Apply the product in several layers.
- Do not smoothly abrade the previous layer.
- If the surface has been abraded smoothly, blast the surface and reapply the bonding agent.

5) curing

- curing duration: at least 5 days

The following curing methods are suitable. Select the best method in light of the local conditions:

A) Cover with plastic sheets or mats. The foil must not touch the surface of the mortar.

B) Spray with water.

C) Chemical curing. Check the compatibility of the chemical curing with the following layers or work steps.

Note:

- A uniform colour shade of the mortar surface is not possible.
- Pre-wet the concrete substrate before applying the mortar so that the substrate is water-saturated and the fresh mortar does not extract mixing water.
- Prior to coating, prepare the surface using mechanical methods. example: shot-blasting

Cleaning the tools	Clean with water after use. Collect cleaning water/rinsing water and dispose of it professionally. Remove bonded material by mechanical means.
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Notes, recommendations, special information, miscellaneous	Observe the general application instructions: see www.stocretec.de , Products - see technical manual, notes Declaration of performance, CE marking: - declaration of performance: see www.stocretec.de
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Delivery	
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Packaging	sack
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Article number	Name	Container

Technical Data Sheet

StoCrete TG 104

	00297-001	StoCrete TG 104	25 kg bag
Storage			
Storage conditions	Store in dry conditions.		
Storage life	<p>In the original container until ... (see packaging). This product has a low chromate content. Provided the storage conditions are adhered to, the quality of the product in its unopened, original container is guaranteed until the maximum storage life has expired. The storage life can be deduced from the batch number of the container. Batch number explanation: Number 1 = the last number of the year, numbers 2 + 3 = calendar week Example: 430 219419781 – storage life until end of week 30 of 2024 Use promptly after opening.</p>		

Identification	
Product group	Screed materials

GISCODE	ZP1
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Safety	<p>This product is subject to compulsory labelling in accordance with the current EU regulation. Observe the Safety Data Sheet!</p>
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Special notes	<p>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.</p> <p>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.</p>
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Technical Data Sheet

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