

Technical Data Sheet

StoCrete TV 304

Grout, polymer-modified, cementitious, layer
thickness 20-70 mm



Characteristics

Area of application

- for grouting building elements such as machinery, fixing bolts, crane rails, bridge bearings, steel cast in units, pocket foundation elements, and support recesses
- or grouting openings in concrete members
- For large scale flowable concrete repairs

Properties

- shrinkage-free
- resistant to salt and frost
- impermeable to water
- consistent homogeneity
- high flow
- very good application

Technical data

Criterion	Standard / test specification	Value/ Unit	Notes
Bulk density of fresh mortar	EN 1015-6	2.3 kg/dm ³	
Maximum particle size		4 mm	
Flexural strength (28 days)	TP BE-PCC	10 MPa	
Compressive strength (1 day)		43.1 MPa	
Compressive strength (28 days)		82.5 MPa	

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

The substrate condition shall be in accordance with BS EN 1504 -10 Cl. A.7.2.2, A.7.2.3, A.7.2.4

The concrete substrate must be load-bearing, sound and free from dust, release agents, as well as from corrosion-promoting components (e.g. chlorides) and all other deleterious matter. Remove weak layers and cement laitance.

Dampen in accordance with BS EN 1504 -10 Cl. A.8.2.1 Bonding

Prepare exposed reinforcing steel in accordance with BS EN 1504 -10 Cl. A.7.3.2

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to Sa 2½ in accordance with EN ISO 8501-1 unless specified otherwise.
Average bond strength 1.5 N/mm²
Lowest single bond strength value 1.0 N/mm²

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 to allow for filling with repair mortars/fillers..

Bevel the edges of the areas of spalling to a minimum of 90° and a maximum of 135°

Application

Application temperature

Lowest application temperature: +5 °C
Highest application temperature: +30 °C

Time for application

Pour and grout immediately after mixing.

Mixing ratio

25 kg of powder / 2.875 - 3.125 l water = 1.0 : 0.115 - 0.125 parts by weight

Material preparation

Decant water into a forced action mixer and then add StoCrete TV 304 in the correct mixing ratio and mix (max. 400 rpm) for 2 minutes.

Consumption

Type of application

Approx. consumption

per litre of cavity

2.3

kg

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) Grouting with StoCrete TV 304
Grouting depth of StoCrete TV 304: 20 - 70 mm.
Greater thickness is possible if carried out in layers

Application

Pumping and conveying by machine possible.

1) Prepare the substrate using a suitable mechanical process.
Clean the exposed reinforcing steel in accordance with BS EN 1504 -10 Cl. A.7.3 up to preparation grade Sa 2½ (see below). The cleaned reinforcing steel must be free from corrosion, loose material and grease.

2) Corrosion protection

Following derusting of the reinforcing steel immediately coat with StoCrete TK in two application cycles. Use a paint brush to coat the steel evenly and without gaps. Waiting time between the two application cycles is 4.5 hours.

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The protection against corrosion must have hardened on the reinforcing steel to an extent that it cannot be loosened during the next application cycle

First application cycle: StoCrete TK grey consumption approx. 130 g/m one-time application Ø up to 18 mm

Second application cycle: StoCrete TK light grey consumption approx. 140 g/m one-time application Ø to 18 mm

or

First application cycle: StoCrete TK grey consumption approx. 150 g/m one-time application Ø above 18 mm

Second application cycle: StoCrete TK light grey consumption approx. 160 g/m one-time application Ø above 18 mm

Protection against corrosion is not necessary if the concrete covering is sufficiently thick and dense!

3) Grouting

Sufficiently pre-wet the concrete substrate before applying the product (about 24 hours before the first application cycle). At the time of application, however, it must have dried to the point that it just appears slightly damp.

If formwork is necessary, ensure it is sufficiently stable and rigidly fixed. Before grouting, pre-wet the formwork with water or treat it with suitable release agents to prevent rapid drying out. This also makes it considerably easier to remove the formwork later.

Perform grouting operations starting from one side or corner. Ensure that the grouting process is not interrupted.

For larger-scale grouting work, pour the grout into the centre of the opening (hopper or hose).

Application by machine in the dense flow process is possible using a screw pump, e.g. WM-Variojet, PFT N2V, or similar.

If the surface is to be processed further, e.g. with a subsequent coating, scatter StoQuarz 0.3 - 0.8 mm over the grout once it is in place for improvement of the bonding properties.

Avoid excessive vibrations in the surrounding areas in the first hours after placing StoCrete TV 304.

Consumption of StoCrete TV 304: approx. 2.3 kg per litre of void (mixed material)

4) Curing

Curing procedure:

a) Cover with sealed plastic film or dampened hessian sacks

b) Spray with water

c) Chemical curing agent

Under normal conditions, the time for subsequent treatment to be observed is at

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least 3 days. Undertake curing in accordance with ENV 13670-1

Note:

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

A uniform colour shade of the mortar surface is not guaranteed due to the application method.

A key part of curing is adequately wetting the concrete substrate before applying the mortar, so that the suction of the substrate does not result in early and rapid loss of water from the repair mortar.

Cleaning the tools

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

Delivery

Packaging

Sack

Article number	Name	Container
00455-001	StoCrete TV 304	25 kg bag

Storage

Storage conditions

Store in dry conditions.

Storage life

See packaging.

This product has a low chromate content. For optimum performance use the product before the end of storage life. The guaranteed storage life data is included on the batch no. shown on the packaging.

Explanation of batch number: e.g. 6050017152

In this example, storage life until the end of week 05 in 2016 is guaranteed (digit 1 = last digit of the year, digits 2 + 3 = calendar week). For further explanation, see the price list.

Identification

Product group

Grouts

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.

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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 for project specific applications.

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 from your StoCretec Technical Advisor.

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