

Technical Data Sheet

StoPox Mörtel standfest

EP mortar, layer thickness of 4-20 mm



Characteristics

Area of application

- as concrete repair product for the repair of concrete structures (concrete and reinforced concrete)
- as bonded screed in interiors
- for levelling the substrate for subsequent structural strengthening
- for forming fillets

Properties

- epoxy-resin-bound concrete repair product (PC), very good adhesion strength on the concrete substrate, good application overhead, good non-sag properties, high protection against stress from frost/de-icing salt, very quickly over-coatable, very high impermeability, very high mechanical resistance, solvent-free

Information/notes

- product is in accordance with EN 1504-3
- repair mortar in the stress resistance class M 2 / PCI, PCII or also ZTV-ING PC O, PC U
- component of the StoCretec system in accordance with the DAfStb (German) Repair Guideline 2001-10

Technical data

Criterion	Standard / test specification	Value/ Unit	Notes
Compressive strength		60 MPa	in line with EN 12190
Maximum particle size		1,2 mm	
Bond strength (28 days)	EN 1542	> 2,0 MPa	
Static modulus of elasticity	EN 13412	19 GPa	
Coefficient of thermal expansion	EN 1770		$16.5 \times 10^{-6} / K$
Density (mixture 23 °C)	EN ISO 2811	1,82 - 2,00 g/cm ³	

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:

Technical Data Sheet

StoPox Mörtel standfest

The substrate must be dry, load-bearing, and free from native and foreign release agents.

Remove less strong layers and laitance.

Dry in accordance with the definition of the DAfStb (German) Repair Guideline 2001-10, but depending on the compressive strength class. The moisture content may not exceed 4 CM per cent for concrete qualities up to C30/37 and max. 3 CM per cent for C35/45 concrete, measured with a calcium carbide meter.

Average bond strength: 1.5 N/mm²

Bond strength, lowest single 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 sufficiently.

Bevel the edges of the areas of spalling under approx. 45°.

Steel: cleanliness grade Sa 2 1/2 - metallic bright in accordance with DIN EN ISO 12944-4

Application

Application temperature

Lowest application temperature: +8 °C
Highest application temperature: +30 °C

Time for application

At +10 °C: approx. 90 minutes
At +23 °C: approx. 60 minutes
at +30 °C: approx. 30 minutes

Mixing ratio

Component A : component B = 39.0 : 1.0 parts by weight

Material preparation

StoPox Mörtel standfest is delivered in the correct mixing ratio.
Shake the B container thoroughly and set it aside. Use a slow-running paddle mixer (max. 60 rpm) to loosen the contents of the A container. Add all the contents of the B container to the A container.
The temperature of the two components when mixing should be at least +15 °C. Mix thoroughly with a slow-running paddle mixer (max. 60 rpm) until a streak-free compound develops and a uniform grey colour shade is achieved (approx. 3 - 5 min. max.).

Do not stir StoPox Mörtel standfest intensively for more than 5 minutes due to the special extender used. For larger quantities, using a compulsory mixer is recommended.

Mix very thoroughly! It is also vital to stir thoroughly at the sides and the bottom to ensure that the hardener spreads up and down evenly.

Technical Data Sheet

StoPox Mörtel standfest

Do not apply from the delivery container! After mixing, transfer the material into a clean container and stir it thoroughly once again.

Consumption	Type of application	Approx. consumption	
	per mm 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	Concrete repair		
	1) Substrate preparation 2) Protection against corrosion StoPox KSH thix 3) Protection against corrosion (second coat) and bonding agent using StoPox KSH thix 4) Repair mortar StoPox Mörtel standfest Layer thickness per application cycle: Layer thickness 4 - 20 mm for horizontal and vertical surfaces Layer thickness 4 - 10 mm overhead Higher layer thicknesses are possible due to multi-layer work. When doing so, apply StoPox KSH thix as a bonding agent each time.		
Application	Concrete repair:		
	1) Substrate preparation 2) Corrosion protection Immediately after derusting, use a paint brush/brush to apply StoPox KSH thix as protection against corrosion to the reinforcement. Consumption of StoPox KSH thix: approx. 100 g/m 3) Protection against corrosion (second coat) and bonding agent After a waiting time of 4 - 24 hours at a normal temperature, apply StoPox KSH thix as a bonding agent. Use a paint brush/brush to apply the material to the reinforcing steel and the clean, dry area of spalling in the concrete. Consumption of StoPox KSH thix: approx. 0.5 - 0.8 kg/m ² 4) Repair mortar Apply the repair mortar StoPox Mörtel standfest to the fresh bonding agent within 30 minutes. In accordance with the Technical Data Sheet. Consumption of StoPox Mörtel standfest: approx 1.7 kg/mm layer thickness		

Technical Data Sheet

StoPox Mörtel standfest

In the case of multi-layer application, apply the bonding agent StoPox KSH thix each time.

If applying solvent-free coatings and sealing coats later on, scatter the fresh mortar with kiln-dried quartz sand 0.3 - 0.8 mm.

Consumption of StoQuarz 0.3 - 0.8 mm: approx. 0.5 - 1.0 kg/m²

Dust-dry: after approx. 3 hours.

Ready for foot traffic and over-coatable: after approx. 24 hours

Mechanically resistant after approx. 7 days

Cleaning the tools

Clean with StoDivers EV 100 immediately after use.

Notes, recommendations, special information, miscellaneous

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 of the latest Technical Manual.

Delivery

Colour shade

grey

Packaging

pail and tin

Article number	Name	Container
14171/017	StoPox Mörtel standfest Combi	25 kg combi
14171/016	StoPox Mörtel standfest Combi	10 kg combi

Storage

Storage conditions

Store in dry and frost-free conditions. Avoid direct sunlight.

Storage life

In the original container until ... (see packaging).

Certificates/approvals

Z-36.1-87	GUT-00001001
Z-36.12-86	GUT-00001002
Z-36.12-88	Sto S&P CFK Lamella, slotted

Technical Data Sheet

StoPox Mörtel standfest

Identification

Product group Repair mortar

GISCODE RE30

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.

Handling epoxy resins: "Praxisleitfaden für den Umgang mit Epoxidharzen",

(Practical guide for handling epoxy resins) and

test report: "Prüfbericht zur Schutzwirkung von acht

Chemikalienschutzhandschuhen gegenüber EP-Beschichtungen" (Test report on the protective effect of eight chemical protective gloves against EP coatings),

Gloves: "Handschuhe für den Umgang mit lösemittelfreien Epoxidharzen" (Gloves for handling solvent-free epoxy resins), and

Protective gloves: "Die richtige Anwendung von Schutzhandschuhen" (The correct use of protective gloves)

<https://www.bgbau.de/themen/sicherheit-und-gesundheit/gefahrstoffe/umgang-mit-epoxidharzen/>

Published by:

BG BAU - Berufsgenossenschaft der Bauwirtschaft

Hildegardstraße 29/30, 10715 DE-Berlin

Tel. (+49) 30 85781-0, Fax. (+49) 800 6686688-37400, www.bgbau.de

Guidelines for the planning of building site facilities: "Wirtschaftliche and sichere Baustelleneinrichtung"

Published by:

Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (BAuA)

Friedrich-Henkel-Weg 1-25, 44149 DE-Dortmund

Tel. (+49) 231 9071-0, Fax. (+49) 231 9071-2454,

E-mail: poststelle@baua.bund.de, homepage: www.baua.de

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

Technical Data Sheet

StoPox Mörtel standfest

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.

StoCretec GmbH
Gutenbergstr. 6
D-65830 Kriftel

Tel.: +49 6192 401-104
Fax: +49 6192 401-105
stocretec@sto.com
www.stocretec.de