

Disbocret® 544 PCC I- Grobmörtel



Polymer modified, cement-bound repair mortar. For reprofiling and for levelling gradients on horizontal concrete surfaces subjected to dynamic mechanical stress (traffic loads).

Product Description

Field of Application	For reprofiling deep spallings and defects and for levelling gradients on horizontal substrates, e.g. under coatings on bridges and balconies (application: PCC I). For screed on separating layer and bonded screed.	
Material Properties	<ul style="list-style-type: none"> ■ Easy preparation and good working properties. ■ Low water-cement (w/c) ratio. ■ Penetration of CO₂ and moisture is minimised. ■ Anti-corrosive. ■ Frost-resistant, de-icing salt resistant. ■ For layer thicknesses of 30 - 100 mm, max. grain size: 8 mm ■ Meets the requirements of DIN EN 1504-3: Structural and non-structural repair. ■ Corresponds to mortar class M2 as per German RiLi-SIB. <p>If combined with anticorrosive Disbocret® 502 Protec plus the material is tested as a repair system in accordance with TL/TP BE-PCC of ZTV-ING. German general appraisal certificate is available.</p>	
Material Base / Vehicle	Polymer-modified cement mortar.	
Packaging/Package Size	25 kg bag	
Storage	Dry, min. 9 months from date of manufacture; low chromate content: 9 months.	
Technical Data	<ul style="list-style-type: none"> ■ Maximum grit size: ■ Apparent density of green mortar: ■ Properties of hardened mortar: 	<p>Max. particle size of the aggregate: 8 mm approx. 2,300 kg/m³ (Average values after 28 days) Apparent density of hardened mortar: approx. 2,225kg/m³ Compression strength: approx. 60 N/mm² Tensile strength under flexion: approx. 10 N/mm² Adhesive tensile strength: >2.0 N/mm²</p>

Application

Suitable Substrates	Concrete. The average adhesive tensile strength of substrates must be 1.5 N/mm ² , with a minimum individual value of 1.0 N/mm ² .
Substrate Preparation	<p>Pretreat reinforcing steel rods with Disbocret® 502 Protec plus as anticorrosion coating according to the manufacturer's recommendations. Prepare the concrete with Disbocret® 502 Protec plus according to the manufacturer's recommendations as a bonding slurry before applying the coarse-grained repair mortar, wet-on-wet.</p> <p>The substrate must be sound/stable, clean and free from all loose substances that may prevent good adhesion. Brittle or loose concrete, concrete containing corrosive substances, e.g. chlorides, must also be thoroughly removed by suitable means, along with any remnants of paint, oil, fat/grease or release/separating agent (formwork oil residues). In the same way, surface laitance (cement stone) should be removed by suitable means. This should be removed to such a depth that the repair mortar will find sufficient adhesion to the treated surface. The edges of spalled or damaged areas must be bevelled (45° - 60°). The substrate must be pre-wetted and should present a matt (flat) surface appearance prior to the application of the coarse-grained repair mortar.</p>
Preparation of Material	The contents of a 25 kg bag of product is gradually mixed into the measured quantity of tap (potable) water leaving behind some amount of water, and agitated with a suitable low-speed paddle mixer (max. 400 rpm) for approx. 3 minutes. Then add the rest of water quantity according to requirements and continue stirring for 2 minutes, until the mixture is free of lumps and has a homogeneous consistency.

Mixing Ratio	Dry Mortar	Water
	1 part by weight	approx. 0.09 parts by weight
	25 kg bag	2.25 l
Method of Application	Apply the thoroughly mixed product with suitable tool, e.g. shovel, trowel or float, blending the mortar (compressing) wet-on-wet into the bonding slurry and smoothen the surface, if necessary. Prevent fast drying due to direct sunlight, high temperatures and drying wind/draught by suitable protective measures or by finishing treatment, e.g. protect scaffolding with foils, moist jute bags or spray with water, for min. 5 days as per ZTV-ING. Formwork must be handled according to acknowledged rule of technology.	
Layer Thickness	Min. 30 mm, max. 100 mm. Higher layer thickness can be achieved by multilayered application.	
Consumption	Dry mortar: approx. 2.0 kg/m ² per mm of layer/coating thickness.	
Workability	Approx. 60 minutes at 20 °C.	
Application Conditions	Material, substrate and ambient air temperature: Min. 5 °C, max. 35 °C during application and hardening.	
Tool Cleaning	Clean tools immediately after use with water.	

Advice

German Certificates

■ 4-1081 Testing according to ZTV-ING, TL/TP BE-PCC, application PCC I, P 2149/00-81
Polymer-Institute, Flörsheim

Special Risks (Hazard Note) / Safety Advice (Status as at Date of Publication)

Restricted to professional users.

Causes skin irritation. Causes serious eye damage. May cause respiratory irritation. Do not breathe dust or mist. Do not get in eyes, on skin, or on clothing. Use personal protective equipment as required. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Contains cement.

Disposal

Materials and all related packaging must be disposed of in a safe way in accordance with the full requirements of the local authorities. Particular attention should be paid to removing wastage from site in compliance with standard construction site procedures.
In Germany: Only completely empty bags and containers should be handed in for recycling. Dispose hardened material residues as mixed construction and demolition site waste.


Giscode

ZP 1 (Germany)

Further Details

See Material Safety Data Sheet (MSDS).
Follow the application instructions while applying our products.

CE Labelling

	
Disbon GmbH Roßdörfer Straße 50, 64372 Ober-Ramstadt	
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DIS-544-004144	
EN 1504-3:2005	
Concrete substitute product for statically and not statically relevant repairs	
EN 1504-3: ZA.1a	
Compressive strength	Class R4
Content of chloride ions	≤0.05%
Adhesive strength	≥2.0 MPa
Disabled shrinking/swelling	≥2.0 Mpa
Carbonation resistance	NPD
Modules of elasticity	≥20 GPa
Reaction to fire	Class E

EN 1504-3

CE labelling is based on EN 1504-3 “Products and systems for protection and repair of concrete load bearing structures – Part 3: Statically and not statically relevant repair”, defining the requirements for repair products.

Products matching the above mentioned standards are to be labelled with the CE mark (labelling is effected on the bag). Corresponding information (performance record according to BauPVO) is available on our website www.disbon.de

Additional engineer standards are effective for the use in Germany in structural safety relevant areas. Conformity is documented by the Ü sign (Überwachung = supervision) on the container. Established by documented evidence of conformity 2+ with controls and tests on the part of the manufacturer and notified bodys.

Customer Service Centre

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