

Disbocret® 545 PCC II-Feinmörtel



Polymer modified, fibre-reinforced, cement-bound repair mortar.
For reprofiling horizontal and vertical concrete surfaces with or without traffic loads and dynamic mechanical stress.

Product Description

Field of Application	For reprofiling spallings and defects and for complete surface application, e.g. to increase the concrete top-coating thickness. May be used for preparing composition floors (composite screed) with layer thickness of 15-40 mm. For the structural repair of concrete structures.
Material Properties	<ul style="list-style-type: none"> ■ Easy preparation and good working properties. ■ Low water-cement (w/c) ratio. ■ Penetration of moisture is minimised. ■ Anti-corrosive. ■ De-icing salt resistant. ■ Can be applied by wet-spray-method. ■ For layer thicknesses of 6-40 mm, max. grit size: 2 mm ■ Corresponds with mortar class M3 according to german guideline RiLi SIB ■ Meets the requirements of DIN EN 1504-3: Structural and non-structural repair. <p>If combined with Disbocret® 502 Protec plus the material is tested as a repair system according to TL/TP BE-PCC of ZTV-ING. German general building inspection test certificate available.</p>
Material Base / Vehicle	Polymer modified, cement-based dry mortar premix.
Packaging/Package Size	25 kg bag
Storage	Dry, shelf life is min. 9 months (from date of manufacture); low chromate content: 9 months.
Technical Data	<ul style="list-style-type: none"> ■ Maximum grit size: 2 mm ■ Compression strength: approx. 56 N/mm² ■ Apparent density of green mortar: approx. 2,200 kg/m³ ■ Properties of hardened mortar: approx. 2,060 kg/m³ ■ Tensile strength under flexion: approx. 9.7 N/mm² ■ Adesive tensile strength: > 2.0 N/mm² <p>Static modulus of elasticity: approx. 29.000 N/mm²</p>

Application

Suitable Substrates	Normal, heavy and lightweight concrete. The average adhesive tensile strength of the substrate must be 1.5 N/mm ² , with a single minimum value of 1.0 N/mm ² .
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Substrate Preparation	<p>Pretreat reinforcing steel rods with Disbocret® 502 Protec plus according to the manufacturers instructions as an anti-corrosion coating. For manual application, prepare the concrete with Disbocret® 502 Protec plus according to the manufacturer's instructions as a bonding slurry (adhesive-wash). Then apply the fine mortar wet-on-wet on the bonding slurry. In case of wet-spray application, a bonding (adhesion promoting) layer is unnecessary.</p> <p>The substrate must be sound/solid, clean and free from all loose material 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 agents. In the same way, surface laitance should be removed using suitable means. This should be removed to such a depth that the repair mortar would 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 moist surface aspect prior to the application of the fine mortar.</p>						
Preparation of Material	<p>The contents of a 25 kg bag of Disbocret® 545 is gradually mixed into measured quantity of tap (potable) water leaving behind some amount of water, and agitated with a suitable low-speed electrical paddle (max. 400 rpm) for approx. 3 minutes. Then add the rest of water quantity and continue stirring for 2 minutes until the mixture is free of lumps and has a homogeneous consistency.</p>						
Mixing Ratio	<table border="1"> <thead> <tr> <th>Dry mortar</th> <th>Water</th> </tr> </thead> <tbody> <tr> <td>1 part by weight</td> <td>0.12 parts by weight</td> </tr> <tr> <td>25 kg bag</td> <td>3.00 l</td> </tr> </tbody> </table>	Dry mortar	Water	1 part by weight	0.12 parts by weight	25 kg bag	3.00 l
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Method of Application	<p>Apply the fine mortar with a trowel or spattle/scrapper, blending the material (firmly compressing), wet-on-wet into the bonding slurry. Reprofile deep spallings on vertical surfaces by applying multiple layers. The fine mortar can be applied by wet-spray-method (e.g. PFT N2V).</p> <p>Rapid curing due to direct sunlight, high temperature or draught/supply air must be avoided by suitable means or after-treatment.</p> <p>Boardings must be fixed according to the acknowledged rules of technology. A surfacer application at an early stage serves as after-treatment of the fine mortar. For machine-use: see "Disbon Bautenschutz - Verarbeitungshinweise"</p>						
Layer Thickness	Min. 6 mm, max. 40 mm. Higher layer thickness can be achieved by multilayered application.						
Consumption	Dry mortar: approx. 2.0 kg/mm/m ² .						
Workability	Approx. 60 minutes at 20 °C.						
Application Conditions	Material, atmospheric, and substrate temperature: Min. 5 °C, max. 35 °C during application and drying.						
Tool Cleaning	Immediately after use with water.						

Advice

German Certificates

- 4-1103 General appraisal certificate Nr. P 5633/08-334
Polymer Institute, Flörsheim

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

Irritating to skin. Risk of serious damage to eyes. Do not breathe dust. Avoid contact with skin and eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable gloves and eye/face protection. If swallowed, seek medical advice immediately and show this container or label.

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 emptied bags and containers should be given for recycling. Dispose hardened material residues mixed construction and demolition site waste.

Giscode

ZP 1

Further Details

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

CE Labelling

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 the repair products.

Products matching the above mentioned standards are to be labelled with the CE mark. 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 bodies.

Customer Service Centre

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All suggestions and application instructions herein are based on our latest technical experience. Due to the wide variety of individual project conditions, we cannot be held responsible for their content. These instructions do not release the purchaser/ applicator from his responsibility to determine the suitability of the product in consideration of the project characteristics. These instructions are to be considered void when a new edition is released. Our general conditions of sale and delivery in their latest edition apply. This document is a translation of our German Technical Information No.545 · Disbocre® 545 PCC II-Feinmörtel · Issued: July 2017

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