

Disbocret® 714 PCC I- Grobmörtel



Polymer modified, cement-bound, repair mortar for concrete repairs. Suitable for reprofiling and levelling gradients of trafficable, horizontal concrete surfaces subjected to dynamic loads.

Product Description

Field of Application	For reprofiling deep defects and spallings and for levelling gradients on horizontal surfaces as e.g. in car parks/parking garages (application: PCC I). Suitable for producing screeds, reprofiling defective areas and increasing rebar (reinforcing steel rod) protection. Also suitable as concrete repair mortar and for embedding mixed metal oxide titanium anodes for cathodic corrosion protection of reinforced concrete (ferroconcrete).
Material Properties	<ul style="list-style-type: none"> ■ Easy preparation and good working properties. ■ Low water-cement (w/c) ratio. ■ Frost-resistant, de-icing salt resistant. ■ Low shrinkage and internal stress (low tension). ■ For interior and exterior use. ■ For layer thicknesses of 20 - 100 mm, max. grain size: 8 mm. ■ Corresponds with mortar class M3 as per German guideline RiLi SIB. ■ Mortar for embedding anodes in the field of cathodic corrosion protection. ■ Reaction to fire as per DIN EN 13501-1: A2_i-s1 ("nicht brennbar" / non-combustible/inflammable). ■ Meets the requirements of DIN EN 1504-3: Structural and non-structural repair. <p>If combined with bonding agent/bridge (slurry) Disbocret® 713 PCC Haftbrücke the material is tested as a repair system according to TL/TP BE-PCC of ZTV-ING.</p>
Material Base / Vehicle	2-component, polymer modified cement mortar.
Packaging/Package Size	<ul style="list-style-type: none"> ■ Dry mortar: 40 kg bag, 18 m³ silo (capacity: max. 32 t) ■ Mixing liquid: 25 l plastic can, 1,000 l container
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"> ■ Bulk density: approx. 1,800 kg/m³ ■ Maximum grit size: 8 mm ■ Apparent density of green mortar: approx. 2,300 kg/m³ ■ Properties of hardened mortar: (Average values after 28 days) Compression strength: approx. 55 N/mm² Tensile strength under flexion: approx. 9 N/mm² Adhesive tensile strength: > 2.0 N/mm² Dynamic modulus of elasticity: approx. 38,000 N/mm² Static modulus of elasticity: approx. 35,000 N/mm²

Application

Suitable Substrates	Concrete. The average adhesive tensile (pull-off) strength of the substrate must be 1.5 N/mm ² , with a minimum single value of 1.0 N/mm ² .
Substrate Preparation	The substrate must be stable, clean and free from all 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 separating agent (formwork oil residues). In the same way, surface laitance should be removed using suitable means. This should be removed to such a depth that the repair mortar can find sufficient adhesion to the treated surface. The edges of spalled or damaged areas must be bevelled (45° – 60°). Pretreat reinforcing steel rods with bonding agent Disbocret® 713 PCC Haftbrücke according to factory specification as corrosion protection. Pre-wet the concrete to obtain a matt moist (flat) surface appearance, then apply the coarse-grained repair mortar onto the bonding slurry (wet-on-wet).

Preparation of Material	Pour the given quantity of mixing liquid Disbocret® 716 PCC-Anmachflüssigkeit in a clean vessel. Add the corresponding measured quantity of dry mortar gradually while agitating thoroughly with a suitable low-speed paddle mixer (max. 400 rpm) for approx. 3 to 5 minutes, until the mortar is free of lumps and has a homogeneous consistency.					
Mixing Ratio	<table border="1"> <thead> <tr> <th>Dry mortar</th> <th>Mixing liquid</th> </tr> </thead> <tbody> <tr> <td>1 part by weight 40 kg bag</td> <td>approx. 0.085 parts by weight approx. 3.4 l</td> </tr> </tbody> </table>	Dry mortar	Mixing liquid	1 part by weight 40 kg bag	approx. 0.085 parts by weight approx. 3.4 l	
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Method of Application	Apply the repair mortar with suitable tool, e.g. shovel, trowel or float, intensively blending (pressing onto it) the material wet-on-wet into the layer of bonding agent/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. Formwork must be handled according to acknowledged rule of technology.					
Layer Thickness	Min. 20 mm, max. 100 mm					
Consumption	Dry mortar: approx. 2.0 kg/m ² per mm of layer/coating thickness.					
Workability	Processing time: Approx. 60 minutes at 20 °C.					
Application Conditions	Material, substrate and ambient air temperature: Min. 5 °C, max. 30 °C during application and hardening.					
Waiting Time	At 23 °C: Walkable and trafficable after 1 day. Application of OS systems after 5 days.					
Tool Cleaning	Immediately after use with water.					

Advice

German Certificates

- Testing according to ZTV-ING, TL/TP BE PCC, application PCC I, Polymer-Institute, Flörsheim
- Testing according to load class M3, RiLi-SIB, Polymer-Institute, Flörsheim
- Test rapport for suitability as anode imbedding mortar for cathodic corrosion protection, IBAC, Aachen

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

Restricted to professional users.

Causes skin irritation. Causes serious eye damage. Do not breathe dust or mist. Do not get in eyes, on skin, or on clothing. Wear protective gloves/eye protection/face protection. IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Contains: Cement, portland, chemicals.

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 references while applying our materials.

CE Labelling

	
1119	
Disbon GmbH Roßdörfer Straße 50, 64372 Ober-Ramstadt	
09	
DIS-714-007427	
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
Compatibility to temperature changes	≥2.0 MPa
Carbonation resistance	Confirmed
Modules of elasticity	≥20 GPa
Capillary absorption of water	≤0.5kg*m ² *h ^{-0,5}
Hazardous substances	Conform with 5.4
Reaction to fire	Class A2 _{fl} -s1

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. 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 bodies.

Customer Service Centre

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