Disbocret® 504 Feinmörtel



Polymer-modified, cement-based repair mortar for reprofiling concrete. Excellent application properties – also with wet and dry spraying method.

Product Description

Field of Application

For repair of spalling and defects as well as for complete reprofiling of surfaces, e.g. in order to enhance concrete top-covering.

Material Properties

- Excellent application properties, allowing machine application.
- Very high stability.
- High-yield product.
- Non flammable A1 DIN 4102.
- Applicable for coat thickness of 5-40mm, max. grit size: 2mm.
- Approved to German standard procedures RiLi-SIB, mortar class M1.
- Meets the requirements of EN 1504-3: Structural and non-structural repair.

Material Base / Vehicle

Packaging/Package Size

Storage

Technical Data

Polymer-modified cement mortar

25 kg bags (container delivery is possible).

Dry, min. 9 months (from date of manufacture); low chromate content: 9 months.

Maximum grit size: 2 mm

■ Compression strength: 35 N/mm² (mean value after 28 days)

Apparent density of green mortar: approx. 2,100 kg/m³
Apparent density of hardened mortar: approx. 2,000 kg/m³

Tensile strength under flexion: >8.0 N/mm² (mean value after 28 days)
Adesive tensile strength: >1.5 N/mm² (mean value after 28 days)

Application

Suitable Substrates

Normal, heavy and light-weight 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

Treat reinforcing steel with Disbocret® 502 Protec plus (as an anti-rust priming coat) according to the manufacturer's recommendations.

If manually applied, fine repair mortar Disbocret® 504 is to be applied only on concrete surfaces previously treated with a bonding slurry of Disbocret® 502 Protec plus according to the manufacturer's recommendations. Then apply the fine repair mortar wet-on-wet on the bonding slurry. If applied with wet or dry spraying method the adhesion promoting layer (bonding bridge) is not required. For anti-corrosive treatment of concrete reinforcement steel Disbocret® 502 Protec plus must be used.

Concrete surface must be sound/solid, clean and free from loose or brittle parts. Substances preventing adhesion, e.g. existing paint coatings, oils, fats/greases, etc., must be removed by suitable method. Substrates (hardened cement paste) must be free from corrosive substances, e.g. chlorides, and removed where required to guarantee proper adhesion of he subsequently applied fine repair mortar on the treated surface.

The edges of repaired areas must be chamfered between 45° to 60°. Substrates must be pre-wetted. Care must be taken to ensure that most of the moisture has been absorbed before the fine repair mortar is applied (flat surface aspect).

Preparation of Material

Pour measured quantity of tap (potable) water into a container and, while stirring with a suitable electric paddle (max. 400 rpm), add the corresponding quantity of dry mortar gradually. Keep on stirring for approx. 3 minutes until a lump-free, homogenous mixture is achieved.

Mixing Ratio

Dry mortar	Water
1 part by weight	0.12 - 0.15 parts by weight
25 kg bag	3.00 – 3.75 l

Technical Information No. 504

Method of Application

Fine repair mortar is applied with trowel or scraper, wet-on-wet, blending (pressing onto it) on the bonding slurry. Deeper spalling on vertical surfaces is reprofiled in layers. Fine repair mortar is either dry-spray (e.g. Aliva, Jetmaster) or wet-spray applied (e.g. PFT N2V).

Quick drying, caused by sunlight, high temperatures and draught (draft) must be prevented by suitable protective measures or after-treatment. Formwork must be handled according to generally applied surfacer serves as an after-treatment for fine

acknowledged rules of technology. A prematurely applied surfacer serves as an after-treatment for fine repair mortar.

For machine application: see "Disbon Bautenschutz - Verabeitungshinweise"

Layer Thickness

Partial repair of spalling:

5 – 40 mm

Complete surface application:

5 - 20 mm

A higher thickness can be achieved by applying in layers.

Consumption

Dry mortar: Approx. 1.8 kg/m²/mm.

Workability

At 20 °C approx. 60 minutes.

Application Conditions

Material, Athmospheric and Substrate Temperature:

Min. 5 °C. max. 35 °C.

Tool Cleaning

Immediately after use with water.

Advice

German Certificates

- 4-1092 Testing according to load class M1, Rili-SIB Polymer-Institute, Flörsheim
- 4-1078 Testing while using the dry and wet spraying method Polymer-Institute, Flörsheim

Special Risks (Hazard Note) / Safety Advice (Status as at Date of Publication) Irritating to skin. Risk of serious damage to eyes. Keep out of reach of children. Do not breathe dust. Avoid contact with eyes and skin. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable gloves and eye/face protection. In case of swallowing seek medical advice immediately and show the packaging 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 Sheets.

Follow the application references while applying our materials.

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 bodys.

Customer Service Centre

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