



POLPO for BUILDING CHEMICALS & TECHNOLOGIES

PRODUCT DATA SHEET

CONCRETE REPAIR[®] Premium cement mortar

DESCRIPTION

CONCRETE REPAIR[®] is a single-component, polymer-modified, high build cementitious mortar, designed for structural concrete repairs. It requires only the addition of clean mixing water free from sulfates and chlorides to produce a lightweight mortar., low permeability, high strength mortar for both soffit and vertical repair situations.

The product has been equirements of EN 1504-3 as an R4 mortar.



Acrylic polymer-modified, highbuild structural repair mortar.

- Lightweight, high strength mortar for soffit and vertical repairs
- Complies with EN 1504-3 as an R4 mortar
- Quartz reinforced

Features and benefits

- Lightweight, low density structural repair mortar which allows speedier completion of work.
- High build properties – up to 75mm vertically and 50mm in a soffit repair, without formwork.
- Contains fibres and spray dried acrylic polymer
- Easy to apply, with excellent application properties

USES

- Structural concrete repairs, particularly where high, overhead build is required
- Repairs to car park soffits, bridge structures and columns

25KG



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Preparation

Concrete substrates

Concrete substrates must be adequately prepared by use of scabbing, needle gunning or other means, as appropriate.

Oil and grease must be removed by steam cleaning together with suitable detergent.

Any contaminated concrete must be removed.

All damaged concrete should be cut back to a sound surface and at least 15mm behind any exposed reinforcement.

The edges of the repair should be cut perpendicular to the surface of the repair.

Note: Disc cutting is not recommended due to hazardous respirable crystalline silica that can be produced.

New concrete must be at least 14 days old.

Thoroughly saturate the concrete but remove excess water.

Steel substrates

These should be grit blasted equivalent to BS 7079-A1 and degreased immediately prior to application. Where corrosion is absent, wire brushing to a clean, bright surface may be adequate. Care must be taken not to polish the rust.

Note: Preparation of both concrete and steel must achieve a clean, sound, roughened surface.

MIXING

Mixing of bonding slurry

Mix vigorously to a brushable, slurry consistency.

Mix for 2-3 minutes from adding the powder to the water.

Over mixing will entrain air and reduce compressive strength. Do not over mix.

Water addition is 3.0 to 3.3 litres of clean water per 25kg bag. Start at 3 litres and adjust as required upwards to 3.3 litres.



Application

Priming of steel reinforcement Apply one full, unbroken coat of CONCRETE-REPAIR®, ensuring the back of the cleaned reinforcing bars are coated.

Priming of concrete substrate

Ensuring the prepared concrete substrate is saturated but surface damp, use a stiff brush to scrub the slurry well into the surface. Apply the mortar to the substrate whilst the bonding slurry is still tacky and compact well into place, ensuring no air is trapped.

The minimum application thickness is 20mm. Where very thick sections are required, multiple applications may be necessary. Intermediate surfaces should be scratched to give a good mechanical key.

Finishing

Finish with a wooden or plastic float or sponge to present a lightly textured surface. Otherwise, finish with a steel float for a tightly closed surface.

Curing

Unless a levelling mortar, coating, inhibitor, sealer or other system is to be applied to the surface, cure immediately after finishing with a suitable membrane.

Before application of a coating or a levelling mortar, cure the repairs by covering with closely-fitting polyethylene sheeting

Packaging

CONCRETE-REPAIR® is supplied in 25kg bags

Storage and shelf life

When stored unopened in a dry place at temperatures above 5°C, shelf life is 12-months from date of manufacture.

Health and safety

Contains cement (Contains chromium (VI)).

May produce an allergic reaction). Harmful by inhalation. Irritating to eyes and skin. Keep out of the reach of children. In case of contact with eyes, rinse immediately with plenty of water and seek medical help.

After contact with skin, wash immediately with plenty of soap and water. Wear suitable protective clothing, gloves and eye/face protection.

CONCRETE REPAIR®

Premium cement mortar

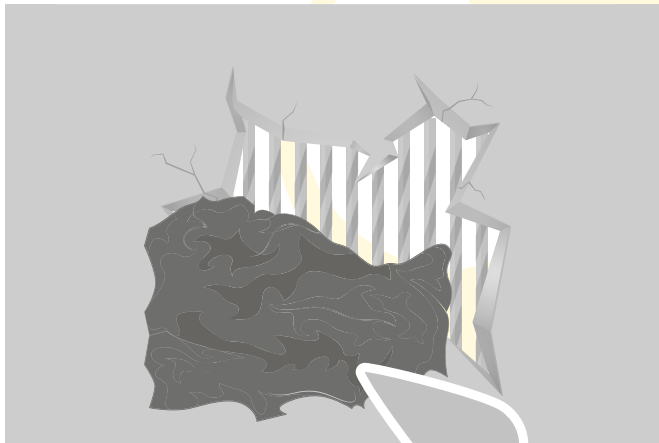
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Technical data EN1504

Performance Characteristic	Method	Requirement	Result
Compressive Strength	EN 12190	≥25 MPa	>40 MPa
Chloride ion content	EN 1015-17	≤0.05%	0.01%
Adhesive bond	EN 1542	≥1.5 MPa	>1.5 MPa
Carbonation resistance	EN 13295	dk ≤ control concrete (MC/0.45)	≤ dk
Elastic modulus	EN 13412	≥15 GPa	17.5 GPa
Thermal compatibility Part 1 Freeze-thaw	EN 13687-1	Bond strength after 50 cycles ≥1.5 MPa	>1.5 MPa
Capillary absorption	EN 13057	≤0.5 kg m ⁻² h ^{-0.5}	0.052

QUARTZ REINFORCED



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WARNING

- Keep the product out of the reach of children
- Empty container is not suitable for food
- In case of contact with eyes, wash immediately with water
- Use in well-ventilated areas



Storage and expiration

12 month from the date of manufacture, in its original closed packaging, stored away from humidity.