



Dr. Fixit Repair Polymer Mortar

FIBER REINFORCED HIGH STRENGTH DUAL SHRINKAGE COMPENSATED TROWALABLE POLYMER REPAIR MORTAR

Description

Dr. Fixit Repair Polymer Mortar is a ready to use dimensionally stable fibrous reinforced cementitious reinforced structural grade Polymer Repair Mortar. It produces a dense, high strength Polymer Repair Mortar, with excellent bond characteristics to steel and concrete. Dr. Fixit Repair Polymer Mortar is suitable for 5mm to 25mm thickness.

Areas of Application

Used commonly for general repairs and renovate/ resurfacing the concrete structure such as in industry, infrastructure, residential and commercial segment.

- Repairs to reinforced or pre-stressed slabs, beams, retaining wall or columns.
- Repair of structural members subjected to repetitive loading.
- Overhead and vertical applications to restore concrete cover.
- For renovating and resurfacing concrete structures such as beams columns, building facades, balconies and more.

Features & Benefits

- Easy to use: Ready to use and reduce time for repair
- Long term durable: Provides excellent durability and strong structural repair
- Polymer Repair Mortar: Able to repair structural strengthening of concrete
- Dual shrinkage compensated: Dual expansion system with long-term drying shrinkage hence reducing cracking tendency
- High built technology: it can be applied from 5mm to 25mm thickness in single layer
- Designed mechanical properties: excellent compressive strength, flexural strength and tensile strength and adhesion strength.

Method of Application

1 SURFACE PREPARATION

- Concrete surface should be sound, stable, clean and free from laitance, paint, oil, grease, and any residual mould release agents and curing compounds. The Metal surfaces should be free from any rust, scaling, cleaning can be carried out with suitable methods like by using wire brush, water jetting, mopping, etc.
- Defective concrete surfaces must be cut back to a sound base and ensure to exposed key aggregates on surface
- Corroded reinforcing steel should be exposed around its full circumference and cleaned using Dr. Fixit Rust Remover to remove all loose scale and corrosion deposits. It is important to clean the steel to a bright condition.
- One coat of - Dr. Fixit Zinc Rich primer a single component zinc based epoxy coating should be applied on the reinforcing steel. If any discontinuity in the applied film is noticed, one more coat has to be applied.
- Ensure before casting the concrete surface is fully saturated and no standing water on surface..

2 MIXING

- Dr. Fixit Polymer Mortar HB must be mixed mechanically. For this, heavy-duty slow speed drill with spiral mixing paddle or forced action mixer can be used.
- The quantity water required will generally require between 4.75Kg and 5.25Kg per 25 kg bag of Dr. Fixit Polymer Repair Mortar.
- Add approximately 4.75Kg of portable water into the mixer. With continuous mixing add Dr. Fixit Polymer Repair Mortar.
- Based on water demand remaining water of 0.5Kg to be added to be added to meet desire consistency. Mix thoroughly for 3 to 5 minutes until mortar is homogeneous and lump free and desire consistency.



- If ambient temperature is more than 30 degree C, use chilled water for mixing and store unused product in shed. For better results maintain the mixed temperature of product at less than 35°C. Mix only as much material as can be applied within 45 minutes.

3 APPLICATION

- After mixing, Dr. Fixit Repair Polymer Mortar can be applied by trowel on vertical and overhead surfaces.
- When applying by hand Dr. Fixit Repair Polymer Mortar must be forced tightly into the substrate to ensure complete contact with the pre-wetted substrate. In situations where reinforcement steel is countered, the mixed material should be placed behind the bars tightly and then subsequent thickness should be built up in layers, each layer being up to 25 mm thick (wet on dry method).
- A thin scrape coat or contact layer before building up to the required thickness, wet on wet, will improve adhesion especially in case of hand application. If the concrete is pours apply one coat of Dr. Fixit Pidicrete MPB in the ratio of 1:1 (MPB:Cement) as a bond coat .
- Apply Dr. Fixit Repair Polymer Mortar to the desired layer thickness maximum up to 25mm (wet on dry method) and level using a screeding bar, trowel or wooden board. Can be applied in thicker layers in smaller patches or where additional reinforcement is present. Smoothing with a trowel or finishing by float or sponge can be done as soon as the mortar has begun to stiffen.

4 CURING

- During curing, protect Dr. Fixit Repair Polymer Mortar from excessive heat and draft conditions.
- Mist-spray the surface with water during the first 24 hours of wet curing. Alternatively, use damp burlap, or a suitable ASTM C309 water- based curing compound. Do not use a solvent-based curing compound.

Precautions & Limitations

- Dr. Fixit Repair Polymer Mortar should not be part mixed and water powder should be strictly follow
- Ensure full circumference exposure of reinforced steel and treated accordance the guideline.
- Consult structural engineer if the diameter of rebar is reduced by more than 20% of the original diameter.
- Replacement or provision of additional steel shall be done in consultation with structural consultant.
- The product during application should not be exposed to running water or prior to final setting.
- Dr. Fixit Repair Polymer Mortar should not be used if ambient temperature is less than 5°C.

Technical Information

PROPERTIES	TEST METHOD	TYPICAL VALUE
W/c Ratio		0.45
Pot life		60 min
Compressive strength, 30°C	EN 12190	38 MPa 28 Day
Dual shrinkage		Yes
Adhesive Bond Test, Mpa	EN 1542	>1.5
Max. single layer applied thickness upto		25mm

Theoretical Coverage

- 1.3m² per 25 Kg pack at 10mm thickness at water powder ratio of 0.195% by weight
Yield - 13 Ltrs at W/P ratio of 0.195

Packaging

25 Kg Unit



Shelf Life & Storage

- Shelf life is 6 months from the date of manufacturing if stored in original and unopened packaging in a cool dry place away from direct sunlight and moisture.

Health & Safety Precautions

This product contains cement. And contact with skin may cause irritation. It should not be inhaled, and a quality certified PPE should be used whilst handling, pouring and mixing the powder. Avoid contact with the product by working carefully, using a barrier cream. If any contact does occur, wash thoroughly with soap and water. Avoid contact with eyes, if such contact occurs flush of water irrigate with water for 20 minutes and seek medical advice. If swallowed seek medical advise immediately- do not induce vomiting. See MSDS for further information

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