

FEB EPOXY MORTAR

Solvent Free Epoxy Resin Mortar Kit

Description of Product

FEB EPOXY MORTAR is a two-component solvent free epoxy resin mortar. The specially selected fillers and resins form an easily finished impervious mortar with high build characteristics combined with optimum chemical and mechanical resistance. FEB EPOXY MORTAR is specifically designed for overhead and high build vertical applications.

Fields of Application

General repairs, renovation and rendering to:

- Soffits.
- Undersides of floors, beams, etc.
- Honeycombed or spalled concrete.

Wherever a high build impervious mortar with excellent chemical resistance and maximum mechanical properties is required, such as, sewerage works, bridge repairs, manhole linings, pipes etc.

Overhead work and vertical surfaces where normal epoxy resin compounds are unsuitable. Wherever effective repair of spalled concrete is required to provide all round protection to reinforcing steel, vertical renders for linings, etc.

Used as coving mortar or lining mortar for bund walls and channels. (May need sealing with MASTERTOP® 1210 depending on chemical exposure.)

Features and Benefits

- Suitable for high build application.
- Suitable for vertical and overhead surfaces.
- Good adhesion and cure under damp conditions.
- Good chemical resistance.
- Low exotherm.

Technical Data/Typical Properties

Colour	Grey
Service temperature limits	-20°C to 50°C
Application temperature limits	8° C to 45°C
Density (BS 6319:Pt1)	1075Kg/m ³
Sag @ 25mm thickness	none at 25°C
Full cure 20°C	3 to 5 days
Linear coeff. of thermal expansion (ASTM C531)	23 X 10 ⁻⁵ mm/mm per °C
Thermal compatibility with concrete (ASTM C 884)	Pass
Linear shrinkage during cure (ASTM C531)	Minimal
Water absorption (ASTM C413)	0.07%
Compressive strength @ 20°C (BS 6319:Pt 2) (ASTM C580) 7 day cure	35.0 N/mm ²
Flexural strength @ 20°C (BS 6319:Pt.7) (ASTM C307)	20.0 N/mm ²
Tensile strength @ 20°C (BS6319:Pt7) (ASTM C307)	9.0 N/mm ²
Bond strength (slant shear method) (BS6319:Pt4)	Concrete 34.1 N/mm ² Steel 27.5 N/mm ²
Working Time	@10°C 1 hour @15°C 40 mins @25°C 30 mins
Cure rates	@10°C 7-10 days @15°C 5-7 days @25°C 3-5 days
Chemical resistance	Good to a wide range of aqueous media: raw sewage, dilute mineral acids, alkalis, salt water, detergents etc. <i>Resistant to:</i> hydrocarbons <i>Poor resistance to:</i> alcohol's ketone and organic acids.

FEB EPOXY MORTAR may yellow on exposure to certain chemicals or environments. This yellowing does not effect the chemical or mechanical properties of FEB EPOXY MORTAR.



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Application Procedure

Preparation of Substrate

All surfaces must be clean and free of surface moisture. All dirt, dust, Cement laitance and deleterious matter must be removed by thorough wire brushing followed by blowing clean with oil-free compressed air.

Priming

All surfaces must be primed. Use the EPOXY PRIMER provided in the pack/unit. This is a two pack solvent free system and acts as an adhesive and tack coat. Thoroughly mix resin and hardener components for 3-4 minutes and apply evenly to the substrate using a stiff brush. The contents of the container must be used within 45 minutes of mixing.

Priming should be carried out in advance of application of the mortar. It is essential to apply the mortar on top of the primer whilst the latter is still tacky. If the first priming coat should start to gel, apply a second priming coat before applying the mortar.

1 litre of EPOXY PRIMER will be sufficient to treat approximately 4-5 m² (dependant on porosity and texture of surface).

Mixing

Add the hardener to the base component. Thoroughly mix to homogeneous lump free consistency using a slow speed mixer with a suitable paddle.

Application

The thoroughly mixed mortar should be applied by trowel, knife, wooden float or gloved hand. Press well into the primed surface and compact to ensure positive and permanent adhesion. Finishing of the FEB EPOXY MORTAR is aided by wetting the steel trowel with a little hydrocarbon solvent.

For large areas layer thickness should not exceed 40mm in thickness. For smaller areas up to 50mm can be applied. Minimum thickness is 3mm. Further priming is necessary between layers and the backing layer should be cross hatched before cure takes place to provide a mechanical key.

Coverage

2.5 kg pack will cover approximately 0.5m² at 5 mm thick dependent upon the surface texture.

Cleaning

Tools must be cleaned immediately after use with FEB CLEANING SOLVENT No 2 or other suitable solvents.

Packaging

Available in 2.5 Kg packs.

Storage

Store in unopened containers in cool, dry conditions at ambient temperatures between 5 - 35°C (ideally 15 - 20°C).

Shelf Life

2 years if stored in accordance with manufacturer's instructions.

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Health and Safety

*For full information on Health and Safety matters regarding this product the relevant Health and Safety Data Sheet should be consulted.

The following general comments apply to all products.

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs, (which may also be tainted with vapour until the product is fully cured and dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Keep away from children and animals. Reseal containers after use.

Powder Products

Should be handled to minimise dust formation; use light mask if excessive dust unavoidable. Cement powders when wet or moistened can cause burns to skin and eyes which should be protected during use.

Resin Products

Can cause irritation, dermatitis or allergic reaction. Use protective equipment particularly for skin and eyes. Use only in well ventilated areas.

Spillage

Chemical products can cause damage; clean spillage immediately.

Disclaimer:

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