

# SOLCEM EPOXY MORTAR



## Epoxy Repair Mortar

Solcem Epoxy Repair Mortar is a high strength, trowel applied, three component epoxy resin-based mortar

- Repairs to spalled or damaged concrete
- Chemical bunds
- Bedding pre-cast concrete beams
- Nosings on expansion joints
- Flooring repairs
- General repairs to cementitious substrates where strength and chemical resistant properties are essential.



Colour	Product Code	Container Size
Light Grey	SOLCEMEPOXY	12Kg

## SOLCEM - Cementitious Grouts

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### Product Description

Solcem Epoxy Repair Mortar is a high strength, trowel applied, three component epoxy resin-based mortar designed for rapid and permanent repairs to concrete and masonry surfaces. Solcem Epoxy Repair Mortar is a blend of epoxy resin, Polyamine curing agent, graded siliceous aggregates and colour pigments. The mixed material is applied to a suitably prepared and primed surface, and quickly cures to form a durable, abrasion and chemical resistant repair mortar.

### Typical Uses

- Repairs to spalled or damaged concrete
- Chemical bunds
- Bedding pre-cast concrete beams
- Nosings on expansion joints
- Flooring repairs
- General repairs to cementitious substrates where strength and chemical resistant properties are essential.

### Features & Benefits

- Fast curing characteristics
- Impact and abrasion resistant
- Frost resistant and impervious to water
- Excellent mechanical properties
- Unaffected by a wide range of acids and industrial chemicals
- Negligible shrinkage & High bond strength
- Dures under damp, cool conditions

### Application

#### Surface preparation

Remove all laitance, spalled concrete, grease, oil, dust and other contaminants by scabbling or bush hammering, to provide a sound, clean substrate. Any exposed reinforcing steel shall be fully exposed by cutting out around its full circumference, and cleaned by abrading or grit blasting to remove rust, scale etc. Metal substrates shall be degreased and grit blasted to Sa 2.5 Swedish Standard.

#### Priming

Pour the contents of Curing Agent component into the Base container and mix thoroughly by spatula or low speed paddle mixer. Use a small amount of the mixed liquid to prime the area prior to adding the filler component to produce the Solcem Epoxy Repair Mortar.

#### Mixing

Solcem Epoxy Repair Mortar is supplied as a three component pack. Each component is pre-weighed and ready to mix. Pour the contents of the Curing Agent container into the Base container and mix thoroughly by spatula or low speed drill/stirrer. The mixed resins shall be poured into a forced action mixing vessel and the Aggregate added steadily whilst the mixer is in motion. Mix for 2-3 minutes until a uniform material is achieved.

### Placing

Solcem Epoxy Repair Mortar shall be placed whilst the primer is still 'tacky', which is usually between 10 and 90 minutes after primer application. Place the Solcem Epoxy Repair Mortar by tamping and trowelling to ensure good compaction and a tight finish.

The material should not be feather edged. Maximum thickness in horizontal applications is 50 mm.

For vertical applications the material may be built up in layers not exceeding 6 mm. Do not place to wet or uncured concrete surfaces. Do not place at temperatures of 3°C or lower.

### Curing

Solcem Epoxy Repair Mortar will have hardened sufficiently after overnight cure @ 20°C to allow overcoating or full trafficking.

Longer periods of cure will be necessary at lower temperatures. Full mechanical and chemical resistant properties will be achieved following 7 days cure @ 20°C.

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### Coverage

A 12 kg pack yields 6 litres of Solcem Epoxy Repair Mortar, sufficient for approx. 1.08m<sup>2</sup> at 5mm thickness.

### Equipment Cleaning

Clean equipment with Solklens prior to curing of the mortar.

### Packaging

Solcem Epoxy Repair Mortar is supplied in 12 kg packs

### Storage and shelf life

Store in dry conditions at temperature between 10°C and 25°C.

Avoid low temperature storage prior to use of the material.

Do not expose to freezing conditions.

Solcem Epoxy Repair Mortar has a shelf life of 12 months when stored in original, unopened containers in accordance with manufacturer's instruction.

Technical Data	
Form	Grey Powder
Pack Sizes	12Kg
Density	2200kg/m <sup>3</sup>
Compressive Strength	72 MPa
Tensile Strength	12 MPa
Max Service Temp	70°C
Pot Life	50-60 minutes @ 20°C Adhesion to concrete: > 3.9MPa (concrete failure)
Chemical Resistance	Excellent

### Health & Safety

Solcem Epoxy Repair Mortar should be handled carefully and skin contact, exposure to high vapour concentrations and ingestion avoided. Wearing of overalls, gloves and protective eyewear should be considered together with the application of a suitable barrier cream to hands where necessary. Proper regard should be taken to the precautions necessary when storing and handling Solklens. See separate Health and Safety sheet.