

Epoxy resin Based Repair Mortar

A cementitious powder compound blended with an epoxy resin to create a high strength, high chemical resistant, waterproof, low slump repair mortar. Epomast Mortar has been developed to produce a repair mortar that has excellent abrasion resistance and durability, has virtually no shrinkage and offers excellent adhesion to most building surfaces, whether they be on the horizontal, verticals or even inverted.

Typical applications include bedding in of fixing bolts and dowels, bridge bearing pads and repair and resurfacing of stairs.

Advantages

- Pre-packed units – ready to use
- Fast curing characteristics
- Impact and abrasion resistant
- Frost resistant and impervious to water
- Unaffected by a wide range of acids, and industrial chemicals
- Negligible shrinkage
- High bond strength
- Cures under damp, cool conditions

Application

Typical Uses: Repairs to spalled or damaged concrete; chemical bunds; bedding pre-cast concrete beams; nosings on expansion joints; floor repairs. General repairs to cementitious substrates where strength and chemical resistant properties are essential.

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: The prepared concrete surface shall be primed by the application of Epotac, which should be brushed well in. A coat of EPOTAC primer should also be applied to any exposed re-bars.

Mixing: Epomast 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, (Creteangle bucket or similar), and the aggregate added steadily whilst the mixer is in motion. Mix for 2-3 minutes until a uniform material is achieved.

Application: Epomast Mortar shall be applied whilst the EPOTAC primer is still 'tacky', which is usually between 10 and 90 minutes after primer application. Apply Epomast 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 50mm. For vertical applications the material may be built up in layers not exceeding 6mm

Equipment Cleaning: Clean equipment with a suitable resin cleaner such as RESOKLENS prior to curing of the mortar.

Curing: Epomast Mortar will have hardened sufficiently after overnight cure @ 20°C to allow over-coating or full trafficking. Longer periods of cure will be necessary at lower temperatures. Full mechanical and chemical resistant properties will be achieved following 3 days cure @ 20°C.

Typical Properties:

Colour: Light grey (other colours available)

Density: 2200kg/m³

Pot Life: 50-60 minutes @ 20°C

Adhesion to concrete: >3.9MPa (concrete failure)

Compressive Strength: 72N/mm²

Tensile Strength: 12N/mm²

Taber abrasion resistance: 40mg weight loss (CS17 wheels; 1kg loads, 1000 cycles)

Thermal Coefficient of Linear Expansion: 3 x 10⁻⁵ cm/cm °C

Maximum Service Temperature: 65°C continuous

Coverage

Yield For estimating purposes: 2 kilo of EPOMAST MORTAR will cover approximately 1 square metre at 1mm thick. Colour Neutral grey, other colours may be available upon request to the manufacturer.

Storage

EPOMAST MORTAR is flammable. Store in dry conditions at temperatures between 10°C and 25°C. In a well ventilated area. Avoid low temperature storage prior to use of the material. Do not expose to freezing conditions.

Keep containers tightly closed. Keep away from any sources of ignition. Avoid any build-up of electrostatic charge in the immediate area. Ensure that lighting and electrical equipment nearby are not a source of ignition.

Shelf Life

Shelf life is one year if the resin and hardener packs have not been opened.

Specification

Epomast Mortar is manufactured by Adomast Manufacturing Ltd and shall be applied in accordance with the manufacturer's instructions

Health and Safety

Wear gloves and goggles. Wash off splashes immediately with soap and water. Any eye contamination must be rapidly irrigated with copious amounts of water, and immediate medical attention sought.

Please refer to Material Safety Data Sheet for additional information.