



Description

Supa-Mortar EP is a high strength, trowel applied, three component Epoxy resin-based mortar designed for rapid and permanent repairs to concrete and masonry surfaces. Supa-Mortar EP 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.

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.

Advantages

- Pre-packed units – ready to use
- 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
- Cures under damp, cool conditions

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

Chemical resistance: **Excellent resistance to 20%**

hydrochloric acid, 20% sulphuric acid, 10% citric acid, 25% sodium hydroxide, diesel and petrol. **Very good resistance** to 10% lactic acid, 50% phosphoric acid, 10% nitric acid and 5% acetic acid. **Good resistance** to many common industrial chemicals

Packaging

Supa-Mortar EP is supplied in 26kg packs

Procedure

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 Supa Tack primer, which should be brushed well in.

A coat of primer should also be applied to any exposed re-bars.

Mixing

Supa-Mortar EP 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.

Our expertise is fitting all the pieces together

Fender Steel

Head Office
20 Midland Road
Scunthorpe
North Lincolnshire
DN16 1DQ
Tel: 01724 840609
Fax: 01724 281902

BCS Products

Caenby Corner
Industrial Estate
Hemswell Cliff
Nr. Gainsborough
Lincolnshire DN21 5TU
Tel: 01427 668187
Fax: 01427 668012

Fender Steel

Unit 16A
Enterprise Park,
Bergon Way
Sutton Fields Ind. Est.,
Hull HU7 0YG
Tel: 01482 820620
Fax: 01482 820621

Fender Steel

Unit A5
Astra Park
Parkside Lane
Leeds LS11 5SZ
Tel: 0113 270 4555
Fax: 0113 270 4666

Fender Steel

5 Crofton Court
Portrack Lane
Stockton-on-Tees
Cleveland TS18 2QR
Tel: 01642 603123
Fax: 01642 674892

Fender Steel

5a Freezemoor Road
Houghton le Spring
Sunderland
Tyne & Wear DH4 7BH
Tel: 0191 512 6749
Fax: 0191 584 6547

Application

Supa-Mortar EP shall be applied whilst the primer is still 'tacky', which is usually between 10 and 90 minutes after primer application. Apply the Supa-Mortar EP 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 Supa-Cleanse Toolclean prior to curing of the mortar.

Curing

Supa-Mortar EP 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 3 days cure @ 20°C.

Storage and Shelf Life

Store in dry conditions at temperatures between 10°C and 25°C. Avoid low temperature storage prior to use of the material. Do not expose to freezing conditions.

Supa-Mortar EP has a minimum shelf life of 12 months when stored in original, unopened containers in accordance with manufacturer's instructions.

Coverage

A 26kg pack yields 13 litres of Epoxy mortar, sufficient for 2.2m² at 6mm thickness,
Or 1.3m² at 10mm thickness.

Limitations

Do not apply to wet or uncured concrete surfaces.
Do not apply at temperatures of 3°C or less.

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.

Supa-Mortar EP shall be applied strictly in accordance with the manufacturer's instructions.

For specific advice regarding any aspect of this product, please consult our Technical section.

The information provided in this Product Data Sheet is intended for general guidance only and is given in good faith based on Fender BCS Group current knowledge and experience. No warranty in respect of fitness for a purpose, or any other liability whatsoever can be inferred from the information contained within this data sheet. Users should determine the suitability of the materials for their particular application and should always refer to the most recent issue of the Product Data Sheet for the product concerned. All materials are supplied in accordance with our standard terms and conditions of sale (available upon request).

