

## Epoxy Concrete

### Description

Epoxy Concrete is a versatile, trowel applied, three component Epoxy resin-based, deep section screed/mortar.

The product is supplied in a 'natural' colour, but may be sealed or topped with any of the range of Epoxy coatings or screeds as required.

Typical application thicknesses are 10-50mm.

### Typical Uses

As a deep section protective screed for floor areas subject to impact, abrasion and chemical spillage.

As an economical, fast curing in-fill screed/mortar prior to the application of the final floor finish.

As a thick section Epoxy bedding mortar for kerbs, etc.

### Advantages

- \* Ease of application
- \* Fast curing characteristics
- \* Economical
- \* Hard wearing and durable
- \* Taint free
- \* Frost resistant and impervious to water
- \* Negligible shrinkage even in thick section

### Typical Properties

Colour: Natural (other colours available upon request)

Density: 2200Kg/cu.m.

Pot Life: 45 minutes @ 20C

Curing: light foot traffic after 6 hours @ 20C; full trafficking after 10 hours @ 20C

Adhesion to concrete: 3.6MPa (concrete failure)

Compressive Strength: 64MPa

Chemical resistance: excellent resistance to dilute acids and alkalis, oil, petrol, diesel, vegetable oils, inorganic salts, and cleaning fluids.

### PROCEDURE

#### 1. 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.

#### 2. Priming

Apply a coat of Tackprimer by brush or roller at a nominal rate of 3.5 to 7.0 sq.m./kg, depending upon surface profile.

#### 3. Mixing

Epoxy concrete is supplied as a three component pack consisting of the BASE component; the CURING AGENT component; and the AGGREGATE component.

The CURING AGENT and BASE components shall be thoroughly mixed, preferably by mechanical means.

The mixed liquids shall be drained into a forced action mixer e.g. Mixall, Pennine or Creteangle, and the AGGREGATE component gradually added under constant mixing until a uniform colour has been achieved.

#### 4. Application

Epoxy Concrete shall be applied whilst the primer is still 'tacky' i.e. within 2 hours of application.

The material should be tamped and trowelled to ensure good compaction and a tight finish.

Minimum application thickness is 10mm; maximum application thickness is 50mm for large areas.

NOTE: up to 100mm thickness may be applied in small patches.

#### 5. Equipment Cleaning

Clean all equipment, immediately after use, with Toolclean.

#### 6. Curing

Epoxy Concrete will have hardened sufficiently after overnight cure @ 20C 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 @ 20C.

#### 7. Packaging

Epoxy Concrete is supplied in 25kg packs.

#### 8. Coverage

A 25kg pack of Epoxy Concrete yields 11.4 litres of material, sufficient for 1.14 sq.m. @ 10mm thickness.

#### 9. Storage & Shelf Life

Store in dry conditions at temperatures between 10C and 25C and out of direct sunlight.

Epoxy Concrete has a minimum shelf life of 12 months when stored in original, unopened containers in accordance with the manufacturer's instructions.

#### 10. Limitations

Do not apply to wet or uncured concrete surfaces.

Do not apply at temperatures below 3C.

#### 11. Health & Safety

Avoid contact of the material with skin and eyes.

Wear appropriate gloves, overalls and eye protection during use.

Wash off with soap and water if the material comes into contact with the skin.

Any eye contamination must be rapidly irrigated with copious amounts of water, and immediate medical attention sought.

Please refer to the separate Material Safety Data Sheet for additional information.

Epoxy Concrete shall be applied strictly in accordance with the instructions of the manufacturer.