



EpiMax EP Binder

Solvent Free Epoxy Binder System

Description

EpiMax EP Binder Solvent Free Epoxy Binder can be conveniently combined with a variety of suitable dry quartz aggregates to produce high strength epoxy mortars, screeds and concretes for sub-floor preparation, surface profiling and general repair applications.

This system is ideal for applications where high strength development and good ultimate chemical resistance is required within the sub-floor itself.

Sub-floors can be topped with performance epoxy or polyurethane cement floor protection systems. Typically these floors are installed in food production and packaging areas, commercial kitchens, manufacturing and engineering and workshops.

EpiMax EP Binder can also be used as a primer and sealer coat over prepared and suitable surfaces.

EpiMax EP Binder meets the requirements of BS 8204 Part 6 Synthetic Resin Flooring Type 6: Screed Flooring.

EpiMax EP Binder FAST is a fast curing version for rapid return to service or application in cold weather.



Typical properties - Standard version

- Solids content: 100%
- Work time: 20 - 30 Minutes at 25°C
- Set to touch: 4 Hours at 25°C
- Cure time: 24 Hours at 25°C
- Convenient mix ratio (2:1 pbv)
- Self-priming

Typical properties - FAST version

- Solids content: 100%
- Work time: 5 - 10 Minutes at 25°C
- Set to touch: 1 Hour at 25°C
- Cure time: 2 - 3 Hours at 25°C
- Convenient mix ratio (2:1 pbv)
- Self-priming

Estimating data

Select appropriate aggregate mix ratios from the following table:

Flow Characteristics	EpiMax EP Binder/Selected Aggregate Volume Ratio	EpiMax EP Binder litres/m ³	Selected Aggregate litres/m ³
Very fluid	1:2	500	1000
Flowable mortar	1:3	333	1000
Workable mortar	1:4	250	1000

Pre-installation compatibility

EpiMax EP Binder is compatible with previously installed and cured EpiMax 340 WVB Water Based Epoxy Membrane. The application of EpiMax 340 WVB will limit potential water vapour transmission from the underlying concrete slab.



Post-installation compatibility

EpiMax EP Binder is a compatible foundation for subsequent application of a wide range of EpiMax coatings and toppings including:

EpiMax 225 Construction Grade Epoxy Binder
EpiMax 330 Solventless Performance Epoxy Coating
EpiMax 333 High Build Epoxy Coating
EpiMax 333AR High Build Acid Resistant Coating
EpiMax 333WB Performance Water Based Epoxy Coating
EpiMax 350 Epoxy Floor Protection System
EpiMax 350T Textured Epoxy Flooring System
EpiMax 999HB Fast Drying Protective Finish
EpiMax 999WB Concrete Protective Sealer



Surface preparation

Concrete should be at least 28 days old. Ensure it is free of all contaminants, additives, curing agents, oils, pre-existing coatings etc and is also alkaline in nature. Prepare as necessary by professional diamond grinding or captive blast cleaning as applicable to expose firmly held aggregate to CSP 2 Standard. Remove any dust and debris. Allow to dry if wet. Always confirm preparation adequacy.

Limitations

The system should not be applied to surfaces subject to rising damp or having a moisture content higher than 4%. Application temperatures closer than 4°C to the prevailing dew point during the curing process may result in condensation on the uncured surface causing whitening or blooming. This effect may reduce subsequent inter-coat adhesion. In these situations, good adhesion may be obtained by re-profiling the surface.

Typical properties

EP Binder : Selected aggregate (1:4 pbv); 7 days at 25°C

- Tensile strength: 34 MPa
- Compressive strength: 60 MPa
- Flexural strength: >17 MPa
- Concrete bond strength: 2.5 MPa (Concrete fails)

Priming

Prime prepared surfaces at an application rate of 6m²/litre using a short nap roller. Protect all newly primed surfaces and allow to harden fully, but the next stage should be applied within 24 hours of priming. If this time is exceeded, the critical foundation substrates must be re-primed.

Packaging

EpiMax EP Binder is available in 60 litre kits and 600 litre kits (includes Part A, Part B - Aggregate is additional).

EpiMax EP Binder FAST is available in 60 litre kits and 600 litre kits (includes Part A, Part B - Aggregate is additional).

They are pre-packaged in correct proportions for use.

Safety precautions

Read **Safety Data Sheet** before commencing any application. Keep away from children. Avoid contact with skin and avoid breathing vapour. Always provide adequate personal protection (gloves and goggles etc) during use. Always provide adequate ventilation, especially in confined spaces. If poisoning occurs, call Doctor or Poisons Information Centre. Phone 13 11 26. If swallowed, DO NOT induce vomiting. Give plenty of water or milk. If skin contact occurs, quickly remove contaminated clothing and wash affected areas thoroughly with soap and water.