



EmO Guard EP 400

Damp-tolerant, solvent free epoxy resin coating

Uses

As a protective coating for concrete and steel, it is particularly useful where concrete surfaces are damp and cannot be dried out. The cured film is corrosion, chemical and abrasion resistant and is suitable for application to:

- Sewage works
- Marine environments
- Basements
- Tunnels

Advantages

- High build application
- Suitable for use in confined areas
- Can be applied directly to steel and concrete
- Smooth, glossy, easy to clean surface
- Corrosion, chemical and abrasion resistant
- Can be applied to damp surface

Product Description

EmO Guard EP 400 is a two pack, solvent free epoxy resin material. It is supplied in pre-measured quantities ready for site mixing and use. The material cures to provide a smooth, tough and resistant finish. It is available in grey.

Specification

Corrosion, chemical and abrasion resistant lining

The chemical and abrasion resistant coating shall be EmO Guard EP 400, a solvent free epoxy, specifically designed for application to damp surfaces and to provide a tough, impermeable and resistant film.

Design Criteria

EmO Guard EP 400 is designed to be applied in two coats to achieve a minimum total dry film thickness of 400 microns to achieve the correct protective properties; EmO Guard ep 400 must be applied on to the substrate at the coverage rates recommended.

Typical Properties

The values given below are average figures achieved in laboratory tests. Actual values obtained on site may show minor variations from those quoted.

Volume Solids	:	100 %
Pot life	:	@20°C @35°C
	:	30 Min 10 Min
Bond Strength	:	>2.00 N/mm ²

(ASTM D 4541)



Dynamic Crack Bridging		
Capability	:	Passed
Salt spray resistance		
(BS 1881: Pt 4:1988)	:	Passed
Sea water immersion		
Resistance		
(BS 1881: Pt 124:1988)	:	Passed
The fully cured film is		
Resistant to	:	Distilled water
		Sea water
		Raw sewage
		Petrol
		Xylene
		Sat.sodium chloride and 25% sodium hydroxide
Water absorption (ASTM C 642)		
After immersion @ 23 ^o c	:	Nil
After immersion		
And boiling	:	0.1%
Resistance to chloride Ion penetration		
(AASHTO T 259 & 260)	:	Resistant
Resistance to Sulphate ion		
Penetration (AASHTO T 259)	:	Resistant
Resistance to CO2 diffusion	:	Resistant
Resistance to bacterial growth	:	Resistant

Resistance to Fungal growth : Resistant

Technical Support

ELMRR provides a comprehensive technical support service to specifiers, end users and contractors and is able to offer on-site technical assistance.

Instructions for Use

Surface Preparation: Ensure the concrete foundation surface is dimensionally stable and free of dirt, dust, oil, laitance, paint, curing compounds etc. Bolt holes and fixing pockets should be free from any dirt or debris. If possible a roughened surface is preferable to smooth surfaces. Metal surfaces must be free from rust, loose scaling and paint. Shuttering should be covered with polyethylene to ensure a clean release.

Mixing:

The individual components of EmO Guard EP 400 should be thoroughly stirred before the two are mixed together. The entire contents of the hardener container should be poured in to the base container and the two materials mixed thoroughly for at least 3 minutes. The use of heavy duty slow speed drill is desirable.

Equipment care

EmO Guard EP 400 should be removed from tools and equipment with ELMIERE Solvent EP immediately after use. Hardened material can only be removed mechanically.

Application

Number of Coats : 2



Coverage

5 m² /ltr @ 200 microns wft

Supply

EmO Guard EP 400 : 5 Ltr Pack

All surfaces should be treated with two coats of EmO Guard EP 400. The thoroughly mixed material should be applied with a suitable brush, roller or spray equipment.

The first coat must be firmly applied and be well scrubbed in to the surface, ensuring a uniform coating with a wet film thickness not less than 200 microns. The first coat should be allowed to dry for not less than 2 hours and not more than 16 hours at 35^oc.

The second coat should be applied exactly as above again achieving a wet film thickness not less than 200 microns.

Limitations

- Although EmO Guard EP 400 may be applied to damp concrete there must be no standing or running water
- EmO Guard EP 400 is not colour stable when exposed to direct sunlight.
- EmO Guard EP 400 should not be applied over existing coatings.

Health & Safety

Precautions

EmO Guard products does not fall into the hazard classifications of current regulations. However, it should not be swallowed or allowed to come into contact with skin and eyes. Suitable protective gloves and goggles should be worn. Splashes on the skin should

be removed with water. In case of contact with eyes rinse immediately with plenty of water and seek medical advice. If swallowed seek medical attention immediately – do not induce vomiting.

Important note

ELMRR endeavors to ensure that the technical information contained herein is true, accurate and represents our best knowledge and experience. No warranty is given or implied, as ELMRR has no control over the conditions of use and the competence of any labor involved in the application are beyond our control. As all ELMRR technical data sheets are updated on a regular basis it is the customer’s responsibility to check that the product is suitable for the intended application, and that the actual conditions of use are in accordance with those recommended.

FIRE

EmO Guard EP 400	:	Flammable
ELMIERE Solvent EP	:	Flammable
EmO Guard MP Primer	:	Flammable

Manufactured By:

ELMRR CONSTRUCTION CHEMICALS

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