

Fire Guard/EP

Solvent Free Modified Epoxy Intumescent Fireproof Coating

Description	Fire Guard/EP is a high build, solvent free modified epoxy intumescent fireproofing coating for steel, wood, and concrete, it gives protection against domestic fire for 2.5 – 3 hours. It has excellent corrosion performance and mechanical properties. It complies with ASTM E-119, UL-263, UL-1709, BS 476 parts 20, 21, EN 11381-8, ISO 12944-2, ASTM E84 (Class A)	
Where to use	• Nuclear power generating industries • Military industries • Hydrocarbon and chemical processing industries • Construction industries • Petroleum and petrochemical industries • Soft fibrous insulants and encapsulation of asbestos	
Advantages	• Drastic reduction in spread of flame • Waterproof • Chlorides resistant • UV Stable • Effective weatherproof and vapour barrier • It remains highly elastomeric throughout its design life • Available in a range of decorative colours • Easy applied and highly versatile • Chemical resistant	
Properties		
Specific Gravity	1.3 ± 0.1	
Solid Content	100 % by weight	
Pot Life @ 25°C	40 – 60 minutes	
Dry to touch @ 25°C	5 hours	
Dry to recoat @ 25°C	24 hours	
Fully Cure @ 25°C	7 days	
VOC	15 – 20 g/l	
Flash point	100 °C	
Compressive Strength	40 – 45 MPa	ISO 604
Tensile Adhesion	10 MPa	ISO 4624
Tensile Strength	10 MPa	ISO 527-2
Abrasion Resistance	65 mg/1000 R	ISO 5470-1
Fire Rating	High straighten "O" Classification to building regulations Class A	BS. 476 parts 6, 7, 20, 22 ASTM E119 EN 13381-4
Flame spread Index (FSI)	15	ASTM E119 EN 13381-4
Smoke Developed Index (SDI)	100	ASTM E119 EN 13381-4
Flame Spread	Not spread (Localized)	ASTM E119 EN 13381-4
Flame reached 5 ft. mark	Did not reach within 150 minutes	ASTM E119 EN 13381-4

Surface Preparation	• All surfaces should be dry and free from contamination such as oil, grease, loose particles, decayed matter, moss and algae growth • Concrete substrate should, in addition be fully cured, laitance free and free from any traces of mould release, oils and curing compounds • To ensure an unbroken top coating is achieved; surfaces containing below-holes or similar areas such as pitting should first be filled • Abrasive blasting to SA 2 ½ for metal substrates
Application	Cementitious prepared substrates: • should first be primed using Bonding primer at rate of 0.15 – 0.2 Kg/m² • The primer must be allowed to dry for a minimum of 8 hours at 20 °C before applying Fire Guard EP • Under no circumstances should the primer be over coated until the surface is dry For steel surfaces: • Can be primed using either Kemprime M or Kemprime ZRS at rate of 0.13 – 0.15 Kg/m² • The primer should be covered within 8 hours maximum by Fire Guard EP • In case of no possibility to apply Fire Guard EP within 8 hours; it will be more adequate to use Bonding Primer at rate of 0.15 – 0.2 Kg/m² • All the primed substrate should be treated with minimum of two coats of Fire Guard EP • The material should be stirred well before use • The first coat should be applied to all areas by the use of suitable brushes, rollers or airless spray to achieve a uniform coating with a wet film thickness not less than 250 - 300 microns per coat • The first coat should be allowed to dry for not less than 24 hours at 25 °C before continuing • The second coat should be applied exactly as detailed above and again achieving a wet film thickness not less than 250 - 300 microns per coat • Fire Guard EP may be applied to large areas by the use of suitable airless spray equipment • Please Consult Technical office before commencing of work
Theoretical coverage	1.3 Kg/m ² at DFT 1 mm (thickness according to protection required)
Packaging	(A&B) 20 Kg pails
Shelf life & Storage	One year in its sealed packs stored under proper conditions
Health and Safety	• Use goggles-gloves and a breathing mask when applying • Apply forced ventilation in confined spaces • Remove splashes from the skin with a hand cleanser or soap and water • Eye splashes are to be washed with plenty of water
Additional Information	PROKEM provides the construction industry with a comprehensive range of construction chemicals and specialty products answering the queries of modern engineers for trouble free durable structure PROKEM designs tailor made products should there be critical application that requires specific properties rather than our main range for our customer's satisfaction PROKEM reserves the right to change the properties of its products All orders are accepted subject to our current term of sale & delivery Users must always refer to the most recent issue of the local product data sheet for the product concerned, copies of which will be supplied on request PROKEM extends technical services to include after-sales support to assist users in the proper handling of our products