

Fireguard

Waterborne Fire Retardant Coating for Steel and Concrete Structures

Description	Fireguard is a water based coating which forms a tough flexible, chemical resistant membrane with outstanding fire retardant properties, gives protection against domestic fire for 60 – 150 minutes. Suitable for both internal and external applications. It achieves the highest fire ratings of international standards including BS 476 parts 3, 6, 7, 20, 22, EN 11381-4 and ASTM E-119	
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 weather proof and vapour barrier • It remains highly elastomeric throughout its design life • Available in a range of decorative colours • Easy applied and highly versatile • Water based – free from toxic hazards • Chemical resistant	
Properties		
Specific Gravity	1.32	
Solid Content	64 % by weight	
Dry to Touch	3 hours	
Dry to Handle	6 hours	
Fully Cure	5 days	
Tensile Load	20 Kg/cm ² for 1 cm wide strip @ 350 DFT	
Elongation	215 % unreinforced	
Water vapour Permeability	16.8 g/m ² /day @ 350 DFT	BS. 3177
Accelerated Weathering	5000 hours Carbon arc no change	BS. 3900
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 are pitting should first be filled
Application	• All prepared substrate 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 Fireguard • Under no circumstances should the primer be over coated until the surface is dry • All the primed substrate should be treated with two coats of Fireguard • The material should be stirred well before use • The first coat should be applied to all areas by the use of suitable brushes or rollers to achieve a uniform coating with a wet film thickness not less than 350 microns per coat • The first coat should be allowed to dry for not less than 4 hours at 20 °C before continuing • The second coat should be applied exactly as detailed above and again achieving a wet film thickness not less than 350 microns per coat • Fireguard may be applied to large areas by the use of suitable airless spray equipment • Please Consult Technical office before commencing of work
Theoretical coverage	• 1.50 Kg/m ² at DFT 700 microns
Packaging	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