

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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	
Accelerated Weathering	5000 hours Carbon arc no change	
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	
Smoke Developed Index (SDI)	100	
Flame Spread	Not spread (Localized)	
Flame reached 5 ft. mark	Did not reach within 150 minutes	

Surface Preparation	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 Fire Guard • 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 Fire Guard • 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 • Fire Guard may be applied to large areas by the use of suitable airless spray equipment • Please Consult Technical office before commencing of work
Theoretical coverage	<ul style="list-style-type: none"> • 1.50 Kg/m² at DFT 700 microns
Packaging	20 Kg pails
Shelf life & Storage	One year in its sealed packs stored under proper conditions
Health and Safety	<ul style="list-style-type: none"> • 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	<p>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</p> <p>PROKEM designs tailor made products should there be critical application that requires specific properties rather than our main range for our customer's satisfaction</p> <p>PROKEM reserves the right to change the properties of its products</p> <p>All orders are accepted subject to our current term of sale & delivery</p> <p>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</p> <p>PROKEM extends technical services to include after-sales support to assist users in the proper handling of our products</p>