

# Fireguard

Waterborne Fire Retardant Coating for Steel and Concrete Structures

Description	<b>Fireguard</b> 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"><li>• Nuclear power generating industries</li><li>• Military industries</li><li>• Hydrocarbon and chemical processing industries</li><li>• Construction industries</li><li>• Petroleum and petrochemical industries</li><li>• Soft fibrous insulants and encapsulation of asbestos</li></ul>	
Advantages	<ul style="list-style-type: none"><li>• Drastic reduction in spread of flame</li><li>• Waterproof</li><li>• Chlorides resistant</li><li>• UV Stable</li><li>• Effective weather proof and vapour barrier</li><li>• It remains highly elastomeric throughout its design life</li><li>• Available in a range of decorative colours</li><li>• Easy applied and highly versatile</li><li>• Water based – free from toxic hazards</li><li>• Chemical resistant</li></ul>	
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 <sup>2</sup> for 1 cm wide strip @ 350 DFT	
Elongation	215 % unreinforced	
Water vapour Permeability	16.8 g/m <sup>2</sup> /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	<ul style="list-style-type: none"> <li>• All surfaces should be dry and free from contamination such as oil, grease, loose particles, decayed matter, moss and algae growth</li> <li>• Concrete substrate should, in addition be fully cured, laitance free and free from any traces of mould release, oils and curing compounds</li> <li>• To ensure an unbroken top coating is achieved; surfaces containing below-holes or similar areas are pitting should first be filled</li> </ul>
Application	<ul style="list-style-type: none"> <li>• All prepared substrate should first be primed using Bonding primer at rate of 0.15 – 0.2 Kg/m<sup>2</sup></li> <li>• The primer must be allowed to dry for a minimum of 8 hours at 20 °C before applying Fire Guard</li> <li>• Under no circumstances should the primer be over coated until the surface is dry</li> <li>• All the primed substrate should be treated with two coats of Fire Guard</li> <li>• The material should be stirred well before use</li> <li>• 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</li> <li>• The first coat should be allowed to dry for not less than 4 hours at 20 °C before continuing</li> <li>• The second coat should be applied exactly as detailed above and again achieving a wet film thickness not less than 350 microns per coat</li> <li>• Fire Guard may be applied to large areas by the use of suitable airless spray equipment</li> <li>• Please Consult Technical office before commencing of work</li> </ul>
Theoretical coverage	• 1.50 Kg/m <sup>2</sup> 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"> <li>• Use goggles-gloves and a breathing mask when applying</li> <li>• Apply forced ventilation in confined spaces</li> <li>• Remove splashes from the skin with a hand cleanser or soap and water</li> <li>• Eye splashes are to be washed with plenty of water</li> </ul>
Additional Information	<p><b>PROKEM</b> 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><b>PROKEM</b> 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><b>PROKEM</b> reserves the right to change the properties of its products</p> <p>All orders are accepted subject to our current term of sale &amp; 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><b>PROKEM</b> extends technical services to include after-sales support to assist users in the proper handling of our products</p>