

Product Data Sheet
Edition 07.2014
Identification No. HR - 7



FIRE GUARD

Water Based Intumescent Coating

Description

Fire Guard is a water based intumescent coating which forms a tough, flexible, chemical resistant membrane with outstanding fire retardant properties, suitable for internal surfaces and for external applications, it should be finished with a weather resistant top coat such as (DECACOAT W, PROTHANE TC). It achieves the highest fire ratings of international standards including BS 476 parts 4,5,6,7. Upon curing, it is completely waterproof and forms a highly effective defense against aggressive elements such as chlorides, and atmospheric pollution. It presents an effective vapor barrier and is suitable for steel structure, buildings and concrete

Where to use

- Nuclear power generating industries
- Military industries.
- Hydrocarbon and chemical processing industries Petroleum & petrochemical industries.
- Construction industries Soft fibrous insulation & encapsulation of asbestos
- Airports and air craft hangers.

Advantages

- UV Resistance.
- it remains highly elastomeric throughout its design life
- Available in a range of decorative colours
- Drastic reduction in spread of flame
- Easy to apply
- Water based – free from toxic hazards
- Chemical resistant
- Effective weatherproof and vapour barrier.

Properties

Specific gravity	1.35± 0.05
Solid content	75% ± 5%by (wt.)
Application Temp	+5°C 30°C
Water vapour permeability	16.8g/m2/day
Accelerated weathering	5000hrs carbon arc no change

It complies BS-476 part 4,5,6,7 & 21 and EN ISO 1882, 1716, 11925-2 & 9239-1

How to use

Surface preparation:

- All surfaces should be dry and free from contaminants 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 of pitting should first be filled.
- Steel substrates must be abrasive blast cleaned in accordance with Swedish standards Sa2½, Surface profile 50-80 microns.

Mixing

The material should be stirred well before use

Application

- Concrete substrates should first be primed using **BONDING PRIMER** at rate of 150 - 200 gm/m² and steel should first be primed using **KEMPRIM M** at rate of 150 - 200 gm/m².
- The primer must be allowed to dry for a minimum of 24 hours at 20°C before applying FIREGUARD.
- Under no circumstances should the primer be over coated until the surface is dry.
- All primed substrate should be treated with two coats of FIREGUARD
- 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 275 microns per coat
- The first coat should be allowed to dry for hours for recoating and 48 hours to final 24 cure at 20°C before continuing
- The second coat should be applied exactly as detailed above and perpendicular to the first coat and again achieving a wet film thickness not less than 275 microns per coat

Product Data Sheet
Edition 07.2014
Identification No. HR - 7



- FIREGUARD may be applied to large areas by the use of suitable airless spray equipment with a pump ratio (40:1) with a min. pressure of 150 bar and a feeding pipe of 3/8 inch.
- Thinning with water if necessary up to 5%

Cleaning:

Clean brushes and spray equipment with water immediately after use.

Theoretical Coverage:

- 1.2 kgm/m² at D.F.T 600 microns , For fire protection for 60 minutes based on BS 476 Part 21.
- 4.0 kgm/m² at D.F.T 3000 microns , For fire protection for 120 minutes based on BS 476 Part 21.

Packaging:

20 kg pails.

Shelf Life & Storage:

FIREGUARD has a shelf life of 12 months under recommended conditions.

Health and Safety

- * Use gloves when handling dry powder.
- * Do not breathe dust.
- * Use a particle mask.
- * Eye contamination must be washed immediately with clean 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 extends technical services to include after sales support to assist users in a proper handling of our products.