

We Are Here to Serve U.....

TECHNICAL SPECIFICATIONS FORTIFIERSTEEL INTUMESCENT PAINT STRUCTURE STEEL





We Are Here to Serve U.....

Characteristic

Specification

PRODUCT FortifierSteel Intumescent for Structural Steel

HSN CODE 32099020

TYPE Thin Fire-retardant water base intumescent coating paint; Anti

Halogen and asbestos free for metallic surfaces for interior

use.

COLOUR Off white/ special shades can be manufactured

FINISH Mat

CURING Surface Dry 30 min Tack

free drying 24 hrs

Hard dry 4 hrs

Over coating 4 hrs

DRYINGAir-drying paint

APPLICATION Roller or air less spray. Airless spray equipment is

recommended and should match these guidelines:

Tip size 19 – 25

Fan Angle 20° - 40°

Operating Pressure 2500 – 3000 psi

Hose diameter 10 mm (3/8") internal diameter

Hose length Max. 60 mtrs.

NON-VOLATILE MATTER Min 60 % by volume

SCRATCH RATINGNo such scratch as to show the bare surface

FLEXIBILITY AND

No visible damage or detachment of the film

ADHESION AFTER 48

HOURS OF AIR DRYING

WATER/ACID/ALKALI/OIL No Effect in mild applications

WAHSU WORLD LLP



We Are Here to Serve U.....

SHELF LIFE

One year

FIRE RATING ELEMENTS

Four Hours for structural steel

WATER IMMERSION

No effect after immersion for 360 Hours

COVERING

7 Sq. ft. per liter for 2 mm DFT and 15 Sq. ft. per liter

for 1 mm DFT

USE

Suitable on any type of surface. Simply prepare the surface and apply FortifierSteel F R PRIMER solvent base on metal and water base on cement walls. Then apply seven coats of FortifierSteel with four hours' interval between coats. It can be tinted by universal strainers. Then two coats of FortifierSteel F R TOPCOAT for humid areas and for long life. In case of fire, the surface should be repainted.

HOW IT WORKS

It forms foam when temperature reaches 200 degrees Celsius. This foam is heat and fire resistant and almost non-conductive. This keeps the surface away from heat and hence does not allow the surface to receive or conduct the heat in other areas. Also, since this form foam and a charred layer, it does not allow oxygen to reach to the surface over which it is applied. Hence it protects the surface from catching fire.



We Are Here to Serve U.....

FortifierSteel passes the Test Safe's following tests -

- A. Flammability testing of materials and substances, combustion.
- B. Product analysis with heat, toxicity and smoke yield.
- C. Explosive testing of materials, including flammable gasses, dusts, and vapors.
- D. It also passes bench scale flammability test.

FortifierSteel passes the NFPA 703 test for fire retardant Impregnated wood and fire-retardant coatings for building materials.

FortifierSteel passes following tests as per ASTM. -very much within the range of NFPA approval.

Flame spread test as per ASTM E-162: 01

Smoke generation test as per ASTM E-662: 06.

Surface burning test as per ASTM E-84.

Cabinet method fire retardancy test as per ASTM D-1360.

COATING THICKNESS

Number of coats will depend upon type of application. In any case, total dry film thickness of the coating should be 3.5-4.00 mm for Four hours fire rating



We Are Here to Serve U.....

Overcoating Times in Hours

Indication of recoat or top sealing times considering loading areas and application methods are given below:

Hours per application (0.3 mm WFT) – thin coat

Hours per application (0.6 mm

20 °C

30 °C

WFT) – medium coat Hours per

application (1.2 mm WFT) -

thick coat 10°C

RH	Spray	Still	Air	Still	Air Flow	Still	Air Flow Hrs
		Air	Flow	Air	Hrs	Air Hrs	
		Hrs	Hrs	Hrs			
30%	Thin	8	2 ½	4	2	4	1 ½
	Medium	6	3 ½	6	3	5	2 ½
	Thick	12	4 ½	8	4	6	3
50%	Thin	10	3	6	3	5	1 1/2
	Medium	12	4	8	4	6	3
70%	Thick	18	6	12	5	10	3 1/2
	Thin	12	6	10	5	8	3
	Medium	18	9	12	7	10	6
	Thick	24	12	18	9	12	7



We Are Here to Serve U.....

Application of topcoat

Once DFT's have been achieved as specified, FortifierSteel TOPCOAT can be applied. Make sure that FortifierSteel is completely dry before applying topcoat.

Maintenance

Damaged areas should be abraded back to a sound surface. The surface should then be clean and dry before re-applying.

Storage

FortifierSteel should be stored internally between +5 °C and +30 °C. Do not store below +5 °C. At temperatures above 25 °C the shelf life will be reduced. Shelf life normally is 12 months in originally sealed containers.

Note

The technical specification is correct to the best of our knowledge and under test conditions and we do not accept any liability towards misuse and contents of it. Product must be tested for specific use prior to use.