

SafeCoat® TFI

DESCRIPTION

SafeCoat® TFI is a single component latex, intumescent fire retardant coating ideally suited for exposed **interior** structural steel where a 2-1/2 hour fire resistance rating is required. It is ideal for interior steel columns, trusses, beams and other exposed structural members. It limits thermal penetration by expanding to many times the original dry film thickness when exposed to heat. This expanded material forms a char which insulates the substrate against heat, and reduces available oxygen to the surface. It provides a 2-1/2 hour fire rating as tested under **ASTM E-119-08A**, **NFPA 251** "Small Scale Test" and **CAN/ULC4-S101**, "No Load"

USES

- Imparts a 2-1/2 hour fire rating to exposed steel structural members equal or greater in M/D than a 10WF30 Flange Beam
- Provides an aesthetic, thin, decorative finish to comply with architectural designs
- Listed by Guardian Fire Testing Laboratories, Inc, New York, according to the test standards above.
- Guardian is an independent laboratory certified to test and list products under the same accreditation authorities as UL, ULC and Intertek

FEATURES

- **Non-toxic** - contains no asbestos or halogens.
- **Fire-resistant** - It will not burn in liquid or solid state.
- **Forms a char under fire conditions**, preventing the spread of flames, and slowing the penetration of heat through the substrate
- **Excellent adhesion and durability** when applied to metal. (manufacturer-approved anti-corrosive primer required.)
- **Easy to use** but will need to be built up to proper thickness, typically over 4 or 5 applications.



Metal coupons (TFI @ 60 mils DFT) before and after burning. Char insulates structural steel to provide a 2-1/2 hour fire rating per the testing indicated on page 2.

PROPERTIES

Coating Type	Latex	
Finish	Off-white, flat finish	
Color	Standard: Off-white (Can be overcoated to achieve desired colour)	
Specific Gravity	11.77 lbs/US Gallon or 1.41g/mL	
Hardness	D76	
Solids by Weight	69%	
Solids by Volume	57%	
Coating VOC	16.006 g/l	0.1336 lbs/USG
Material VOC	9.335 g/l	0.078 lbs/USG
Density	1.405	
Specific Gravity	1.405	
Dry Time	Touch: 30 min. to 1 hour (varies with temperature and humidity) Recoat: 1 to 2 hours Full cure: 48 hours	
Film Thickness	2-1/2-Hour Rating on 10WF30 Dry: 60 mils DFT/100 mils WFT	
Abrasion Resistance	Index to ASTM D4060: 90 @ 1000 cycles @ 60) mils DFT	
Coverage	16 ft. ² /Gal.	
Flash Point	No Flash	
Storage Limits	Keep from freezing (above 50° F, 10°C recommended)	
Shelf Life	24 months	
Packaging	Available in one, five and fifty-five US gallon quantities	