



## INTUMESCENT FIRE PROTECTION STRUCTURAL STEEL

### SafeCoat® Steel

#### DESCRIPTION

**SafeCoat® Steel** is a single component latex intumescent fire retardant coating ideally suited for exposed **interior** structural steel where a flame spread and 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.

#### USES

- Imparts fire rating to exposed steel structural members.
- Provides an aesthetic, thin, decorative finish to comply with architectural designs

#### FEATURES

- **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. The **PRECIDIUM™ 41-P Waterborne Epoxy Primer** is Quantum's approved anti-corrosive primer. Other approved primers are listed below under surface preparation.
- **Easy to use** but will need to be built up to proper thickness, typically 31-54 mils WFT/20-35 mils DFT per application. (Detailed application is available from the manufacturer.)

#### PROPERTIES

<b>Coating Type</b>	Latex		
<b>Finish</b>	Off-white, flat finish		
<b>Color</b>	Standard: Off-white A suitable top coat may be used to achieve the desired colour, sheen and durability. Contact the distributor or manufacturer.		
<b>Specific Gravity</b>	13.18lbs/US Gallon or 1.58g/mL		
<b>Hardness</b>	D65-75		
<b>Solids by Weight</b>	77%	<b>Solids by Volume</b>	65%
<b>Coating VOC</b>	2.6 g/L		
<b>Bond Strength</b>	660 psi		
<b>Dry Time (Touch):</b>	1-2 hours (varies with mil thickness, Temperature and humidity)		
<b>Flash Point</b>	No Flash		
<b>Storage Limits</b>	Keep from freezing (above 50° F, 10°C recommended)		
<b>Shelf Life</b>	12 months		
<b>Packaging</b>	Available in five-gallon pails. Special order: 55-gallon drums		

#### FLAME SPREAD and FIRE RESISTANCE RATINGS OF LISTED PRODUCT

Test	Rating			
<b>CAN/ULC S-102-18</b>	Flame Spread: <b>Class A (0)</b> Smoke Developed: <b>Class A (25)</b>			
<b>UL 263 (2011)</b> <b>CAN/ULC S-101 (2014)</b> <b>ASTM E119 (2018a)</b>	Fire Resistance ( <b>30-120 minutes</b> ) (Contact manufacturer for mil thickness for your required rating; varies based on time, steel member type and size. Some examples of testing are below.)	<b>Listing Design #: QTS/IF 120-01</b> Intertek: Listing Section(s): ROOF/CEILING, FLOOR/CEILING, BEAM & COLUMN ASSEMBLIES. CSI Code(s): 07 81 00 Applied Fireproofing; 07 00 00 Thermal and Moisture Protection; 07 81 23 Intumescent Fireproofing		
<b>Columns (1-hour Rating)</b>	<b>M/D</b>	<b>WFT (mil)</b>	<b>Coverage</b>	<b>DFT (mil)</b>
W10x30	40.5	136	12 sq. ft./gallon	88
W12x50	53.1	116	14 sq. ft./gallon	75
W14x30	32.8	154	10 sq. ft./gallon	100
HSS 4"x4"x3/8"	20	143	11 sq. ft./gallon	93
HSS 4"x4"x1/4"	13.5	222	7 sq. ft./gallon	144