Quantum Chemical

SafeCoat® Fire Retardant Coatings
Fire Protection Simplified!

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. (Contact the manufacturer or distributor for alternative acceptable anti-corrosive primers).
- **Easy to use** but will need to be built up to proper thickness, typically 20-25 mils per application.

PROPERTIES

Coating Type	Latex
Finish	Off-white, flat finish
Color	Standard: White A suitable top coat may be used to achieve the desired colour, sheen and durability. Contact the distributor or manufacturer.
Specific Gravity	13.18lbs/US Gallon or 1.58g/mL
Hardness	D65-75
Solids by Weight	77%
Solids by Volume	65%
Coating VOC	0
Bond Strength	660 psi
Dry Time (Touch):	1-2 hours (varies with mil thickness, **T**emperature and humidity)
Flash Point	No Flash
Storage Limits	Keep from freezing (above 50° F, 10°C recommended)
Shelf Life	12 months
Packaging	Available in one, five and fifty-five US gallon quantities

FLAME SPREAD and FIRE RESISTANCE RATINGS OF LISTED PRODUCT

Test	Rating	Listing Design Number
CAN/ULC S-102-18	Flame Spread **Class A (0)**	
CAN/ULC S-102-18	Smoke Developed **Class A (25)**	
UL 263 (2011) **CAN/ULC S-101 (2014)** **ASTM E119 (2018a)**	Fire Resistance **30-120 minutes** (Contact the manufacturer for mil thicknesses to achieve your required rating which varies depending on the steel member type and size.)	QTS/IF 120-01 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

APPLICATION INSTRUCTIONS

Surface Preparation:
All surface preparation should be carried out in accordance with good painting practices. Remove all loose, peeling or powdery paint from the surface. All dirt, grease, oil, wax and other foreign material must be removed with a suitable cleaner and allowed to thoroughly dry. Steel must be primed with an approved anti-corrosive primer. If steel is already primed, perform a field adhesion test. If unsuitable, recoat with approved primer.

Application:
For optimal finish, apply **SafeCoat® Steel** using airless spray equipment. Remove both the gun and pump filters prior to spraying. Use a 17-23 thou aperture with a 3-12" fan, depending on the dimensions of the steel member and balancing coverage and overspray considerations.

SafeCoat® Steel is a heavier body paint requiring mechanical/shear mixing for best product viscosity for spraying. Use reliable and consistent pumping equipment to achieve optimal results. Apply each coat uniformly to entire surface to obtain smoothest finish (~20-25 mils per coat to avoid product sag). Apply one coat per day or recoat once prior coat reaches a shore D hardness of 50.

Surface and ambient temperature must be maintained at greater than 50° F (10°C) during application and must remain so for at least 48 hours following the application.

Ensure the proper QC Form is filled out and provided to the site inspector and Quantum Chemical. The form is available from the distributor or the Quantum Chemical website at www.quantumchemical.com.

SafeCoat® Steel is intended for **interior use only**. If the coated substrate will be subject to repeated washing, prolonged high humidity, or high traffic, a suitable top coat is required. More than one additional finishing coat could adversely affect the flame spread rating and smoke developed classification. Consult the product manufacturer or store rep for suitable top coats. A wet film thickness gauge can be used at the start of the application to check that sufficient **SafeCoat® Steel** has been applied.

Clean Up: All application tools can be easily cleaned with water. If product has dried on, use hot soapy water to soften and remove it.

Precautions: SafeCoat® Steel is not "WHMIS" regulated nor is it subject to the "Transportation of Dangerous Goods Act and Regulations". See SDS for detailed precautions. PROTECT FROM FREEZING as freezing will damage the product.

PRODUCT WARRANTY

Recommendations for the use of our products are based on tests carried out at government approved labs. Manufacturer and seller are not responsible for results where the product is used under conditions beyond our control. The purchaser of this product must rely on his own judgement in determining suitability for his purpose, and in applying directions as to handling and use. Quantum makes no warranty, expressed or implied, except that if this product proves on inspection to be defective, Quantum will replace such quantity of the product proven to be defective or refund the purchase price of defective product. Labour costs and other consequential damages are hereby excluded. No representative or purported agent of Quantum has the authority to change this warranty. The information contained herein is subject to change without notice. If in doubt, contact your Quantum Representative for current Technical Data Sheets (TDS).