

# Submittal Data Sheet Structural Steel

Selection & S	pecification Data
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Generic Type	A water-based intumescent coating that consists of a vinyl acetate resin.
Description	A decorative thin-film intumescent coating designed for fire protection of structural steel for interior conditioned and general purpose applications requiring ASTM E119 testing for full scale/load bearing applications.
Features	<ul> <li>Tested to ASTM E119 / UL 263 standards</li> <li>Decorative aesthetic finish - provides a hard, durable, architectural finish. Compatible with most latex/acrylic topcoats</li> <li>Thin film coating - offers an economical solution to alternative fireproofing</li> <li>low VOC, LEED compliant</li> <li>Easy repair - if damaged, product can be patched easily</li> <li>Does not require reinforcing mesh</li> <li>Third party listing certificate</li> </ul>
Color	White
Finish	Smooth
Primer	An alkyd metal or all purpose acrylic primer must be applied to steel before intumescent coating application. *For galvanized surfaces use all purpose acrylic primers ONLY.
Topcoat	For interior conditioned space, topcoating is not required but may be applied for aesthetic purposes.
	Product must be topcoated if there are environmental exposure requirements. Refer to FlameOFF <sup>®</sup> Coatings, Inc. technical support.
	Intumescent coating must be applied to the required DFT and fully cured to a Shore D Hardness of 70 before topcoat is applied.
Thickness Per Coat	Recommended 20-35 Mils WFT *Range: 15-45 Mils WFT. Maximum thickness per coat depends upon applicator experience, substrate, and job site conditions.
Solids Content	By Volume 71%
Theoretical Coverage Rates	1138 sq ft/gallon at 1 mil DFT (105.7 m2 / at 25 microns) 37 sq ft/gallon at 30 mils DFT (3.4 m2 / at 750 microns)
VOC Values	As Supplied 0.06 lbs/gal (7 g/l)

## Testing / Certification / Listing

Listing

This product is ICC-ES Listed and UL Classified. It has been tested at Underwriters Laboratories in accordance with ASTM E119/UL 263 Fire Endurance requirements to meet the Full Scale requirement of IBC/NFPA Building Codes.





\*See ICC Reports Directory ESL 1191

\*See UL Fire Resistance Directory R38327

Contact FlameOFF® Coatings for any additional testing outside listing reports provided above

ASTM E119 2 hours ASTM E84 ASTM D2240

Class A 70 Shore D

Packaging,	Handling & Storage
Shelf Life	12 Months *Shelf life when kept at recommended storage conditions and in original unopened containers.
Shipping Weight	64 lbs per 5 gal pail
Flash Point	N/A
Storage	Store indoors in a dry environment between 40°F and 100°F (7°C and 38°C)
Packaging	5 Gal
	This product is proudly manufactured in the USA

#### Mixing & Thinning DO NOT THIN or alter in any way. Thinning Mixer Use 1/2" electric or air driven drill with a slotted paddle mixer (300 rpm under load) Mixing Product must be mixed using a 1/2" electric air driven drill with a slotted paddle or Jiffy mixer blade. Mix material for a minimum of 5 minutes to achieve the necessary texture required before spraying.

#### Email: info@flameoffcoatings.com

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### Substrates & Surface Preparation

General

All surfaces must be primed and must be clean, dry, and free of oil, grease, loose scale, dirt, dust or other materials that would impair the bonding of the intumescent coating to the substrate.

#### **Application Conditions and Curing Schedule**

Application	Condition	Material	Humidity
Temperature	Minimum	45°F (10°C)	0%
& Humidity	Maximum	100°F (40°C)	85%

Surface Temp. & 50% Relative Humidity	Handle	Recoat (spray)	Recoat (brush)	Topcoat
70 °F (21 °C)	24 Hours	7-8 hours	2-3 hours	48-72 hours

\*Curing times are dependent upon temperature, ventilation, and humidity. Lower temperatures will slow down the curing process, higher temperatures will speed up the curing process. Additional ventilation (add fanmay expedite curing process. For optimum curing, it is recommended to apply coats at 20-45 mils wet per coat. Material is ready to be topcoated when an average Shore D hardness of 70 is achieved.

\*\*See Application Guide for full application details.

# **Application Equipment Guidelines**

General equipment guidelines are given below, and may need to be modified depending on individual jobsite conditions. See Application Guide for full application details. Contact FlameOFF<sup>®</sup> Coatings with any questions.

Airless Spray	Use 1.0 gal. per minute electric airless (minimum) to provide an operating pressure of 3,000 p.s.i. (140 kg/cm2). ** Remove rock catcher from siphon tube.**
Spray Gun	Contractor Gun (with filter removed) or equivalent
Spray Tips Fan Size Hose Length Material Hose	0.021" - 0.025" 4"-10" (depending on section being sprayed) 50' (15 m) maximum 1/2" I.D.

\*\* Listed here are general equipment guidelines for the application of this product. Job site conditions may require modifications to these guidelines to achieve the desired results.\*\*

General	Product may be applied by brush or spray application Do not apply with a roller. Spray application is recommended for the optimum appearance.
Airless Spray	A single coat built up with a number of quick passes allows greater control over quantities, thickness and finish. **Note - In most conditions, it is advantageous to apply two thin coats rather than one thick coat.**
Application	Spray: 20-45 Mils Wet Film Thickness
Rates	Brush: 10 Mils Wet Film Thickness
Wet Film Thickness	Frequent thickness measurements with a wet film gauge are recommended during the application process to ensure uniform thickness.
Dry Film Thickness	Final thickness must be measured using an electronic dry film thickness gauge. For method of thickness determination and tolerances refer to: AWCI Technical Manual 12-B (Standard Practice for the Testing and Inspection of Field Applied Thin Film Intumescent Materials); and International Building Code - IBC 1705.14
Recommended Dry Film Thickness	Required Dry FIIm Thickness is dependent upon the type/size/shape of the steel member. Please refer to FlameOFF <sup>®</sup> Coatings's Steel Coverage Calculator or consult a representative for required DFT.

Cleanup	Flush pump, gun, tips, hoses and mixer with hot water at least once per day.
Safety	Follow all safety precautions on the product Material Safety Data Sheet.
Overspray	All adjacent and finished surfaces shall be protected from damage and overspray.

#### Maintenance

General	If coating becomes damaged, rebuild the required thickness by spray or brush. When dry, smooth and finished, topcoat may be applied. The repair area must follow all surface propertien requirements.
	must follow all surface preparation requirements before reapplying the coating. The coating must be
	built back to the original thickness.

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