



Protective
&
Marine
Coatings



FIRETEX FX5090 WATERBASED INTUMESCENT COATING

B59W5090

WHITE

Revised: January 26, 2024

PRODUCT INFORMATION

PRODUCT DESCRIPTION

FIRETEX FX5090 is a waterbased thin-film intumescent fire protection coating for use on interior and exterior* exposed structural steel substrates. The product is designed to meet the highest performance, aesthetic, and environmental demands of today's commercial construction industry with ratings up to two hours. Its smooth paint-like finish allows architects to design using exposed steel for a decorative and aesthetic final appearance.

- Provides up to 2 hours fire protection
- Single component
- Aesthetic finish
- Impact resistant
- Outstanding application characteristics
- Does not contain TCEP
- UL Classified for exterior use*

**When topcoated with 6 mils (150 microns) dft of Pro Industrial Waterbased Acrolon 100 per the appropriate UL Design*

PRODUCT CHARACTERISTICS

Finish:	Flat
Color:	White
Volume Solids:	69% ± 3% (ASTM-D2697)
Weight Solids:	71%
VOC:	<25g/l VOC, (EPA method 24)

Recommended Thickness:

Required total DFT for a specific fire rating is dependent on steel section and size. Consult Sherwin-Williams Sales Representative for details.

Recommended Spreading Rate per coat:

	Airless Spray	Brush
Wet mils (microns)*	40.0 (1000)	18.0 (450)
Dry mils (microns)**	28.0 (700)	12.0 (300)
~Coverage sq ft/gal (m ² /L)	40 (1.0)	92 (2.3)
Theoretical coverage sq ft/gal (m ² /L) @ 1 mil / 25 microns dft	1104 (27.1)	

*Maximum sag tolerance is 50.0 mils (1250 microns) wet by airless spray.

Drying Schedule:

	@ 41°F/5°C	@ 60°F/15°C	@ 73°F/23°C
*To touch:	12 hours	3 hours	90 minutes
*To recoat:	16 hours	6 hours	4 hours

**Drying time is temperature, humidity, and film thickness dependent.*

Note; No more than 2 coats by airless spray should be applied within any 24 hour period.

Shelf Life:	6 months, unopened Store indoors at 40°F (4.5°C) to 100°F (38°C).
Reducer/Clean Up:	Water
Flash point:	>200°F/93°C

RECOMMENDED USES

- Interior conditioned spaces (ICSs) (no topcoat required)
- Interior General Spaces (IGSs) (with topcoat)
- Exterior environments with 6 mils (150 microns) of a topcoat of Pro Industrial™ Water-Based Acrolon™ 100 Urethane (note - an epoxy seal coat is not required)
- Suitable for use in USDA inspected facilities
- Commercial buildings
 - Warehouses
- Healthcare / Hospitals
 - Airports
- Hotels
 - Atriums
- Educational buildings
 - Iconic structures
- Stadiums
 - Public buildings
- School gymnasiums
 - Convention centers

APPROVALS

- UL 263 listed
- UL Classified - UL CDXA and UL CDYD
- FX5090 has been investigated to the requirements of ANSI/UL 263 and CAN/ULC-S101 for Interior Conditioned Space, Interior General Purpose and Exterior use in Design Nos. D994, N642, Y635 and Y636.
- LEED v4 and v4.1

PERFORMANCE CHARACTERISTICS

Test Name	Test Method	Results
Abrasion Resistance	ASTM D4060	500 cycles 246 mg loss 1000 cycles 470 mg loss
Adhesion	ASTM D4541-09	318 psi
Durometer Hardness	ASTM D2240-05	Shore D - 61
Impact Resistance	ASTM D2794-93	44 in. lbs.
Surface Burning	ASTM E84	Class A Flame Spread - 0 Smoke Developed - 75

APPLICATION EQUIPMENT

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compliant with existing VOC regulations and compatible with the existing environmental and application conditions.

Airless Spray

Nozzle Size:HD .X23- .X25 (depending on application requirements)

Operating Pressure:2800-3000 psi (197-211 kg/cm²)

Airless fluid line hose with 3/8" ID is recommended.

Lengths less than 100' feet of 3/8" ID fluid are recommended with a 10' 1/4 ID whip hose. All pump and gun filters must be removed.

Brush

FIRETEX FX 5090 may be brush applied using a quality feather tipped brush such as the Purdy Nylox Soft. The typical maximum film build is 18 mils with faint brush marks remaining.



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RECOMMENDED PRIMERS

Must be primed with approved primer. Material can not be applied over zinc rich primers or directly to galvanized steel.

Approved Primers:

Kem Kromik Universal Primer
Pro Industrial ProCryl Universal Primer
Kem Bond HS
Recoatable Epoxy Primer
Recoatable Epoxy Primer Low VOC
Steel Spec Universal Primer

Contact your Sherwin-Williams Representative for specific information.

RECOMMENDED TOPCOATS

Must be topcoated with an approved topcoat as per the FIRETEX FX5090 Topcoat Guide. Subsequent maintenance and repaint must also be done with an approved topcoat.

Contact your Sherwin-Williams Representative for specific information.

ADDITIONAL NOTES

The dry time of this material is retarded by high humidity conditions. Lack of air movement also slows down the drying process, and under such conditions it is advisable to introduce some method of circulating air over the coated surface in order to speed up the drying. A ventilated air speed of 6 feet per second is recommended.

CLEAN UP INSTRUCTIONS

Clean spills and spatters immediately with Water. Clean tools immediately after use with Water. Follow manufacturer's safety recommendations when using any solvent.

SAFETY PRECAUTIONS

Refer to the SDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

SURFACE PREPARATION

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

TINTING

DO NOT TINT

APPLICATION CONDITIONS

FIRETEX FX5090 must be applied in a dry internal environment. It must not be exposed to condensation, damp or wet conditions during or after application.

Temperature: 41°F (5°C) minimum*
(air, surface, and material)
At least 5°F (3°C) above dew point
Relative humidity: 80% maximum**

*At application temperatures below 50°F (10°C), drying times will be significantly extended, and spraying characteristics may be impaired. Proper film formation may not occur below 41°F (5°C)

**Relative humidity must be <80% to ensure proper film formation

Extended overcoating times may be required at low temperatures and/or high film thicknesses.

Occasionally cracking may occur on edges of flanges and external or internal angles of structural steel, depending on geometry, over-application and ambient conditions. This does not detrimentally affect the fire performance properties of the product.

ORDERING INFORMATION

Packaging: 5 gallons (18.9L) of material in 5 gallon pail

Weight: 11.6 lb/gal ; 1.39 Kg/L

DISCLAIMER

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Information and Application Bulletin.

WARRANTY

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.