



## **FIREFREE 88®**

*Firefree 88®, a premium quality,  
water-based,  
intumescent fire-resistant coating*

# **APPLICATIONS INSTRUCTIONS**

Firefree 88® (“Ff88”) is a water-based latex fire resistant intumescent coating/paint. Ff88 is FM Approved [www.fmapprovals.com](http://www.fmapprovals.com), ICC Listed/Inspected, classified by the Underwriters Laboratories (UL), and accepted by NY Material and Equipment Acceptance (MEA) Division. Firefree Coatings, Inc. is a member of NFPA, ICC and ASTM.

**Ff88 is designed for interior use. When Ff88 is used for Exterior applications, including to meet the 5’ property line, it must be protected by Firefree Exterior (“FfE”) acrylic topcoat.** There is no substitution of the FfE as this acrylic topcoat has passed the weatherization test (ASTM D2898, method B) over the Firefree intumescent coatings. Any substitution of either Ff88 or FfE would void any warranty express or implied.

While Ff88’s application is similar to applying a regular water-based latex, Ff88 is a specialty coating and it needs to be applied by an experienced, professional painter, in strict compliance with the instructions below (including the thickness recommended by Firefree Coatings). In exterior applications, which always require application of FfE, strict compliance with FfE’s own Application Instructions is also required. **It is the sole responsibility of the customer to choose an experienced, qualified applicator for the Product and ensure that such applicator applies the Product in strict compliance with the Application Instructions and applies the recommended thickness.**

### **SURFACE PREPARATION**

Firefree 88 can be used as a primer on most surfaces. All surfaces to be coated must be clean, cured, firm, dry and free of dust, dirt, oil, wax, grease, mildew, loose flaking paint, efflorescence or any other contamination or condition that would adversely affect the performance of the coating. Etch or prime (with a latex primer or fast dry oil base primer/sealer) glossy, glazed or dense surfaces. Always prime oil-based finish coatings with fast dry primer/sealer. Fill holes and surface irregularities with a suitable patching compound to match surface profile. Spot prime all patched areas with appropriate primer. **Do not commence work until such defects have been corrected.**

- Metal siding surfaces must be primed.
- Concrete and cement board-based surfaces and trim must be primed with a cement type primer compatible with high pH. Contact your local paint store for more information.
- For enamel/finish oil: Test for adhesion. If necessary, apply one (1) coat of a latex primer/sealer before applying Ff88.
- Glossy surfaces: Test for adhesion. If necessary, lightly sand use etching liquid or apply a primer.
- Wall covering application: Apply one (1) coat of wall primer over product before applying Ff88.

### **WEATHER**

Ff88 should only be applied when material, air, and surface temperatures are above 50°F (10°C) or below 95°F (35°C) and will remain within such temperature range for at least 24 hours. Temperatures must remain above 5° above the dew point during application and drying time. Do not expose to rain, fog or any moisture during application and drying time. Application during extreme weather conditions (including winter) is not recommended. Limit exposure to heavy moisture for at least 10 days after application is completed.

### **CURING**

Specialty paints require up to 30 days after final application for full cure and maximum performance. Cure times vary depending on air circulation and environmental conditions.

## **DRYING TIME**

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Drying times depend on several factors, including those below, and can vary from 4 to 48 hours, or longer, for each coat:

- **Temperature.**
- **Air movement.**
- **Humidity.** We do not recommend applying the coating if relative humidity exceeds 75%.
- **Moisture.** Measure the moisture content of surfaces using a moisture meter. Do not apply Ff88 to wood if the moisture content is more than 12%.
- **Thickness of product applied.**
- **Method of application.**

For more information, please contact Firefree Coatings.

## **MULTIPLE COATS**

Make sure that each coat of Ff88 is **thoroughly dry to the touch** before applying the next coat.

## **APPLICATION METHOD**

Ff88 can be applied by airless sprayer, roller, or brush. If you need to strain Ff88 only use a gauze the size used in fly screen doors. DO NOT THIN FIREFREE 88.

Spray-Airless: Capable of a pressure range of 780 to 3300 psi. Tip .015 to .023 heavy duty 4" to 12" (10.16 cm to 30.48 cm) fan width recommended.

Firefree 88 can be stirred with a paint wood-paddle (this is the similar procedure like paint). Apply at can consistency. Use of airless sprayer is recommended (use of a dedicated spray line is required)

Roller: Use a 1-1/4" (20-25mm) nap synthetic cover for heavy application. Other rollers may be used depending on desired finish.

Brush: For brush application, a nylon/fully loaded brush should be used. A laying on technique will reduce the brush marking.

## **COVERAGE/SPREAD RATE**

The recommended dry film thickness will determine the coverage rate. There is no set coverage rate that applies to all assemblies. The coating is made up of about 67% solids and thus, on average, the ratio of wet thickness to dry thickness is 1.5 to 1. Any consideration for quantity and waste or overspray is the sole responsibility of the end user. Waste factor will depend on the method of application (brush, roll or spray), job site conditions and other factors and should be based on the applicator's experience.

## **WET FILM THICKNESS (WFT) and DRY FILM THICKNESS (DFT)**

**The dry film thickness recommended by Firefree needs to be precisely complied with for adequate performance,** thus during application, the wet film thickness should be checked using a wet film thickness gauge. The final DFT needs also to be verified, *see third-party inspection below.*

Thus, always use a wet mil film gauge to measure each wet coat application. Each coat application can be built up to different levels of wet mil thicknesses using multiple passes of coating with an airless spray gun, brush, or roller. To measure the desired film thickness required, during application process, use a wet film thickness gauge to monitor the wet film thickness being applied.



**Read instructions on gauge for proper use.**

### **DFT THIRD PARTY INSPECTION**

In addition to measure WFT per above, as this is a life safety issue, Firefree Coatings (“Firefree”) requires that all surfaces to which the Product was applied be inspected a by third party special inspection agency, or an ICC-ES certified professional, of a Firefree QA/QC qualified inspector to verify that the Product has been properly applied in the required uniform thickness. To obtain a list of inspections agencies, go to [www.psiusa.com](http://www.psiusa.com), or [www.terracon.com](http://www.terracon.com). The hiring of an independent inspector is the responsibility of the contractor or customer.

### **PAINTED SURFACES & PRIMERS**

When painting over existing painted surfaces, check for any reactions between FF88 coating and the existing paint, if any reaction should occur, apply a primer over the existing paint prior to applying FF88. For information on compatible primers, contact Firefree Coatings.

### **COLOR, FINISH AND TOPCOAT OVER Ff88**

Ff88 comes in a white color with a flat finish and is tintable to most colors (not exceeding 8 oz of tint/gal). Contact your local paint store to enquire about universal compatible tint and for assistance with tinting choice and process. In some cases, improper tinting can contribute to surfactant leaching, see below.

For interior use, if a different color or finish is desired, FfA can also be top coated with most premium latex paints to achieve a different color and finish. Contact your local paint store for assistance with choice of a compatible topcoat.

### **SURFACTANT LEACHING**

Occasionally surfactant leaching might happen. It is a common issue in the paint industry (although improper application can make it worse). As your experienced contractor will explain, it will often correct itself over time. For more information, please ask your paint store or contractor, or see an industry overview at <https://www.firefree.com/fire-retardant-fire-resistant-paint-products/downloads.php?m=ff88All>.

### **EXTERIOR APPLICATION**

When Ff88 is used in exterior applications it must be protected by Firefree Exterior (“FfE”) acrylic topcoat. There can be no substitution of FfE as this proprietary acrylic topcoat has passed the weatherization test (ASTM D2898, method B) over the Firefree intumescent coatings. Any substitution of either Ff88 or FfE would void any warranty express or implied.

### **MAINTENANCE**

Surfaces which have been coated with Ff88 should be protected from abuse and abrasion. Damaged surfaces should be repaired and Ff88 should be reapplied to the original specified dry film thickness to maintain specific rating.

**CLEAN UP**

Wash brushes, rollers, spray guns & pumps and other painting tools in COLD clean water promptly after painting. Clean and remove any dried product. Use all products completely or dispose of properly. Local disposal requirements vary; consult your sanitation department or state-designated agency for more information on disposal options.

**SAFETY.** Avoid contact with eyes, skin and clothing. Do not take internally. Use personal protective clothing, including safety glasses to prevent any particles of paint from entering the eyes. Protective gloves are recommended for prolonged contact exposure. Respiratory protection is recommended, but not required; however, make sure plenty of ventilation is allowed. Protective half masks can be used when painting to prevent breathing paint dust or particles from entering the lungs. Wash thoroughly after handling. Close container after each use. Keep out of reach of children.

For additional safety information consult the Safety Data Sheet for this product.

**DISPOSAL**

Never pour leftover coating down any sink or drain. Use up material on the job or seal can and store safely. Do not incinerate. For specific disposal or recycle guidelines, contact your local waste management agency or district. Always attempt to recycle whenever possible.

**STORAGE & TEMPERATURE**

Ff88 cannot be exposed to freezing temperatures. It is important to maintain storage temperatures above the freezing point. Ff88 should be stored at temperatures between 50° F to 85°F (10°c to 29°c).

Expected shelf life: (2) years from the date of manufacture (DOM). Product must be kept at recommended storage conditions and in original unopened containers.

## ABOUT THE COMPANY

Firefree Coatings, Inc. is the leading developer of high-quality fire retardant and fire-resistant intumescent coatings that will help reduce the spread of fire, minimize smoke and toxic gases that would occur during a fire, thus giving occupants extra time to evacuate a building safely and limiting property damages. Our products are tested at third-party accredited International Accreditation Service (IAS) fire testing laboratories, in compliance with low VOC emissions.

Firefree Coatings is strongly committed to human safety and environmental issues and is strongly positioned to meet the increasing demand for fire safety for commercial, industrial, government, residential, and other markets. Firefree Coatings is a member of NFPA, ICC and ASTM E-05 Committee. Firefree and Firefree88 are registered trademarks of Firefree Coatings.

### Firefree Coatings

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