SPEC-DATA



PRODUCT INFORMATION

Description

FIREFREE 88® ("FF88®") is a premium quality water based, nontoxic, thin film intumescent fire retardant, fire resistant product formulated to provide a fire retardant, resistant barrier on a variety of interior substrates, including gypsum board, oriented strand board and other wood products, composite architectural panels, class A polyurethane foam, Icynene® Style Foam, masonry, concrete, thin gauge metals, fiberglass, as well as many other substrates. It is suitable for residential, multifamily, commercial and industrial projects, for both new and reconstruction projects. Color: Standard off-white, but may be custom tinted. FF88® is approved for interior use on certain assemblies only and is not designed for use on structural steel. Please refer to "FIRE SAFETY" below. For **exterior** use: Please contact the company for more information

Composition & Materials

Firefree 88® is a nontoxic; water based latex fire retardant, fire resistant coating.

Colors

Standard off-white. May be custom tinted.

Sheen

Flat.

Limitations

FF88® is not designed for use on structural steel. FF88® is approved for interior use (for exterior use, please contact the company). FIREFREE Coatings, Inc. has tested its FF88® product, as a component, in various fire resistant rated assemblies. Contact manufacturer for more information. FIREFREE Coatings, Inc. recommends that the application be performed by a licensed painter experienced in performing the work on projects of similar scope and scale. FIREFREE Coatings, Inc. will provide proper application instructions to the licensed painter contractor selected by the General Contractor or Owner.

Building Codes

Installation must comply with the requirements of applicable local, state and national building codes.

APPLICATION

Surface Preparation

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 an oil based 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. Metal surfaces must be free of rust.

Application Conditions & Procedures

Do not apply if temperature is below 50°F. All surfaces to which FF88® have been applied should be inspected by a third party special inspection agency, or an ICC certified professional, or a Firefree Coatings QA/QC qualified inspector to verify that FF88® has been properly applied in the required uniform thickness.

Do not thin or strain FF88®. Apply at can consistency. Use of airless sprayer is recommended (use of a dedicated spray line is required), but FF88® may be applied by brush or roller. For brush application, a fully loaded brush should be used. A laying on technique will reduce the brush marking. A short nap roller can be used but this may result in a slight textured finish.

Enamel finish coats: Apply one (1) coat of a latex primer or fast dry oil base primer/sealer over FF88® before applying a latex enamel or oil base enamel finish coat. Wall covering applications: Apply one (1) coat of wall primer over product before applying wall covering. FF88 ® has a flat finish but may be top coated with most paints to achieve the desired texture and finish. For information on approved compatible primers and finish paints, contact manufacturer. Apply additional finish coats only after previously applied coats are thoroughly dry. Precautions: Do not apply any materials that have been frozen or have come into contact with contaminants prior to use.



Spread Rate

Application at a rate of 14 mils wet, 10 mils dry has a theoretical spread rate of 114 sq.ft/gal per 1 coat. Confirm wet film thickness with a wet film thickness gauge. 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 applicators experience.

Thickness

During application, the wet film thickness should be checked using a wet film thickness gauge. To use the gauge, insert the teeth into the wet basecoat. The last tooth to be coated indicates the thickness achieved. It is important to ensure that the wet film applied is of sufficient thickness to give the required dry film thickness. During the drying process, FIREFREE 88® will shrink due to evaporation.

All surfaces to which FF88® have been applied should be inspected by a third party special inspection agency, or an ICC certified professional, or a Firefree Coatings QA/QC qualified inspector to verify that FF88® has been properly applied in the required uniform thickness.

If an independent testing agency is retained, it should ensure that preparation of substrate is in accordance with manufacturer's recommendations. It should randomly obtain and test samples during application to verify that wet film thickness of the intumescent coating complies with manufacturer's requirements.

Dry Film Thickness

The final dry film thickness of the Firefree 88® will vary according to specific construction assemblies. The dry film thickness required will depend on the specific fire rating and substrates to be protected. Please contact Firefree Coatings Technical Service to assist in determining the appropriate dry film thickness of the coating.

Drying

<u>Dry time</u> is when the surface is thoroughly dry to the touch. Drying times are dependent upon a number of factors: Temperature - Air movement - Humidity - Thickness of product - Method of application. If unsure, please contact manufacturer.

If multiple coats of FF88® are required; FF88® must be thoroughly dry to the touch prior to the application of additional coats. **The final dry film thickness required will vary according to specific assemblies**. Please contact FIREFREE Coatings for more information.

Recommended Equipment

Pump: Graco 5900 HD (gas) or Graco Mark V

(electric) or larger

Tip Size: Graco HDRAC (523 or larger) Spray Gun: Graco Blue Gun (241-705)

Hose: Use min of 3/8" airless spray line as first 50'

from pump.

Packaging

5 gallon bucket, weight per bucket is 60 lbs.

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 recommended temperatures between 40° to 85°. Expected shelf life is one (1) year from the date of purchase. Product must be kept at recommended storage conditions and in original unopened containers.

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.

Cleanup & Safety

Wash brushes, rollers, spray guns & pumps and other painting tools in COLD clean water promptly after painting. Clean and remove any dried product with the use of Goof Off. 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.

Use only with adequate ventilation. Do not breathe spray mist or sanding dust. Avoid contact with eyes and prolonged or repeated contact with skin. Wear eye protection and or gloves during application or sanding. A dust/particulate respirator approved by NIOSH should be worn when sanding or spraying. Close container after each use. First Aid: If you experience difficulty breathing, leave the area to obtain fresh air. In Case of Spill: Absorb with inert material and dispose of as specified under "CLEANUP".

Technical Services

A staff of factory personnel offers design assistance and technical support. For technical assistance, contact Firefree Coatings, Inc.

To the best of our knowledge, the technical data contained herein is true and accurate on the date of publication and is subject to change without prior notice. FIREFREE 88® and Ff88® are registered trademarks of FIREFREE Coatings, Inc. September 2009 Replaces March 2008.



WARRANTY

Warranty

FIREFREE Coatings, Inc. (FIREFREE) provides the following limited warranty:

For a period of ten (10) years FF88® will not crack, peel, or chip if properly applied to a properly prepared and approved surface and if properly maintained under normal interior conditions and not exposed to external weathering.

If FF88® fails to meet the terms set forth above, FIREFREE will provide, at no charge, a quantity of FF88® sufficient to repaint the surface affected. **This is the exclusive remedy for all warranty claims.** In the event of a warranty claim, the claimant must notify FIREFREE in writing of the defect promptly following discovery and must submit proof of purchase, including the date of purchase, and proof of the defect, including the date of discovery. FIREFREE reserves the right to inspect any painted surface to which the warranty claim applies.

This warranty will be void if the surface is (a) treated by any abrasive process or material (other than normal sanding before application of FF88®), (b) exposed to any biological solvent or caustic chemical or agent, (c) altered or repaired, (d) exposed to exterior weathering. The warranty will also be void if; (i) FF88® is diluted or adulterated, (ii) mixed with any other product, (iii) is not stored, applied, in the required uniform thickness, and inspected in accordance with the manufacturer's recommendations, instructions, and specifications, or (iv) if used after one (1) year from the date of purchase.

All surfaces to which FF88® have been applied should be inspected by a third party special inspection agency, or an ICC certified professional, or a Firefree Coatings QA/QC qualified inspector to verify that FF88® has been properly applied in the required uniform thickness.

This warranty is made in lieu of any and all other warranties. The manufacturer expressly disclaims any and all warranties, express or implied, of merchantability or fitness for any particular use. For further information, please call 1-888-990-FF88. Refer to Material Safety Data Sheet (MSDS) for further safety and handling information.

FIRE SAFETY

Fire Safety

For various reasons, including (i) the very different circumstances that may exist from one fire to another, (ii) the differences between conditions in an actual fire and laboratory conditions in which testing is conducted, and (iii) the inherent variability of fire tests, passing a laboratory test or certifying/labeling Firefree 88® ("FF88®") for use in specific assemblies/systems does not mean that the same application of FF88® will necessarily provide an equivalent protection or the same result in an actual fire or in a new laboratory test. Furthermore, FF88® is to be used only as component of complete fire retardation systems. It will only contribute to slowing fire spread for the area where it has been applied and will not, by itself, prevent a fire from starting or continuing. The amount by which FF88® retards a particular fire will depend, among other things, on (i) the amount of FF88® applied, (ii) the conditions of the other elements of the assembly incorporating FF88®, and (iii) the conditions of the actual fire itself. FF88® will not make a fire any less dangerous to persons or property. FIREFREE cannot guarantee that loss or injury will not be suffered by persons or property. It is the sole responsibility of the applicator to ensure that FF88® has been applied in accordance with the application directions. It is the responsibility of the occupier to ensure the paint is not cracked, chipped or peeling.

About the Company

FIREFREE Coatings, Inc is a private company based in California. FF88® has been tested and listed by Factory Mutual, a division of FM Global, tested at third party IAS certified fire testing laboratories.

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