

TECHNICAL DATA SHEET



FIREFREE 88®

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

PRODUCT INFORMATION

Firefree 88® (“Ff88”) is a premium intumescent fire resistant coating tested to comply with fire ratings performance prescribed under the International Building Code (IBC). These standards involve (i) fire resistant testing which measures a product’s ability to prevent fire penetration over a period of time, such as ASTM E 119, FM 4975, ASTM E 662-97, ASTM E 3675-98, ASTM E 162-98, ASTM E 1354-94, ASTM E 814, BS 476, AS 1530.3 AS 1530.4. EN 13501-1, and (ii) fire retardant testing such as ASTM E 84 and Room Corner Test standards including UBC 8-2, NFPA 286, UBC 26-3, measuring a product’s ability to limit flashover.

Firefree 88 is listed and labeled by FM Approvals, a division of FM Global, listed and inspected by the International Code Council (“ICC”) classified by Underwriters Laboratories (U/L), and accepted by NY Material and Equipment Acceptance Division (MEA).

RECOMMENDED USES

Use on properly prepared uncoated, primed or previously painted surfaces. Ff88 can be applied to numerous materials, including wood, gypsum board (sheetrock, plasterboard), lathe and plaster, concrete, masonry, embossed/pressed metal tin, thin gauge metal, galvanized steel and aluminum, fiberglass, carbon fiber, plastics and other composite materials for 1 and 2 hour ratings. Can be used on spray polyurethane foam to achieve a 15 minute barrier.

As a result of its' superior fire resistant performance, Firefree 88® can provide significant material and labor cost reductions, resulting in significant savings when compared to other construction options in situations such as construction, both new, retrofit and defective, (residential, commercial, industrial and government), insulation and transportation. Recommended for historic properties, schools, health care (hospitals, assisted living), apartments, condominium, high-rises, hotels, stores, restaurants, oil and solar facilities, government facilities, military applications and facilities, transportation (aerospace, aviation, light rail, maritime, energy).

Ff88 is a water based coating designed for interior use. However Ff88 can be used in some exterior applications if covered by the FfE Exterior Topcoat in strict compliance with Firefree’s specifications (contact Firefree for more information).

Ff88 comes in a white, flat finish. If a different color or finish is desired, Ff88 can be top coated with most premium paints to achieve the desired color and finish. For large orders (>200 gallons) Ff88 can be tinted by Firefree. Please contact Firefree for such custom tinted orders.

KEY FEATURES

- Cost efficient
- High performance
- Eco-friendly
- Fully tested and certified
- Easy to use and apply
- Usable on multiple substrates/assemblies

TESTING LABORATORIES

Firefree coatings are tested to accredited IAS www.iasonline.org third party fire testing laboratories.

CERTIFICATIONS & COMPLIANCE

Qualifies for LEED v4 Credit	CDPH/EHLB Standard Method v1.2, 2017 Emissions	Meets VOC regulations (OTC, SCAQMD CARB)	Master Painters Institute® (MPI) Green Performance® GPS1/GPS2
YES	YES	YES	YES

- Firefree coatings may contribute up to five LEED points
- Tested by Independent ISO/IEC 17025 Accredited Laboratory
- MEA # 320-99 City of New York
- UL # R14654 Classified on OSB, Douglas fir
- FM Approved, per FM 4975
- ICC listed, ESR4271
- Class O, per BS 476 Part 6 & 7
- Class 1-S, per NZBC Verification Method

PRODUCT SPECIFICATIONS

Type: Liquid **Color:** White

Finish/Sheen: Flat 1.9-2.2 @60 .5-1@85

VOC: (test method ASTM D3960) <36 g/L

%Volume Solids: 67%

Viscosity (test method ASTM D-562): 115 @ 77°F(25°C) kU

Specific Gravity/Density, g/ml: (test method ASTM D1475) 1.272± 0.05

Divisions: 099643 Fire retardant coatings, 099600 High performance coatings

Thinning: Not Recommended

Packaging: 5 gallon pails (60 lbs)

Shelf-Life: 2 years (unopened)

APPLICATION

Ff88 is a water-based latex paint and its application is similar to applying a regular water-based latex paint (except for the recommended thickness which needs to be precisely complied with for adequate performance). Ff88 can be brushed, rolled or sprayed using an airless spray gun. Additionally because of its high percentage of solids, it will have an excellent spread rate and coverage. See attached separate Application Instructions.

TECHNICAL SERVICES

Many building assemblies require an hourly fire resistant rating that is tested and rated in accordance to ASTM E-119 standard. If your project requires a fire resistant rating, please contact our Technical Department for advice before applying Firefree 88®. A technical service representative will assist you in evaluating the appropriate dry film thickness of the coating,

call 888-990-3388 (U.S.) or +1 415-459-6488 (outside U.S.). **Building Codes:** Installation must comply with the requirements of applicable local, state and national building codes.

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 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 a component of complete fire retardation systems for the whole structure. 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.

LIMITED WARRANTY

Firefree Coatings, Inc. ("Firefree") provides the following limited warranty for Firefree 88 Topcoat ("Ff88" or "Product"). Please read the warranty below carefully as it contains important information from the manufacturer.

For a period of ten (10) years from purchase, Ff88 will not crack, peel, or chip if properly applied to a properly prepared and approved surface and if properly maintained. 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. This warranty specifically excludes labor or costs of labor or incidental or consequential damages associated with the use of this product.**

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, proof that the recommended thickness was applied, 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 the Product), (b) exposed to any biological solvent or caustic chemical or agent, (c) altered or repaired, or (d) exposed to exterior weathering unless, and only if, it is covered by the Ff Exterior Topcoat in strict compliance with Firefree's specifications. The warranty will also be void if the Product is; (i) diluted or adulterated, (ii) mixed with any other product, (iii) not stored per Firefree's instructions, (iv) not applied in the required uniform thickness per Firefree's specifications, (v) not inspected in accordance with Firefree's instructions, or (vi) used after two (2) years from the date of purchase.

The manufacturer expressly disclaims any and all warranties, express or implied, of merchantability or fitness for any particular use. For further information, please call 888-990-3388/ 415-459-6488. Refer to Safety Data Sheet (SDS) for further safety and handling information.

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 destruction of property. Our products are tested at third-party accredited International Accreditation Service (IAS) testing laboratories.

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

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