PRODUCT INFORMATION

Ff Exterior Topcoat ("FfE") is a premium, 100% acrylic, exterior paint to be used exclusively over surfaces previously coated with Firefree Class A ("FfA") or Firefree 88 ("Ff88"), to improve the durability of such products if used in exterior applications in strict compliance with Firefree Coatings ("Firefree")’s recommendations.

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

FfE is a required component of the Firefree Exterior System, which system is designed to provide fire retardant benefits, per ASTM E-84 30 Minute Extended, in exterior applications (walls, sidings, eaves, soffits), thus improving fire retardation for structures exposed to wildfires and bushfires.

The Firefree Exterior System has two components:
- Firefree Class A, applied at 20 mils dry to provide the fire retardant abilities, and
- Ff Exterior Topcoat to be applied at 6 mils dry over FfA to protect the fire retardant properties of FfA from exterior weathering. FfE on its own does not have any fire retardant properties.

KEY FEATURES

- High quality acrylic resin
- Easy to use and apply
- Environmentally friendly
- Great adhesion and color retention
- Excellent early moisture resistance and UV resistance
- Washable, resists dirt pick-up
- Low temperature application to 40F (4C)

CERTIFICATIONS & COMPLIANCE

<table>
<thead>
<tr>
<th>COMPLIES WITH BELOW AS OF</th>
<th>04/24/2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCAQMD</td>
<td>YES</td>
</tr>
<tr>
<td>LEED V3</td>
<td>YES</td>
</tr>
<tr>
<td>CARB</td>
<td>YES</td>
</tr>
<tr>
<td>MPI GPS-1</td>
<td>YES</td>
</tr>
<tr>
<td>GS-11</td>
<td>YES</td>
</tr>
<tr>
<td>MPI GPS-2</td>
<td>YES</td>
</tr>
<tr>
<td>AIM</td>
<td>YES &lt;50 g/L</td>
</tr>
</tbody>
</table>

PRODUCT CHARACTERISTICS

<table>
<thead>
<tr>
<th>Resin Type</th>
<th>100% Acrylic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>White</td>
</tr>
<tr>
<td>Finish</td>
<td>20-30 @ 60° Satin</td>
</tr>
<tr>
<td>Coverage</td>
<td>229 sq.ft/gal (5.62 m²/L) at 6 mils wet / 3 mils dry per coat</td>
</tr>
<tr>
<td># of Coats</td>
<td>2 coats, total 6 mils dry</td>
</tr>
<tr>
<td>Drying Time</td>
<td>To touch: 30 minutes (70°F &amp; 50% R.H) To recoat: 4 hours</td>
</tr>
<tr>
<td>Drying times listed above may vary depending on temperature, humidity and natural conditions.</td>
<td></td>
</tr>
<tr>
<td>Weight per Gallon</td>
<td>10.69 lbs</td>
</tr>
<tr>
<td>Solids by Weight</td>
<td>55%</td>
</tr>
<tr>
<td>Solids by Volume</td>
<td>42.9%</td>
</tr>
<tr>
<td>VOC</td>
<td>&lt;50 g/L</td>
</tr>
</tbody>
</table>

PRODUCT SPECIFICATIONS

FfE Exterior Topcoat

- Coating thickness: (2) coats @ 3 mils dry each; total 6 mils dry. Net coverage rate with the two coats specified: 110 sq.ft/gal (2.70 m²/L).

FfE must be used over the Firefree® line of intumescent coatings to provide durability on exterior-weather conditions. The Firefree intumescent coatings (FfA or Ff88) must be applied to the recommended uniform dry film thickness specified by Firefree Coatings in order to meet the specified levels of fire protection.

APPLICATION INSTRUCTIONS

FfE is a premium, 100% acrylic exterior paint and its application is similar to applying any acrylic exterior paint (except for the recommended thickness that needs to be precisely complied with for use in the Firefree Exterior System, see Thickness/Coverage next page).

Surface Preparation.

FfE is designed to be applied on top of Firefree Class A or Firefree 88. The underlying coat of FfA or Ff88 must be thoroughly dry before FfE is applied (see FfA or Ff88 Application Instructions as applicable). All surfaces must be covered with FfA or Ff88. Such FfA or Ff88 covered surface must be dry and clean before FfE is applied.
**Temperature.**
Do not apply FfE if air or surface temperature is below 40 F (4C).

**Thinning.**
Avoid thinning FfE. If thinning is necessary to maintain workability, do not exceed half of pint of water per gallon.

**Application Equipment**
FfE can be applied by airless sprayer, roller or brush. Spraying and backrolling is recommended on new flat work. Stir thoroughly before and during use. Maintain a wet edge to avoid lap marks.

**Spray (Airless):** capable of a pressure range of 780 to 3300 psi. Use .017” (0.04 cm) - .021 (0.05 cm) Tip Size; heavy duty 4” to 12 “(10.16 cm to 30.48 cm) fan width recommended.

**Roller:** use 3/8” - 3/4” (9.53 - 19.05 mm) nap synthetic cover for heavy application. Other rollers may be used depending on desired finish.

**Brush:** use a Nylon/Polyester Brush. A laying on technique will reduce the brush marking.

**Thickness/Coverage.**
The recommended thickness for FfE to be used over FfA to comply with the requirements of the Firefree Exterior System is 6 mils dry (12 mils wet), which can be applied in two coats. During the drying process, FfE will shrink due to evaporation of water. At such 6 mils dry thickness, the net coverage rate is 110 sq.ft per gallon (2.70 m²/l).

The dry film thickness recommended by Firefree needs to be precisely complied with for adequate performance. As a result, 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.

**Drying Time.**
Drying time is when the surface is thoroughly dry to the touch. The first coat of FfE must be thoroughly dry to the touch before the next coat is applied. The recommended time for drying is 4 hours. Drying times are dependent upon a number of factors, including Temperature, Air Movement, Humidity and Method of Application.

**Color and Finish, Use of a Topcoat over FfE**
FfE comes in a white, sattin finish. If a different color or finish is desired, FfE can be top coated with most premium top coats to achieve the desired color and finish. For large orders (>200 gallons) FfE can be tinted by Firefree.

Please contact Firefree for such custom tinted orders. Check for any reactions between FfE and such Topcoats.

**Surfactant Leaching**
This can occur with any exterior latex house paint when water solubilike components are extracted and redeposited in concentration on the surface. The likelihood and severity of this deposition depends on the paint formulation and the conditions under which the paint is applied and dried. This will generally weather off in a month. Please refer to separate memo on Surfactant Leaching for more information (www.firefree.com).

**Maintenance**
Surfaces which have been coated with FfE should be protected from abuse and abrasion. Damaged surfaces should be repaired and new FfE should be applied to the original recommended dry film thickness.

**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 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 and Temperature.**
FfE cannot be exposed to freezing temperatures or exposed continuously to direct sunlight. FfE needs to be stored at temperatures between 50F and 85F (10C to 29C). Expected shelf life is two years from date of manufacture (DOM). Product must be kept in storage temperature conditions and in original unopened containers.
LIMITED WARRANTY
Firefree Coatings, Inc. ("Firefree") provides the following limited warranty for FF Exterior Topcoat ("FfE" or "Product"):
For a period of ten (10) years from purchase FfE will not crack, peel, or chip if properly applied to a properly prepared and approved surface previously coated with Firefree Products, and properly maintained. If FfE fails to meet the terms set forth above, Firefree will provide, at no charge, a quantity of FfE 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, (b) exposed to any biological solvent or caustic chemical or agent, or (c) altered or repaired. 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, or (v) if 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.

Main Office: 580 Irwin Street, Suite 1
San Rafael, CA 94901 USA
Toll Free: 888-990-3388, (+1) 415-459-6488
info@firefree.com www.firefree.com

This information is provided “as is” by Firefree® Coatings, Inc. and no representation or expressed or implied warranties or merchantability, fitness for a particular use or of any other nature are made with respect to this information or to any product referred to in this written information. Adding color may increase the VOC limits. For SDS or to consult with a Firefree® Certified Coating Professional call 888-990-3388. 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® is a registered trademark of FIREFREE Coatings, Inc. © 2018 Firefree