



ForceField® FireGuard Z-1 Tie-Coat

Application Conditions

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| Generic Type | Water-based coating designed to be used as an intermediary sealant between FireGuard E-84® Intumescent Coating and an approved top coat in interior and exterior applications. |
| Description | FireGuard Z-1 Tie-Coat is specifically designed to seal in FireGuard E-84® Intumescent Coating when the option of a top coating the intumescent material is desired, i.e. to match the interior aesthetics of the structure, or warranted, i.e. exterior applications. |
| Features | <ul style="list-style-type: none">- Smooth Finish- Light Gray Tint- Improved weather resistance- Allows for easy top coating to achieve final desired color- Topcoat finishes smooth- Low VOC content |
| Color | Light Gray |
| Finish | Smooth, Gloss |
| Primers | FireGuard E-84® Intumescent Coating to be applied at the appropriate dry film thickness, and allowed to cure for 24 hours or until completely dry before the application of a compatible top coat. |
| Topcoats | For interior conditioned space a topcoat is optional. For exterior applications the material must be top coated with an impermeable exterior coating. The choice of topcoat will depend on project requirements. FireGuard Z-1 Tie Coat must be allowed to cure for 4-5 days prior to the application of a topcoat. Application must be protected from the elements until topcoat is in place. |
| Wet Film Thickness | Up to 3-5 mils per coat |
| Dry Film Thickness | Up to 1.5 - 2 mils per coat |
| Solids Content | By volume 56% |
| Coverage rate | 300 SQFT / GAL – 400 SQFT / GAL Allow for loss in mixing and application. |
| VOC Content | 25 g/l |
| Limitations | Not for use on exterior environments or for interior steelwork that will be exposed to freeze/thaw cycling or long-term surface temperatures over 140°F (60°C) in normal use without the use of a suitable topcoat. |

Substrates & Surface Preparation

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| General | Prior to application of FireGuard® Z-1 the FireGuard E-84® Intumescent Coating must be fully dry and free of any loose particles that may interfere with the bond of ForceField® FireGuard® Z-1 Tie Coat. |
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Mixing & Thinning

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| Mixer | Use ½” electric or air driven drill with a slotted paddle mixer (300rpm under load). |
| Mixing | Fireguard® Z-1 must be mixed using a ½” electric or air driven drill with a slotted paddle or jiffy mixer blade. Mix material for a minimum of 5 minutes to achieve the necessary texture required before spraying. <u>Do not shake or aerate</u> . Please note that paint skinning may form due to storage conditions, before mixing remove skinned material and mix following the instructions above. |
| Thinning | Do not thin. |
| Tinting | Do not tint. |

Application Procedures

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| Airless Spray (Recommended) | A single coat, built up with a number of quick passes, allows greater control over quantities, thickness, finish, and help achieves complete coverage. |
| Brushed or Rolled | Generally creates a 3 to 5 mil wet application. Multiple coats may be required to meet specifications to the job requirements. Allow each coat to completely dry to touch before applying next coat. |

Application Procedures

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| Application Rates | At an ambient temperature of 70°F (21°C), the following application rates are applicable: Up to 5 mil wet per coat depending on application method (roll, brush, and spray). |
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Application Equipment Guidelines

Listed below are general equipment guidelines for the application of this product when spray applied.

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| Airless Spray | Airlessco LP540 or equivalent |
| Spray Gun | Standard airless spray gun |
| Spray Tips | 0.017” |
| Fan Size | 4”-10” (depending on section being sprayed) |
| Hose Length | 150’ (45m) |
| Material Hose | 3/8” (9.25mm) I.D. minimum |
| Whip Hose | ¼” (6.35 mm) I.D minimum (optional) |

Application Conditions

| Condition | Material | Surface | Ambient | Humidity |
|-----------|--------------|--------------|--------------|----------|
| Minimum | 70°F (21°C) | 50°F (10°C) | 50°F (10°C) | 0% |
| Maximum | 100°F (38°C) | 125°F (52°C) | 110°F (43°C) | 85% |

*Surface temperature should be a minimum of 5°F (3°C) above the dew point. Fireguard must be protected from exposure to weather. Protect from freezing.

Curing Schedule

| Surface Temp. & 50 % Relative Humidity | Dry to Touch | Dry to Recoat |
|---|--------------|---------------|
| 77°F (25°C) | 5-10 Minutes | 4 Hours |

Cleanup & Safety

- Cleanup** Pump, Gun, Tips, Hoses, and Mixers should be cleaned once per day with clean water.
- Safety** It is recommended protective equipment should be worn when applying Fireguard® Z-1 Tie-Coat, including spray suits, eye protection, gloves, and respirators. Refer to Fireguard® Z-1 Safety Data Sheet.
- Ventilation** Ventilation should not be less than 4 complete air exchanges per hour until the material is dry.
- *Material dries quickly do not leave unused material in equipment for an extended period of time.

Maintenance

- General** If coating becomes damaged, rebuild required thickness by spray or brush. When dry finish with topcoat to match. Damaged areas must be abraded back to a firm edge by sanding or scraping. The topcoat should be abraded back 1" (25.4 mm) from the damaged area, and rebuild the FireGuard E-84® Intumescent Coating to the required film thickness the surface must be clean and dry before applying Fireguard® Z-1.

Storage, Packaging & Handling

- Shelf Life** 1 year from production date
*Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in unopened original container.
- Shipping Weight** approximately 9 lbs. per gallon (1.44 kg/l)
- Storage** Store indoors in a dry environment between 33°F-100°F (1°C - 38°C). Protect from freezing.

Packaging



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