

# FireGuard E-84® Intumescent Coating

## Quick Reference Application Guide

### **CAUTION**

IT IS STRONGLY SUGGESTED THAT APPROVAL FOR USE FROM THE LOCAL AUTHORITY HAVING JURISDICTION IS OBTAINED AND CONFIRMED PRIOR TO ANY PURCHASE OR INSTALLATION OF THIS PRODUCT.

Need help or have questions?  
Call 800-332-6327

### **Surface Preparations**

FireGuard E-84® Intumescent Coating can be applied directly to most surfaces. Some surfaces will require a compatible primer. All surfaces must be cleaned and freed of dirt, oil, grease, release agents, loose scale, or any other surface

For wood surfaces: If the surface is considered to be in poor condition (large cracks, pits, or other imperfections), the use of a surface primer would be suggested to minimize waste.

For steel surfaces: A compatible alkyd or epoxy primer will be required. Please reach out to us directly to confirm compatibility.

For concrete masonry surfaces: A water-based styrene resin primer, comparable to the Behr 436, will be required.

### **Wet Film Measuring**

A wet film thickness gauge can be used to measure the application thickness as the coating is installed. It is to be used upon the wet thickness of the material once it is applied on the surface.

The teeth of the gauge will be inserted moderately firm in to the surface. The coating will touch the teeth in an increasing fashion until it cannot reach the next tooth. The last tooth of the gauge to have coating on it will represent the current wet mil thickness.

### **Humidity**

The ambient humidity mark for the area where the coating will be installed must remain below 85% relative humidity for proper curing to occur.

### **Temperature**

- Ambient temperature must remain above 50 F and below 110 F.
- Substrate temperature must remain above 50 F
- Material temperature must remain above 70 F for best application

### **Freezing Temperature and Rain Exposure**

The coating is not designed to be exposed to any level of **rainfall, precipitation, or freezing temperatures** during the installation or curing process. Installation is best done in new construction once the building has been roughed in with a roof/deck in place over the substrate.

### **Environmental Conditions**



### **To determine dry mil thickness of each wet application:**

Wet Mil Thickness # x 0.54 = Expected Dry Mil Thickness  
for that application

### **Example Above**

Ex: 55 wet mil x 0.54 = 29.7 mils dry

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### Application Methods

**Airless Spray:** Sprayer capable of 2000 PSI min., Tip size of .019—.021", refer to TDS for additional details.

Can achieve 25-30 mil wet per application in optimal conditions. Lighter applications of 20-25 mil wet will be a better option when a smoother, higher quality finish is desired.

Multiple light passes rather than slow heavy passes will produce better quality application.

**Brush:** High quality nylon brush recommended. Can achieve a 10-12 mil wet application per coat.

**Roller:** Match nap of roller to the finish level. Shorter nap will provide smoother application but won't apply as much material at one time. Can achieve similar wet mil to the brush application.

### Curing

The coating must cure for 24 hours for all spray applications. The coating must dry to the touch for all brush and roll applications.

### Mixing

The coating will require a field mixing prior to installation. The coating should be mixed a minimum of 5 minutes with a 1/2" electric drill with a slotted paddle or jiffy mixer blade. It will not spray correctly if not mixed properly.

### Coverage

Required dry ml thicknesses will determine the coverage rate of the coating. The coating has a wet to dry ratio of 54%. **The coverage rate of the product will vary drastically depending upon the required dry mil thickness on a project by project basis. Always confirm the required dry mil thickness prior to beginning installation. Please contact manufacturer representative for project specific application thicknesses.**

If the desired finish is different to that of the smooth white **OR** the coating will reside in an exterior location, the use of FireGuard® Z-I Tiecoat will be required. Once installed, a finish top coat will be able to be applied over the system.

For interior locations, the top coat over the Z-I can be a water based finish paint of your choice.

For exterior locations, the top coat over the Z-I must be an exterior grade impermeable finish

### Inspection

Many jurisdictions will require that the application of a life safety coating be inspected to ensure correct application of the product. It would be strongly suggested to determine what level of inspection will be required.

If inspection is required, it would be suggested to review the entire application process with the inspector to ensure that all of their concerns are addressed prior to installation.

Warranty of the coating will require confirmation of third party inspection.

### Maintenance

Once installed the coating should be protected from destructive forces such as abrasion, over cleaning, chipping, or other physical damage over the remainder of construction work.

Should the coating become damaged, the coating will need to be reapplied to the originally specified dry film thickness.

### Clean Up

Pump, gun, tips, hoses, and mixers should all be cleaned once a day with water.

Warm, soapy water will be able to clean away most fresh coating. Scraping drier coating off of material will also be effective.

### Pre-Application Checklist

- ☐ Approval from AHJ/Architect
- ☐ Specified/Approved Dry Mil Thickness Known
- ☐ Environmental Conditions Within Mfg. Require Ranges
  - Humidity
  - Ambient Temperature
  - Surface and Material Temperature
  - Exposure to Rain/Low Temperatures
- ☐ Surface Prepared Properly
- ☐ Correct Spray Equipment (tip size, pump compatibility, etc.)
- ☐ Wet Mil Gauges
- ☐ Clean up method ready to go
- ☐ Need help or have questions? Call 800-332-6327

### Top Coating

