

## Applicator's Field Operations Guide

### **ACRONYMS:**

- AWCI – Association of the wall and ceiling industry – 12-B Edition
- TFIFRM – Thin film intumescent fire-resistive materials
- DFT – Dry Film Thickness
- WFT – Wet Film Thickness
- Acceptable Standards
  - ASTM – American Society for Testing and Materials – E111
  - NFPA – National Fire Protection Association – 251
  - ANSI/UL – Underwriters Laboratory Inc. – 263
  - ULC – UL Canada – CAN/ULC S101-M

### **APPROVED LABS:**

The AWCI recommends the use of ONLY design listings or building evaluation reports and approvals based upon testing data issued by an accredited fire laboratory or agency. Intumescent coatings must be applied based on the testing conducted by the certified laboratory in accordance with the acceptable standard for the hourly rating for the structural member or assembly. Go to [flameoffcoatings.com](http://flameoffcoatings.com) and click on PARTNERSHIP > GET CERTIFIED

### **CERTIFIED APPLICATOR:**

Applicators MUST take the online certification course prior to starting a project when applying TFIFRM. Professional grade tools and equipment are required to allow for efficient and quality application of intumescent coatings.



Wet film thickness gauge



Dry film thickness gauge



Airless Paint Sprayer

### **PRE-CONSTRUCTION:**

Applicators must completely read and comply with the manufacturer's published instructions including all conditions including but not limited to environment, surface prep, primers and topcoats.

Verify that all equipment needed to perform inspections (such as calibrated DFT gauge) is available on the job site. The following inspection procedures will be required for acceptance

- Condition of substrates
- Thickness of application WFT and DFT
- Condition of finished application
- Condition of patching work if applicable

**INSPECTION:**

The applicator MUST meet with the owner and/or general contractor and the building official prior to starting any fire proofing project. All fire ratings and application specifications must be approved and all testing available from the certified testing laboratory must be submitted. Testing and acceptance should be conducted by an experienced inspector with three years of experience with TFIFRM applications. The testing procedure should be agreed upon in the pre-construction meeting by the owner, general contractor, applicator and inspector. The architect shall provide a complete list of structural members and assembly that need to be rated.

**DRY FILM THICKNESS (DFT):**

*Prior to application*, the DFT to be applied to all structural members and assemblies must be agreed upon by the owner, architect and/or building official. The DFT is determined by the published listing provided by the certified laboratory. Listed DFT values shall be detailed in a complete protection thickness schedule provided by the manufacturer or 3<sup>rd</sup> party lab.

**TFIFRM:**

Product used must be spec'd and/or verified by the owner, architect and building official. No substitute product can be used without expressed written consent of all parties involved. Listed coatings may NOT be adjusted not even with water in the field. They must be applied as received. The pail labels must include the manufacturer, product name and bear the label of the accredited laboratory or agency.

**PROJECT SCHEDULE:**

Dates and schedules must be submitted and agreed upon at the pre-construction meeting. Schedules must be shared and accepted by all parties including the owner, architect, applicator, general contractor, and inspection agency.

**TOPCOATS:**

Consult with the manufacturer prior to applying any topcoats. Pre-approved topcoats and colors shall be provided by the manufacturer. Topcoats used for protection from environmental elements must be tested to the UL263 exposures. Always apply topcoats to a small area of product and allow time to dry to ensure the surface is clean and the finished results are approved.

**PRIMER:**

A list of pre-approved primer types will be provided by the manufacturer. If the primer is unknown, then a field cross-hatch test will need to pass and results submitted with documentation provided to the project owner.