



# F1 Intumescent Coating

## Technical Data Sheet

FireShell® F1 is a weather and moisture resistant 100% latex intumescent coating recommended for interior/exterior use.

### RECOMMENDED SUBSTRATE

Exterior exposed closed cell/open cell spray foam, lumber, foam panels, roof foam, exterior exposed foam, coated piping, boat insulation, ships, barrier foam, cabins, barns, foamed attics, sheathing, siding, roofs, wild land structures, fireproof weather resistant applications, flexible ducts/hoses/pipes

### SURFACE PREP

Substrate must be clean, dry, free of loose particles, and free of dust, grease, and mold release agents. Optimal product temperature is 55-95°F (12-35°C).

### THICKNESS

\*\*\*SEE SPECIFIC LAB REPORTS FOR REQUIRED THICKNESS\*\*\*

Apply 1 or 2 coats, depending on required dry film needed. Several thinner coats dry faster than 1 thick coat. Wet film thickness-per coat: 20-25 wet mils per coat, achieves a Dry film thickness (DFT) of 12-14 mils/coat.

Sag Resistance: 40 mils.

### COVERAGE RATE

Covers approximately 160 square feet per gallon at 10mils WFT/6 mils DFT, depending on the method of application and the porosity of the surface to be coated.

### APPLICATION

Apply when surface and ambient temperatures are above 68°F (20°C) and below 95°F(35c), and when relative humidity is below 80%. Drying times can be reduced significantly by warming the area as little as 5°F from conditioned temperatures. In borderline humidity situations, make sure there is good air (fan induced) movement. Any high ceilings applications require fan air movement.

### DRY TIME

Dries to touch in approximately 60 minutes. Allow at least 4 hours of drying time between coats. Full cure does not occur for up to 2 weeks. Damp or humid weather may lengthen the drying time.

### EQUIPMENT

Apply with airless spray equipment, conventional sprayer, heavy knap roller, or a quality brush. For best performance, it is recommended to apply two coats. Thinner first coats reduce wait time to spray second coat.

When using airless spray equipment ensure the equipment has a volume output not less than 0.74gpm (gallons per minute) and an operating

pressure of 3300 psi. The sprayer should be equipped with a filter screen 30-mesh. To ensure proper pressure and delivery to the spray gun use the following rules for hose diameter & length:

- Min. 3/8" ID up to 75'
- Min 1/2" ID up to 200'
- Min 3/4" ID greater than 200'
- Min 3/8" ID & Max 6' L for whip hose

Always use larger diameter hose sections nearest the pump.

We recommend using a Graco Reverse-A-Clean (RAC) X gun tip with no internal diffuser and an orifice size of .521 - .525.

ALWAYS USE EQUIPMENT AND COMPONENTS WITH THE PROPER PRESSURE AND MATERIAL DELIVERY RATINGS THAT ARE IN GOOD WORKING ORDER.

A natural bristle brush or a medium nap roller can be used for touch-up and edge work, or for small areas that are not practical for spray application.

### CLEANUP

Clean up any minor spills or spatters immediately with soap and water, as well as any painting tools and airless spray equipment. Serious spills should be contained and removed with inert absorbent material. Dispose of contaminated absorbent, container, and unused contents in accordance with local, state, and federal regulations.

### SHELF LIFE

12 months in originally sealed container stored dry air environment at temperatures between 40°F (4.5°C) and 90°F. (32°C).

### PROPERTIES

#### Product Specifications

|                                      |  |
|--------------------------------------|--|
| VOC (SCAQMD & EPA)                   | < 50 g/L   |
| Flame Spread & Smoke (ASTM E84)      | Class A ( <25fs, <50s)   |
| Washability (ASTM D2486)             | Scrub Resistance: 370 cycles   |
| (ASTM D4585)                         | Moisture Resistance: 100 hours   |
| Weight per Gallon                    | 10.9 lbs/gal (+/- 0.3)   |
| pH                                   | 6.0 – 7.0  |
| Mold & Fungus Resistance (ASTM 3278) | Excellent  |
| Shelf Life                           | 1 year   |
| Colors                               | White, Charcoal Black  |
| Packaging                            | 5 gallon pail<br>55 gallon drum  |
| Tack Free Time                       | 2 – 3 hours at optimal conditions  |
| Drying Conditions                    | <ul style="list-style-type: none"><li>• Drying time will be affected at 60% R.H. or greater</li><li>• Do not coat at &gt;65% R.H. correct drying will not occur</li><li>• Exterior coat only when several clear days are forecast.</li></ul> |
| Viscosity                            | 105 – 125 KU @ 70°F  |
| % Solids by Weight                   | 70%  |
| % Solids by Volume                   | 56%  |
| Flash Point                          | Non-combustible  |

**NOTE:** Physical properties shown are typical and are to serve only as a guide for engineering design. Results are obtained from specimens under ideal laboratory conditions and may vary upon use, temperature, and ambient conditions. Right to change physical properties as a result of technical progress is reserved. Yields shown are optimum and will vary slightly depending on ambient conditions and application. This information supersedes all previously published data. The Customer is responsible for deciding whether products and associated TDS information are appropriate for customer's use.

**DISPOSAL:** Federal, State and Local regulations. Under the Resource Conservation and Recovery Act (RCRA) regulations, it is the responsibility of the product user to determine, at the time of disposal, whether a material should be classified as a hazardous waste. For recycling guidance of any unused amount, contact your local or provincial organization of recovery and recycling. Dry, empty containers may be recycled in a can recycling program where facilities are available and sanctioned by local authorities.

**PRECAUTIONS:** Do not mix with other paints, solvents, or colors in oil. Keep from freezing. Air and surface temperature should be above 50°F during application and drying time. Do not paint when rain or dew is imminent.

**LIMITED WARRANTY and LIMITATION OF DAMAGES:** ICP Building Solutions Group warrants only that the product shall meet ICP Building Solutions Group's specifications for the product when shipped by ICP Building Solutions Group. NO OTHER EXPRESSED OR IMPLIED WARRANTIES APPLY AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY, NON-INFRINGEMENT OUTSIDE THE U.S. AND FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY DISCLAIMED. Buyer and users assume all risks of use, handling and storage of the product. Failure to strictly adhere to any recommended procedures shall release ICP Building Solutions Group from all liability. The user of the product is responsible to determine suitability of the product for the particular use. The exclusive remedy as to any breach of warranty, negligence or other claim is limited to the replacement of the product. Liability for any indirect, incidental or consequential damage or loss is specifically excluded.

**ENVIRONMENTAL AND SAFETY:** Keep out of reach of children. Do not take internally. Close container after use. Refer to Safety Data Sheet for additional health and safety information.

ICP Construction, Inc.  
150 Dascomb Road | Andover, MA 01810  
866.667.5119 | www.icpgroup.com

