



International Coatings Group FBL-100

Application Guide

General Description

FBL-100 is a water-base intumescent thin film fireproofing material for interior fire protection that will be exposed to view or be subject to potential damage. This hard, durable, abrasion resistant product has a smooth, white aesthetic finish. FBL-100 is a water-base formulation compliant with VOC limits and regulations.

Technical Data:

Color	White
Specific Gravity	1.37
PH Range	7.5-8.5
Weight/Gal	11.7 lbs (5.22 Kgs) Does not include weight of packaging.
Hazardous Ingredients	N/A
Volume Solids	72% (+/- 2%)
Weight Solids	70% (+/- 2%)
Viscosity	18,000 cp (+/- 10%)
Flammability	None Flammable
VOC. (LESS WATER)	100 GRAMS /LITRE

Recommend Uses

FBL-100 is recommended for interior use on substrates such as **Steel, Foam** and **Wood** in these kinds of facilities:

- Industrial plants
- Atriums
- Hospitals
- Parking Garages
- Food Processing Plants
- Convention Centers
- Correctional Facilities
- Power Generating Facilities
- Warehouses
- Schools
- Apartment Complexes
- Sports Stadiums

Features

- Single component.
- Water-based.
- Attractive off-white finish.
- Thin film application.
- 100% Asbestos Free.
- Will not dust, flake, nor delaminate.
- Lightweight and very hard.

Pre-Application

Prior to use, FBL-100 must be stored in a dry location at temperatures between 50°F (10°C) and 100°F (~40°C). Under these conditions shelf life is up to 24 months in unopened containers. DO NOT ALLOW THE MATERIAL TO FREEZE.



Application Conditions

FBL-100 is designed to be applied by spray application and can also be applied by brush or roller. Humidity should not exceed 80% and the surface to be coated should not be less than 40F (5° C). The product is best applied when ambient temperature is between 50F (10° C) and 95F (35° C). While the product can be applied at lower temperatures, viscosity may be a problem and, if applied at higher than recommended temperatures, there may be a risk of runs or sags.

Work Site Conditions

Sufficient lighting and ventilation must be provided to ensure proper application and drying of the product both during and after its application. In enclosed spaces, there should be a minimum of four air exchanges per hour, until the coating is dry.

SUGGESTED SPECIFICATION

This specification covers requirements for materials, equipment and application of intumescent paint to provide fire protection to steel structures and supports as indicated on the design drawings, and in accordance with applicable requirements of contract documents.

SURFACE ACCEPTABILITY

- Surfaces that have been properly prepared to receive this fireproof coating. The surfaces must be clean and dry, free from rust, grease, dust or other contaminants that will interfere with proper bonding.
- All steel surfaces shall be primed with compatible metal primer prior to fireproofing application. Phenolic modified alkyd primer or acrylic or approved equal.

COORDINATION WITH OTHER TRADES

FBL-100 shall be installed after all steel is in place, but before ducts, pipe work, equipment or other obstructions are installed so that fireproofing can be applied to all exposed steel.

STORAGE

Store in a sealed containers, in a cool dry area with ventilation suitable for storing materials. Keep away from direct sunlight. Do not store at temperatures above 39°C (102° F). Keep from freezing. Do not store at temperature below 32°F (0°C).

Over coating is not required. However, if a topcoat is required for color-coding, aesthetics or additional surface protection

APPLICATION thoroughly mix for 3-5 minutes prior to use. Do not dilute

TOPCOATING suitable topcoat shall be used. For unusually severe environments consult ICG for recommendations of appropriate topcoats.

AIRLESS SPRAY EQUIPMENT - PUMPS

We recommend application with airless spray equipment. 3,600 psi or greater. You should always have a range of tip sizes on hand at a job site since steel sizes, hose length, vertical lift, and job site conditions all impact spray patterns. We recommend a range of tip sizes from 25 to 35.

THICKNESS OF APPLICATION

The thickness required in accordance with the acceptable test data. Thickness shall be measured on the basis of wet film thickness taken by frequent random probe measurements during application. All test data measurements are taken on dry film thickness, supervision of application must be undertaken while material is being installed, since final, cured, dry film thickness will reflect shrinkage due to evaporation of water.

PAINT SCHEDULE apply the first coat to primed surfaces that have been cleaned, pre-treated, or otherwise prepared for painting as soon as practicable after surface preparation and before subsequent surface deterioration.

CLEAN UP

Work area shall be maintained in an orderly condition with good housekeeping conditions prevailing. Upon completion of installation, all debris shall be cleared and removed from jobsite.



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Checking wet film thickness during application

HOW TO USE A 'WET FILM THICKNESS GAUGE'



Place the gauge at ninety degrees to the coated substrate and be sure the gauge is firmly in contact with the substrate

← 'Wet Coating'
← Substrate



After the gauge is removed from the substrate, observe the MIL value of the largest tooth or notch that is wet and the smallest tooth that is not wet. The wet film thickness lies between these two values. In the example, the wet film thickness is 6 MILS to 8 MILS (0.006' to 0.008")

* Drawing not to scale, magnified and stretched for clarity



Final Thickness Measurement

Dry film thickness measurements should be taken at least 5 days after the last coat has been applied, and before any topcoat has been applied. Use an electronic thickness gauge such as an Elcometer or equivalent.

Drying & Cure Times at Standard Ambient Temperature and Humidity

Drying time is a function of ambient temperature, ambient humidity and how thickly the coating was applied. However, at 60 °F (15°C) with a relative humidity of 70%, a 20 mil (500µ) wet coat should be dry to touch within 3 hours, completely dry in 6 hours and dried hard enough to handle in 8 hours. Specifications call for a 72 hour cure time.

DO NOT apply additional coats until the underlying coats are completely dry. Applying additional coats on top of product that still has moisture may cause the finish to crack and, if enough moisture is trapped under a surface film, the entire finish may delaminate and fall off.