

PRODUCT DATA SHEET

FBL-100 Fire and Thermal Barrier Latex

FBL-100 is a single component, hard, durable, waterborne, acrylic co-polymer latex, thin film intumescent coating for interior fire protection of ferrous and non-ferrous substrates.

DESCRIPTION

FBL-100 is a halogen free, low VOC, acrylic co-polymer latex thin film intumescent coating.

FBL-100 has a hard, durable, abrasion resistant film, it will not dust, flake, nor delaminate.

FBL-100 gives a smooth, white aesthetic finish, which makes it the perfect coating for the refurbishment or upgrade of passive fire protection in existing or new building stock

Colour	White
Specific Gravity	1.37
PH Range	7.5 – 8.5
Weight/Litre	1.38kg
Volume Solids	68%
Viscosity	1800cP
VOC	19g/L
Adhesion Strength	400psi
Shore D Hardness	77
Scrub Resistance	35 Cycles

SCOPE OF USE

Fire Resistance Rating

FBL-100 has tested in accordance with AS 1530.4:2014, for increasing the “Fire Resistance Rating” (FRR) of the following fire separating elements:

- Timber framed walls, exposed to fire from either or both sides, or timber framed floor/ceiling systems exposed to fire from below lined with the following substrates:
 - 13mm Standard Plasterboard
 - 15mm Fibrous Plasterboard
 - 13mm X-Block Plasterboard
 - 6mm Fibre Cement sheet
 - 12mm Plywood
 - Exposed Timber Floors

@ 1000µm DFT, the system can achieve a FRR of 60/60/60.

- Timber infill, of a Rib & Infill concrete floor-ceiling:
 - @ 300µm DFT, the system achieves a FRR of --/120/90
 - @ 1000µm DFT, the system achieves a FRR of --/120/120.

Group Numbers for Lining Materials

FBL-100 has been tested in accordance with ISO 9705 & ISO 5660

- @ 300µm DFT, it achieves a Group 2-S on Type 1 substrates.
- @ 165µm DFT, it achieves a Group 1-S on Type 3 substrates.

Passive Fire Stopping

FBL-100 has been tested in accordance with AS 1530.4:2014 for the following penetrations.

- Up to a FRR --/60/60 for timber trusses, purlins or joists, that penetrate a fire separating element.
- FRR --/60/60 cold rolled steel C section purlins that penetrate a fire separating element.

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Durability

FBL-100 will, with normal maintenance (B2/AS1 – 2.1.1 NZBC), and depending on where it has been applied, comply with either of the following:

- The life of the building, being not less than 15 years, for building elements
 - that are moderately difficult to access or replace (for example, the building envelope, exposed plumbing in the sub-floor space, and in-built chimneys and flues)
 - for which failure to comply with the Building Code would go undetected during the building's normal use but would be easily detected during maintenance.
- The life of the building, being not less than five years, for building elements
 - that are easy to access and replace (for example, services, linings, renewable project coatings, and fixtures)
 - for which failure to comply with the Building Code would be easily detected during the building's normal use.

Surface Preparation

Surfaces must be prepared correctly to receive **FBL-100**. At a minimum, surfaces to be coated must be clean and dry, free from rust, grease, dust, or other contaminants that will interfere with proper adhesion.

Note: All substrate surfaces to be coated, whether new or pre-painted, shall be prepared in accordance with Australasian standard AS/NZS 2311:2017 Guide to the Painting of Buildings.

Mixing

Thoroughly mix **FBL-100** with a mechanical spiral mixer for 1-3 minutes. Avoid over-mixing as this can cause air to get trapped and create bubbles that will affect the finish. During mixing and handling of the materials always wear suitable protective clothing.

Application

It is recommended that all work should be carried out by skilled tradespeople who can demonstrate they have the competency to apply or install the systems as per the Technical Data Specifications provided by Tech Coatings.

Tech Coatings offers training and support for all intumescent coating solutions. Please contact us on technical@techcoatings.co.nz for further information.

Airless spray application will give the best results and is recommended to achieve uniform thickness and appearance. Application by roller or brush might require additional layers to achieve the requested coating thickness, depending on the type of construction, site conditions, etc. Prior to application a trial on site may be useful to ensure the selected application method will provide the necessary results.

Airless spraying

- Airless spray pump must be 3,300 psi or greater, such as the Wagner 3.39 or Graco Mark V.
- All filters must be removed from the pump and spray gun.
- We recommend a range of tip sizes from .019 to .031 depending on the architectural finish required and the conditions on site.

Brushing/Rolling

For smaller areas

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Application cont.

Conditions

- **FBL-100** is best applied at an ambient temperature between 10° C and 35° C. The substrate to be coated should not be less than 5°C.

Note: 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.

- The Relative Humidity should not exceed 80%.

Thickness

Coating thickness of **FBL-100** can be measured in two ways:

- Wet Film Thickness (WTF): During application, using a WFT comb.
- Dry Film Thickness (DFT): On the fully cured coating, using the DeFelsko PosiTector with 200 C Ultrasonic probe.

The required DFT or WTF shall be stated in the Technical Data Specification.

Topcoat

A suitable topcoat will be required for color-coding, aesthetics and/or additional surface protection.

FBL-100 can be top coated with any high-quality waterborne enamel, but for unusually severe environments please consult Tech Coatings for recommendations of appropriate topcoats.

Clean Up

FBL-100 cleans up easily with warm water and mild soap. There are no HAZMAT, OSHA, or EPA requirements. Work area shall be maintained in an orderly fashion by following good housekeeping and HSEQ practices. Upon completion of installation, all debris shall be cleared and removed from jobsite.

Storage

FBL-100 must be stored

- in the original, sealed containers
- in a controlled environment
- off the floor with suitable ventilation
- at temperatures not below 5°C or above 39°C.

Keep away from direct sunlight & NEVER let the paint freeze!

Maintenance

Although **FBL-100** does not require any maintenance during the lifetime of the coating, the protective topcoat must be maintained in accordance with the manufacturer's instructions.

For any Technical Enquiries, please contact Tech Coatings on technical@techcoatings.co.nz.

DISCLAIMER:

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