

FIRECOAT™ INTERIOR

TECHNICAL DATA SHEET & APPLICATION GUIDE

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OVERVIEW

FIRECOAT Interior is a water-based intumescent paint for fire protection of a variety of substrates inside the house. When exposed to flame or radiant heat, FIRECOAT Interior forms an outer char layer, protecting the underlying surface, slowing down flame spread, reducing smoke generation, and allowing more time for evacuation in case of fire.

KEY ADVANTAGES

- High flame retarding rating
- Water-based
- Free from halogenated flame retardants
- FM GLOBAL Certified

WHERE TO USE FIRECOAT INTERIOR

FIRECOAT Interior can be applied on interior surfaces such as natural timber, MDF, plywood and plasterboard. It can be applied on top of existing paint if the surface is clean, dry and not flaking.



APPLICATION PROCEDURE

SURFACE PREPARATION

Prior to application all surfaces should be clean, dry, free from contaminants (e.g., dust, oil, wax, grease, dirt, resin, etc.) and any loose or flaking paint. Existing coatings with poor adhesion must be removed. Surface should be completely dry prior to the application.

MIXING

Prior to use, stir paint thoroughly. Ensure paint is mixed from the bottom to the top of the pail.

APPLICATION CONDITION

Only apply and cure FIRECOAT Interior at temperatures above 10°C and below 35°C throughout the entire painting process with good air circulation and a relative humidity no greater than 75%. Avoiding extremely hot or cold conditions is advisable for optimal results.

APPLICATION METHOD

FIRECOAT Interior can be applied by brush, roller, or airless spray.

Do not thin FIRECOAT Interior.

- **Brush:** Use a top-quality polyester/nylon blend brush or similar.
- **Roller:** Use a 20 mm or greater nap roller.
- **Airless Spray:** Use airless spray with a minimum 1 GPM rating at 3000 psi such as Graco 795, 1095 or similar. Tip is 531 or greater with a pressure of 2100 psi or higher. Due to the unique properties of FIRECOAT it is important to use an airless spray gun with the right specification as others may clog.

Compatible water-based acrylic paints can be applied as a topcoat for aesthetic purposes. It is recommended to test the chosen topcoat on a small surface to check for compatibility. Allow FIRECOAT to fully dry before applying the topcoat. Refer to Drying Time for details.

DRYING TIME

2 to 5 hours. Allow longer drying time under cooler or humid conditions.

Temperature ideally should be above 10°C during application and drying.

Make sure the paint is thoroughly dry to touch before applying the next coat. Failure to do so may lead to cracking and peeling between coats.

REPAIR

- Repair any damage to the substrate if required prior to re-application of FIRECOAT Interior. Sand any rough edges.
- Remove any loose material such as paint flake and sand.
- Make sure the surface is clean and dry and apply FIRECOAT Interior to the damaged area at the intended thickness and as per the manufacturer's specification.

COATING THICKNESS & COVERAGE

To achieve the desired fire protection, the minimum dry film thickness (DFT) must be achieved upon complete drying. It is difficult to determine the DFT during application, but it can be estimated at the wet state using a wet film thickness (WFT) gauge.

Each coat should achieve a coverage of 1.43 Square Metres Per Litre.

Substrate	No. of Coats	Minimum WFT per Coat	Minimum DFT upon drying
Wood, MDF, Plywood	1	0.70 mm (or 700 microns)	0.34 mm (or 340 microns)
Plasterboard	3	0.70 mm (or 700 microns)	1 mm (or 1000 microns)

Practical spreading rates may vary from the theoretical figures due to factors like substrate roughness and porosity, overspray losses, application methods, and environmental conditions such as wind, temperature, and humidity. Adjust application techniques or apply additional coats as necessary to achieve the specified DFT. Remember that conformance to specifications requires meeting the dry film thickness targets, not simply applying a certain number of coats.



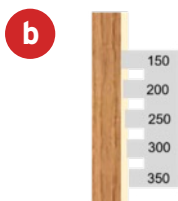
HOW TO USE A WET FILM GAUGE FOR MEASURING PAINT THICKNESS

A wet film gauge is a simple tool used to measure the thickness of a paint while it's still wet. This helps ensure the correct application thickness, which is critical for achieving the desired protection and finish. Here is a step-by-step guide:

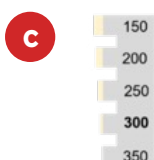
- 1 Apply the Paint or Coating:**
Begin by applying the paint to the surface, ensuring it is evenly distributed.
- 2 Choose the Appropriate Gauge:**
Select a wet film gauge that covers the range of thickness you expect for your application. The gauge has notches or teeth that correspond to different thickness measurements (usually in microns or mm).
- 3 Position the Gauge:**
Hold the wet film gauge perpendicular (at a 90-degree angle) to the coated surface.
- 4 Place the Gauge in the Wet Paint:**
Immediately after applying the paint, gently press the gauge into the wet paint so that it touches the wall surface underneath. Be careful not to drag the gauge, as this could alter the paint film.
- 5 Read the Measurement:**
Remove the gauge and examine the notches. The last notch with paint on it indicates the wet film thickness. For example, if the paint fills notch up to 150 microns but does not reach the 200-micron notch, the thickness is between 150 and 200 microns.
- 6 Clean the Gauge:**
After use, clean the wet film gauge with an appropriate solvent or water to remove any paint residue. This will keep the gauge in good condition for future use.



Wet film thickness (WFT) gauge



WFT measurement using the gauge



WFT reading between 300 and 350 microns

CLEANING EQUIPMENT

Wash application tools in clean, cold water, and flush airless spray equipment promptly after painting. Clean and remove any dried product. Wash water should be disposed in accordance with applicable local regulations.

DISPOSAL

Avoid release to the environment. Do not pour leftover paint down the drain. Dispose of contents/ container at an authorized chemical waste collection point in accordance with any local regulation.

STORAGE

- Store at temperatures between 5-35°C.
- Keep away from direct sunlight and extreme heat.
- Ensure containers are tightly closed when not in use.
- Store out of reach of children and pets.

SHELF LIFE

FIRECOAT Interior has a shelf-life of 24 months if stored in original sealed containers under the recommended storage conditions above.



SAFETY RECOMMENDATIONS

All users should refer to the Safety Data Sheet (SDS) for FIRECOAT Interior for further safety and handling information.

- 🔥 **Eye protection:** Wear safety glasses or goggles meeting the requirements of AS1336 and AS1337.
- 🔥 **Respiratory protection:** When spraying, use respiratory protection with half or full mask with P2 or P3 ratings to protect against spray mists.
- 🔥 **Skin protection:** Wear gloves made of PVC or rubber meeting the requirements of AS2161 and covered shoes.

Note: This product has been independently tested to be a non-irritant for skin and minimal irritant for eyes. However, if a skin irritation or rash occurs then wash the affected area with cold water and seek medical attention if you feel unwell or are concerned.

TESTING & RESULTS

FIRECOAT Interior is tested and achieved the following standards:

- 🔥 Classified B-s1/d0 in accreditations EN 13823 & EN ISO 11925-2
- 🔥 AS/ANZ 1530.3:1999
- 🔥 AS 1530.4:2014 - Plasterboard internal wall system* | FRL -/30/30
- 🔥 FM Approvals Standard 4975

* Plasterboard wall system: 10 mm standard grade plasterboard over 35 mm x 70 mm timber framing with glass wool insulation.

Disclaimer: While every care is taken and users are always directed to follow the instructions for application explicitly, Flame Security International Pty Ltd has no direct control over the end application of the product. Flame Security International Pty Ltd nor any of its employees, contractors or agents are responsible or liable for any claim, loss or damage which might arise from the use of FIRECOAT Interior.

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FIRECOAT INTERIOR APPLICATION QUALITY CONTROL

FACTORS AFFECTING COATING APPLICATION SUCCESS

The success of any coating application can be influenced by multiple factors, including:

- Ambient conditions during surface preparation, application, and curing.
- Cleanliness and condition of equipment.
- Suitability of the chosen coating system.
- Correct application methods for surface preparation and coating.
- Adherence to specified dry film thickness.
- Quality of the paint used.
- Proper site access, lighting, and ventilation.

Thorough inspection and detailed record-keeping are essential for ensuring quality assurance, facilitating future assessments, and possibly supporting warranty claims. As the product manufacturer, Flame Security International recommends that applicators maintain, at a minimum, the following records during the application of FIRECOAT Interior and related products:

The following tables serve as a guide for coating applicators to document:

- Coating Inspection: (Refer to Table 1)
- Equipment Details and Conditions: (Refer to Table 2)
- Surface and Ambient Conditions: (Refer to Table 3)



TABLE 1 – COATING INSPECTION

Project/Item Name/Reference:					ID No.:								
Description:					Date:								
Substrate:					Thickness: mm								
Coating System	1st Coat				2nd Coat				3rd Coat				
Product													
Batch #													
Mixed Prior to Application	Y / N				Y / N				Y / N				
Application Method*													
Date & Time of Application													
Wet Film Thickness (microns)													
Specified													
Average													
Maximum													
Minimum													
Extra Readings Taken?†	Y / N				Y / N				Y / N				
Dry Film Thickness (microns)													
Specified					Average								
Maximum					Minimum								
Quality (inspect for defects)	Pass <input type="checkbox"/>				Reject <input type="checkbox"/>				Repair <input type="checkbox"/>				
Comment													
Signed					Printed Name:					Date:			

* Application method: B = Brush, R = Roller, A = Airless spray
† Please attached record.



TABLE 2 – EQUIPMENT DETAILS AND CONDITIONS

Project/Item Name/Reference:		ID No.:	
Description:		Date:	
Substrate:		Thickness:	mm
Site Work Area Conditions <div> Interior <input type="checkbox"/> Exterior <input type="checkbox"/> Poor ventilation <input type="checkbox"/> Well-ventilated <input type="checkbox"/> </div> <div> Clean <input type="checkbox"/> Dusty <input type="checkbox"/> PPE usage <input type="checkbox"/> </div>			
Test Equipment			
Test	Standard	Type/Model	Calibration Date
Wet Film Thickness	AS 3894.3	Other	
Application Method*			
Roller/brush specification (if use):			
Spray Equipment	Model:		Gun:
	Tip Size:	Needle:	Air Cap:
Air Supply	Compressor Model:	Capacity:	Air Pressure: Water Trap Y / N
Spray Application	Pressure Pot:	Airless Pump:	Gun: Filter Y / N
Comment 			
Signed		Printed Name:	Date:

* Application method: B = Brush, R = Roller, A = Airless spray

