

Technical Data Sheet FIRECOAT Exterior

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Overview	FIRECOAT Exterior is a water-based, halogen-free intumescent paint specifically engineered for the fire protection of various substrates. It provides a slightly textured grey finish and is formulated to meet the stringent requirements of AS 1530.8.1, which outlines fire-resistance tests for elements in construction subjected to simulated bushfire attack. Additionally, FIRECOAT Exterior includes an accelerated weathering component, ensuring enhanced durability and long-lasting performance.	
Key Advantages	 Water-based Halogen-free Compatible with most water-based primers and exterior topcoats (Note: We recommend testing a specific topcoat on a small area first, as application conditions can vary and may affect performance.) 	
Where to use FIRECOAT Exterior	FIRECOAT Exterior is suitable for both interior and exterior surfaces, including natural and composite timber, brick, concrete, plasterboard, masonry, and structural steel. It can be used with or without compatible topcoats. For optimal speed and finish quality, we recommend applying FIRECOAT Exterior with recommended airless spray equipment. Please note that the final finish will have a slightly texture due to the intumescent properties of the product.	
Application Procedure	tion Procedure Surface preparation	
	Before application, ensure that all surfaces are thoroughly cleaned, dried, and free from oil, grease, loose or flaking paint, and any other contaminants that could hinder adhesion. Any existing coatings with poor adhesion must be completely removed.	
	For timber surfaces, ensure they are completely dry before application. For steel surfaces, adhere to the specifications for metal finishing as outlined in AS 1627:	
	Part 1: Removal of oil and grease	
	Part 4: Abrasive Blast Cleaning	
	Please note that FIRECOAT Exterior does not provide corrosion protection for steel surfaces (as per AS/NZS 2312.1:2014 Category C2). We recommend using Carboline 635 primer beforehand to improve both adhesion and corrosion protection.	
	Mixing	
	Stir the contents thoroughly before use, either with a paint paddle or a power mixer, ensuring the paint is mixed evenly from the bottom to the top of the pail.	
	Application condition	
	Only apply and cure FIRECOAT Exterior at temperatures between 10°C and 35°C, ensuring good air circulation and a relative humidity no greater than 75%. Avoid extremely hot or cold conditions for optimal results. Protect the coating from the elements and contamination during application to achieve the best performance and	

finish. We recommend that the applicator maintain a complete record of the application by filling out the Application Quality Control Form.

Application method

FIRECOAT Exterior can be applied using a brush, roller, or airless spray:

- Airless Spray: Use equipment with a minimum 1 GPM rating at 3000 psi, such as Graco 795, 1095, or a similar model. Use a tip size of 531 or greater, with a pressure of 2100 psi or higher. Due to the unique properties of FIRECOAT, it's important to use an airless spray gun with the correct specifications to avoid clogging.
- Brush: Use a top-quality polyester/nylon blend brush or similar.
- Roller: Use a roller with a 20 mm or greater nap.

Important: Do not thin FIRECOAT Exterior. The use of a thinner is strictly prohibited.

Water-based acrylic paints can be applied as a topcoat for aesthetic purposes over FIRECOAT Exterior. We recommend testing the chosen topcoat on a small area to check for compatibility. Allow FIRECOAT to fully dry before applying the topcoat—refer to the drying time section for details.

Note: For a smoother finish, use a brush or roller with a small nap.

Coating Thickness & Coverage

To ensure the desired fire protection, it is essential to achieve the minimum dry film thickness (DFT) after the coating has fully dried. The easiest way to do this is by measuring the wet film thickness (WFT) immediately after application. You can then use the WFT to calculate the corresponding DFT, as shown in the table below.

Each coat should cover 1.43 square meters per litre. Here are the specifications for different BAL levels:

	Wet Film thickness	Dry Film Thickness	Litres per square metre	No. of Coats
BAL 29	0.7 mm	(0.34mm minimum)	1.43 sqm/L	1 Coat
BAL 40	1.4 mm	0.7mm (minimum)	1.43 sqm/L	2 Coats

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.

Recoat and Drying Time

Drying time depends on temperature, air movement, humidity, coating thickness, and application method. Under ideal drying conditions (24°C with good air circulation and relative humidity below 50%), the drying time for a single coat is as follows:

- Between FIRECOAT Exterior Coats: 4-6 hours
- Before applying a Topcoat: At least 12 hours

	 Ensure the paint is thoroughly dry to the touch before applying the next coat to prevent cracking and peeling. Full hardness is achieved after 7 days. Drying times may be longer at lower temperatures and/or higher humidity. Paint Maintenance and Repair Repair any substrate damage before reapplying FIRECOAT Exterior. Periodically inspect the surface for cracks or damage. Remove any loose material or paint flakes and sand rough edges. Ensure the surface is clean and dry before reapplying FIRECOAT Exterior to the intended thickness, following the manufacturer's original application specifications. After a fire, remove the char with a high-pressure hose. If no structural damage is found, follow the original surface preparation steps and reapply all paint layers, including the anti-corrosion primer for steel surfaces. Protect the coating from contamination, such as dirt and grit, and keep it out of the weather during on-site application. Poor weather can affect adhesion, curing times, appearance, and performance. Only apply coatings in good weather. Wash off any airborne salt deposits and dry the surface right before painting.
Cleaning Equipment	 After painting, promptly clean application tools with cold, clean water. Flush airless spray equipment thoroughly. Dispose of wash water according to local regulations. Ensure any dried product is removed from tools. To minimize waste, use all product completely. If any remains, contact a licensed disposal company for proper disposal.
Disposal	 Prevent release into the environment. Do not pour leftover paint down the drain. Dispose of contents and containers at an authorized hazardous or special waste collection point, following local regulations.
Limitations	Topcoat Application: The choice of topcoat will impact the durability of the undercoat. Select high-quality water-based topcoats suitable for either interior or exterior use.
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.
Safety Recommendations	 Avoid breathing mist, vapours, or spray. Wear protective gloves, clothing, eye, and face protection. Read and understand all safety precautions before handling the product. Do not allow contaminated work clothing out of the workplace. If exposed or concerned, seek medical advice/attention. If on Skin: Wash with plenty of water. If irritation or rash occurs, get medical advice/attention. If you feel unwell, seek medical advice/attention. Remove contaminated clothing and wash it before reuse.

Testing & Results	 FIRECOAT Exterior is tested and passed to the following standards: AS 1530.8.1 (BAL 40), Extremely high bushfire rating AS 5637.1-2015 Fire Classification Group 1 AS/ANZ 3837 AS 1530.4-2014 – Steel Penetration FRL 120/-/- AS 1530.4-2014 – Exterior wall system* FRL -/60/60 ASTM D2898 Method B – Accelerated weathering testing ISO 5660 - Heat Release & Smoke Production FM Approvals Standard 4975 * Tested on a plasterboard wall system with 10 mm standard grade plasterboard over 35 mm x 70 mm timber framing with glass wool insulation. Additionally, the product has been certified as non-irritant to skin and eyes by an independent testing laboratory. 	
	independent testing laboratory.	
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 Exterior.



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