FIRECOAT™

EXPERIENCE CRITERIA WITH DOCUMENTARY EVIDENCE

2 MAY 2025

2 MAY 2025

CONTENTS

OVERVIEW OF FIRECOAT EXTERIOR

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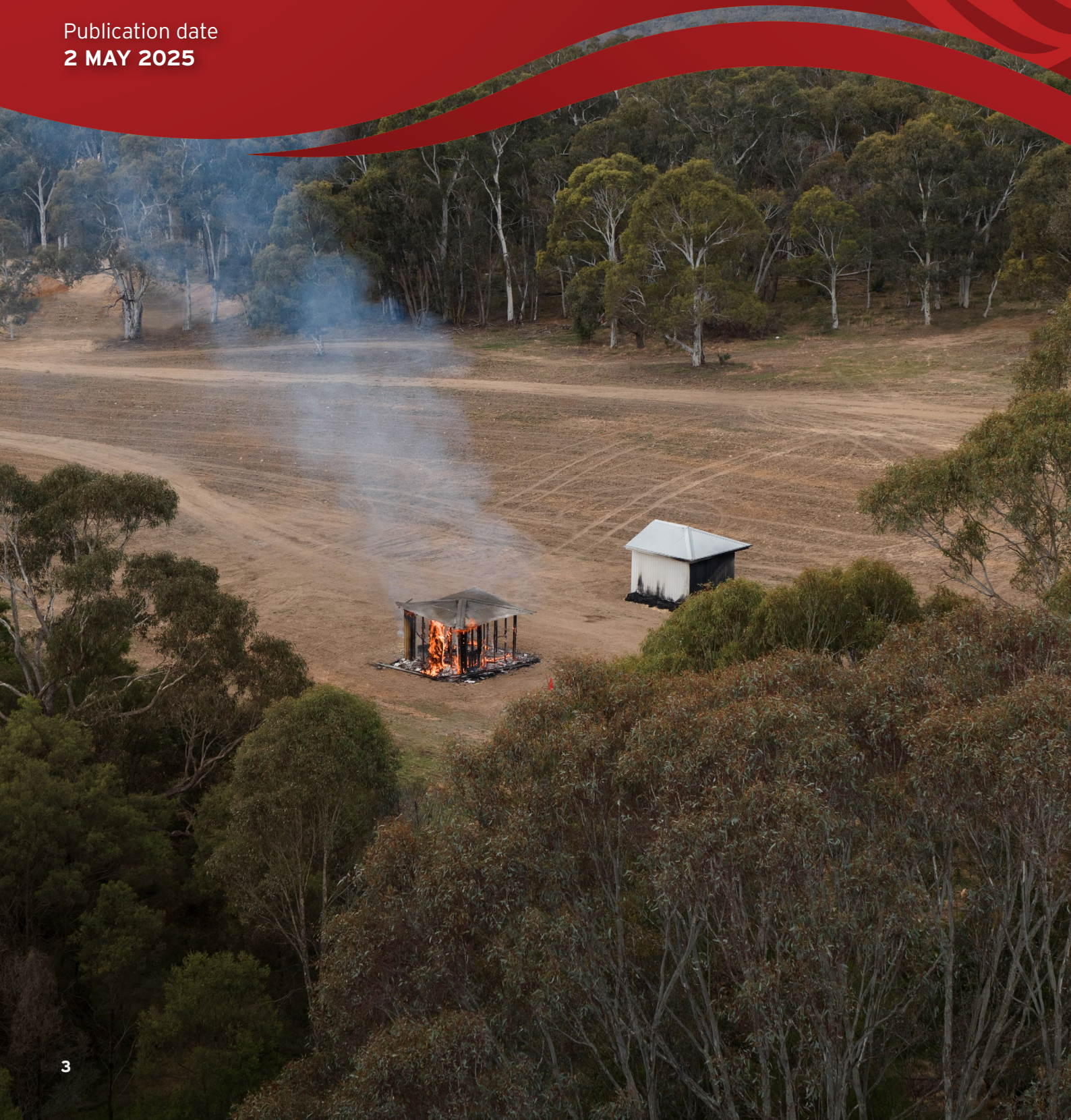

FIRE-PROTECTION WEATHER RESISTANT COATING

FIRECOAT Exterior offers trusted and proven fire protection that sets new benchmarks in fire safety.

FIRECOAT Exterior is a game-changing fire-resistant coating uniquely rated to Bushfire Attack Level 40 (BAL-40). Used in its native grey or overcoated with any water-based exterior colour, FIRECOAT Exterior has been developed to combat the devastating impact of bushfires, structural fires or urban fires.

When exposed to flame or radiant heat, FIRECOAT Exterior expands and forms an outer char layer that acts as a barrier, protecting the underlying surface from ignition and putting a stop to the spread of flames.

- Water-based, fire-protective undercoat or topcoat
- Rated to BAL-40 in NATA accredited laboratory
- Long-lasting protection
- Free from halogenated flame retardants
- Low VOC (volatile organic compounds) content
- Non-irritating to eyes and skin
- Easy to apply with sprayer, roller or brush
- Suitable for use on natural and composite timber, brick, concrete, plasterboard, masonry, aluminium and structural steel (primer may be required for certain substrates)
- Not suitable for use on decking or staircases
- Light grey textured finish
- Certifications for many substrates

FREQUENTLY ASKED QUESTIONS

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WHAT IS FIRECOAT EXTERIOR?

FIRECOAT Exterior is a tough, durable, slightly textured light grey, water-based intumescent protective coating designed for both interior and exterior applications. Key features include:

- **Fire Protection:** It forms an ignition and flame spread barrier on both external and internal combustible surfaces, providing exceptional fire resistance.
- **BAL-40 Rating:** Uniquely rated to BAL-40, it offers extreme fire protection, making it ideal for areas at risk of bushfires or urban conflagration.
- **Versatile Application:** Suitable for a variety of substrates, including existing render, timber, steel, concrete, plasterboard, and brick.
- **Ease of Application:** FIRECOAT Exterior can be easily applied using spray, roller, or brush, resulting in a slightly textured finish.

WHAT RATING DOES FIRECOAT EXTERIOR HAVE?

FIRECOAT Exterior is tested and achieved the following standards:

- AS 1530.8.1 (BAL 40), Extremely high bushfire rating
- AS 5637.1-2015 Fire Classification | Group 1
- AS 1530.4-2014 – FIRECOAT Exterior on 4mm Mild Steel | FRL 60/-/-
- 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.

WHAT IS FIRECOAT INTERIOR?

FIRECOAT Interior is a protective, water-based paint designed specifically for interior fire protection on materials such as timber, MDF, plywood, and plasterboard. Key features include:

- **Fire Protection:** It reduces the spread of fire, providing occupants with additional time to escape
- **Finish:** Compared to FIRECOAT Exterior, it offers a smoother finish, but it is not intended for external use
- **Highest Flame-Retardant Rating:** Classified under EN 13501-1 (Bs1/d0) in accordance with EN 13823 and EN ISO 11925-2, offering the highest flame-retardant rating for an interior paint
- **Ease of Application:** It can be easily applied using spray, roller, or brush methods.

WHAT RATING DOES FIRECOAT INTERIOR HAVE?

FIRECOAT Interior is highly rated for fire protection, with the following certifications:

- EN 13823 & EN ISO 11925-2: Classified as B-s1, d0, the highest flame-retardant rating for an internal paint.
- AS/NZS 1530.3:1999: Tested for simultaneous determination of ignitability, flame propagation, heat release, and smoke production.
- AS 1530.4:2014: Fire resistance test on an internal plasterboard wall system* with an FRL of -/30/30.

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

WHAT IS BAL-40?

The BAL (Bushfire Attack Level) rating is an Australian standard used to assess the risk of a home's exposure to ember attack, radiant heat, and direct flame contact in bushfire-prone areas. This rating is crucial in determining the construction and building requirements needed to protect homes from bushfires.

There are six levels of BAL ratings, as defined by the Australian Standard AS 3959:2018 Construction of buildings in bushfire-prone areas. Each level reflects the severity of potential exposure, with BAL 40 indicating a very high risk, requiring robust protective measures.

Here are each of the BAL ratings and what they mean.

BAL	Description of risk - Bush Fire Attack Level
BAL – LOW	Lowest risk from a potential fire.
BAL – 12.5	Risk is primarily from potential embers during a fire.
BAL – 19	Moderate risk, particularly from embers and burning debris.
BAL – 29	High risk, particularly from embers, debris and heat.
BAL – 40	**Very high risk. Likely to be impacted by embers, debris, heat and potentially flames.**
BAL – FZ	Extreme risk. Directly exposed to the flames of a potential fire front.

Source: https://www.rfs.nsw.gov.au/plan-and-prepare/building-in-a-bush-fire-area/building-after-bush-fire/your-level-of-risk

IS FIRECOAT EXTERIOR BAL-40 RATED?

Yes, FIRECOAT Exterior is BAL-40 rated.
This certification confirms that it provides effective protection against ignition, burning, and flaming from windborne embers, debris, flames, and high heat flux, making it suitable for high-risk fire-prone areas.

HOW DO I KNOW IF FIRECOAT IS THE RIGHT PAINT FOR MY PROJECT?

Each project has its own unique considerations and compliance requirements. To ensure that FIRECOAT meets the specific needs of your application and complies with local regulations, we strongly recommend consulting with a qualified building surveyor or fire engineer before purchasing.
This will help ensure that FIRECOAT is the best choice for your project.

WHERE CAN I FIND MORE INFORMATION ON FIRECOAT PRODUCTS?

For detailed information, including certifications and Technical Data Sheets for FIRECOAT Exterior and Interior, please visit our website at https://fsafirecoat.com.au/products/ to download the relevant documents.

HOW OFTEN DO I NEED TO RE-COAT WITH FIRECOAT EXTERIOR?

FIRECOAT Exterior is designed to last for years when applied to exterior surfaces, even without a topcoat. It functions as an undercoat, and under normal conditions, repainting is only necessary if the surface has been exposed to fire. We recommend periodic inspections to ensure the coating remains in optimal condition.

WHERE IS FIRECOAT MADE?

FIRECOAT is developed by scientists at the University of NSW and proudly manufactured in Australia.

WHAT COLOURS ARE AVAILABLE FOR FIRECOAT EXTERIOR AND FIRECOAT INTERIOR?

FIRECOAT Exterior: Comes in light grey. You can paint over it with a topcoat of your choice to achieve your preferred colour and finish.

FIRECOAT Interior: Available in white.

IS MY PROPERTY WARRANTED AGAINST BURNING IF I USE FIRECOAT?

No, your property is not warranted against burning in the event of a bushfire. There are numerous variables in a bushfire situation. However, using FIRECOAT according to its application instructions will substantially improve the protection of your home from bushfire threat.

WHAT IF THE FIRE STARTS INSIDE THE HOUSE?

Applying FIRECOAT Interior to walls can help reduce the spread of fire within your home, enhancing safety.

CAN I APPLY FIRECOAT EXTERIOR TO MY DECK FLOOR OR STAIRWAYS?

FIRECOAT Exterior is not suitable for use on trafficable surfaces such as deck floors and stairways.

CAN YOU PAINT THE ROOF AND PROTECT IT?

Painting the roof with FIRECOAT may be possible depending on the roofing material. However, most fires start in roof spaces due to embers igniting gutter litter. It is crucial to keep gutters clean and seal any gaps around the roof space to prevent ember penetration.

HOW DOES FIRECOAT COMPARE TO OTHER FIRE-RESISTANT PAINTS ON THE MARKET?

FIRECOAT distinguishes itself with its exceptional performance, durability, and unique features:

1. **Unmatched Performance:** FIRECOAT is rigorously tested to provide superior fire protection. It effectively prevents combustion and limits flame spread, offering reliable safeguarding for your property and assets.
2. **Long-Lasting Durability:** FIRECOAT retains its effectiveness and durability even after prolonged exposure to environmental conditions. This ensures long-term fire protection and peace of mind.
3. **Ease of Application:** FIRECOAT is designed for ease of use, allowing DIY enthusiasts to apply it without the need for costly professional services. This not only saves money but also empowers you to manage your fire protection needs effectively.
4. **Cost-Effectiveness:** FIRECOAT offers a cost-efficient fire protection solution. By applying the product, yourself and following the application guide, you ensure maximum protection while staying within budget.
5. **Versatile Applications:** FIRECOAT is suitable for a wide variety of applications and substrates, including timber, aluminium, steel, concrete, plasterboard, and brick. Its versatility makes it an excellent choice for both residential and commercial settings.
6. **Compliance with Safety Standards:** FIRECOAT adheres to industry safety standards and regulations, guaranteeing that it meets high-quality and safety benchmarks.

In summary, FIRECOAT stands out as a top choice for fire-resistant paints. Its combination of superior performance, durability, ease of application, cost-effectiveness, and versatility makes it an ideal solution for enhancing fire safety. Whether you're a DIY enthusiast or a property owner, FIRECOAT provides added safety and confidence.

WHERE CAN I BUY FIRECOAT?

FIRECOAT is available at Bunnings. For the latest pricing and product availability, please visit the following link: FIRECOAT at Bunnings.

APPLICATION PROCESS

WHAT SURFACES CAN I APPLY FIRECOAT EXTERIOR?

FIRECOAT Exterior can be applied to a variety of exterior surfaces, including:

- Timber
- Brick
- Concrete
- Fibre cement board
- Masonry
- Plasterboard
- Steel

WHAT SURFACES CAN I APPLY FIRECOAT INTERIOR?

FIRECOAT Interior is suitable for interior substrates such as:

- Timber
- MDF
- Plywood
- Plasterboard

IS THERE ANY SPECIAL APPLICATION PROCESS FOR FIRECOAT?

FIRECOAT is applied like any other undercoat paint. For optimal fire protection, ensure it is applied at the specified minimum dry film thickness (DFT). Prior to use, thoroughly stir the contents with a paint paddle or power mixer, mixing from the bottom to the top of the tin.

WHAT ARE THE SURFACE PREPARATION REQUIREMENTS FOR FIRECOAT, AND CAN I USE IT ON SURFACES ALREADY PAINTED WITH A DIFFERENT TYPE OF PAINT?

Before applying FIRECOAT, ensure that all surfaces are:

- **Clean and Dry:** Remove all dust, oil, wax, grease, dirt, resin, and any loose or flaking paint.
- **Free from Contaminants:** Any existing coatings with poor adhesion should be completely removed.

For surfaces previously painted with a different type of paint:

- **Compatibility:** FIRECOAT can be applied over surfaces previously painted with water-based paints, provided they meet the preparation requirements mentioned above.

SPECIFIC GUIDELINES

Timber Surfaces: Ensure timber is thoroughly dry before application.

Steel Surfaces: Follow the specifications for metal finishing as outlined in AS 1627:

- Part 1: Removal of oil and grease
- Part 4: Abrasive Blast Cleaning

Note: FIRECOAT Exterior does not offer corrosion protection for steel surfaces (as per AS/NZS 2312.1:2014 Category C2). For improved adhesion and corrosion protection, we recommend using Carboline 635 primer before applying FIRECOAT.

WHAT IS THE RECOMMENDED COATING COVERAGE AND THICKNESS FOR FIRECOAT EXTERIOR?

For optimal fire protection and compliance with BAL-40 requirements, adhere to the following specifications:

Coverage and Thickness:

- **Coverage Rate:** FIRECOAT Exterior covers approximately 1.43 square meters per litre per coat.
- **BAL 40:** Apply 2 coats to achieve a total dry film thickness (DFT) of 0.7 mm (minimum). Use a roller with a 20 mm or greater nap for application.

Coverage Specifications:

	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

Application Notes:

- **Minimum Dry Film Thickness (DFT):** Achieving the specified DFT is crucial for effective fire protection. This can be estimated using a wet film thickness (WFT) gauge during application.
- **Practical Considerations:** Actual spreading rates may vary due to factors such as substrate roughness, porosity, overspray, application methods, and environmental conditions (e.g., wind, temperature, and humidity). Adjust application techniques or apply additional coats if necessary to meet the specified DFT.

Conforming to specifications requires meeting the dry film thickness targets, not merely applying a specific 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.

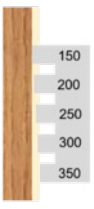
4. **Place the Gauge in the Wet Paint:**
Immediately after applying the paint, gently press the gauge into the wet paint so that it touches the wall surface underneath. Be careful not to drag the gauge, as this could alter the paint film.

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.

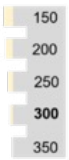
6. **Clean the Gauge:**
After use, clean the wet film gauge with an appropriate solvent or water to remove any paint residue. This will keep the gauge in good condition for future use.

a 

Wet film thickness (WFT) gauge

b 

WFT measurement using the gauge

c 

WFT reading between 300 and 350 microns

Note: The wet film thickness can be converted to dry film thickness. Please consult the table on the previous page.

By following these steps, you can accurately measure the wet film thickness and ensure your coating is applied according to specifications, leading to optimal performance and durability.

WHAT IS THE RECOMMENDED COATING COVERAGE AND THICKNESS FOR FIRECOAT INTERIOR?

FIRECOAT Interior	Wet Film Thickness	Dry Film Thickness	Litres per square metre
Plaster-board	2.1 mm (or 2100 microns)	1.0 mm (minimum) (or 1000 microns)	1.43 sqm/L
Timber	0.7 mm (or 700 microns)	0.34 mm (minimum) (or 340 microns)	1.43 sqm/L

Application Notes:

- **Plasterboard:** Apply the coating to achieve a dry film thickness of 1.0 mm. Ensure proper wet film thickness during application to meet this requirement.
- **Timber:** Apply one coat to achieve a minimum dry film thickness of 0.34 mm.

Always ensure that the specified dry film thickness (DFT) is achieved for optimal fire protection. Adjust application techniques as needed to accommodate variations in substrate and environmental conditions.

IS THERE A RECOMMENDED TEMPERATURE RANGE FOR APPLYING FIRECOAT?

For optimal performance, apply FIRECOAT only when:

- **Temperature**: Between 10°C and 35°C
- **Relative Humidity:** No greater than 75%
- **Conditions:** Ensure good air circulation and protect the coating from extreme heat, cold, and contamination.

Maintain a complete record of the application by filling out the Application Quality Control Form.

WHAT EQUIPMENT CAN I USE TO APPLY FIRECOAT?

Do not thin FIRECOAT.

Recommended Application Equipment:

- **Airless Spray:** Use equipment with a minimum 1 GPM rating at 3000 psi, such as Graco 795 or 1095. Use a tip size of 531 or greater, with a pressure of 2100 psi or higher. Ensure the spray gun is specified correctly to avoid clogging.
- **Brush:** Use a top-quality polyester/nylon blend brush.
- **Roller:** Use a roller with a 20 mm or greater nap.

Topcoat Information:

Water-based acrylic paints can be applied as a topcoat over FIRECOAT Exterior for aesthetic purposes. Test the topcoat on a small area for compatibility and ensure FIRECOAT is fully dry before application. For a smoother finish, use a brush or roller with a small nap.

HOW LONG DOES IT TAKE FOR FIRECOAT TO DRY AND CURE?

Drying Time:

- **Between Coats:** 4-6 hours (under ideal conditions of 24°C, good air circulation, and relative humidity below 50%).
- **Before Topcoat:** At least 12 hours.

Curing Time:

- **Full Hardness:** Achieved after 7 days.

Application Conditions:

- **Temperature:** Ensure temperature is between 10°C and 35°C during application and drying.
- **Humidity:** Drying times may be longer in cooler or more humid conditions. Ensure the paint is dry to the touch before applying additional coats to avoid issues like cracking and peeling.

Paint Maintenance and Repair:

- **Surface Preparation:** Repair any damage and clean the surface before reapplication.
- **Inspection:** Periodically check for cracks or damage and sand any rough edges.
- **After Fire:** Remove char with a high-pressure hose and inspect for structural damage. Reapply all paint layers, including anti-corrosion primer if needed.

Weather Considerations:

- Protect the coating from contamination and adverse weather conditions during application. Ensure good weather for painting and clean off any airborne salt deposits before application.

HOW DO I CLEAN MY BRUSHES, ROLLERS, OR AIRLESS SPRAYER AFTER USING FIRECOAT?

Cleaning up after using FIRECOAT is simple:

- **Brushes and Rollers:** Wash immediately with cold, clean water.
- **Airless Sprayer:** Flush thoroughly with water right after painting.
- **Dried Product:** Ensure any dried material is removed from tools.

Disposal:

- Dispose of wash water and any leftover paint according to local regulations. Ensure that no material or wastewater enters the stormwater system.
- For leftover product, use it completely or contact a licensed disposal company for proper disposal.

DOES FIRECOAT HAVE ANY SPECIFIC STORAGE REQUIREMENTS?

- **Temperature:** Store between 5°C and 35°C.
- **Location:** Keep away from direct sunlight and extreme heat.
- **Containers:** Ensure containers are tightly closed when not in use.
- **Safety:** Keep out of reach of children and pets.

HOW DO I PROPERLY DISPOSE OF LEFTOVER FIRECOAT AND PAINT CONTAINERS?

- **Disposal:** Do not pour leftover paint down the drain. Dispose of unwanted paint and empty containers as chemical waste.
- **Regulations:** Follow all local, national, and international regulations for chemical waste disposal.
- **Local Guidance:** Consult your local council for advice on household chemical disposal.
- **More Information:** For responsible disposal practices, visit paintback.com.au.

ADDITIONAL MEASURES YOU CAN TAKE TO PROTECT YOUR HOME.

BESIDES FIRECOAT, WHAT ELSE CAN I DO TO HELP PROTECT MY HOME FROM FIRE?

You can take additional measures to protect your home from bushfires. Visit the Your Home Government website for more ideas on bushfire protection.

These include the following low-cost measures:

- Sealing all gaps around the house with appropriately specified joining strips or flexible silicon-based sealant
- Installing appropriately specified building membranes behind weatherboards or other external cladding when they are being replaced
- Installing appropriately specified building membranes beneath existing roofing (especially tiled roofs) when it is being replaced for maintenance
- Installing draught excluders at the base of side-hung doors, and draught seals around window and door frames
- Sealing vents and weep holes in external walls with aluminium mesh (<2mm gap)
- Sealing around roofing and roof penetrations with appropriately specified flexible silicon-based sealant
- Installing non-combustible gutter guards
- Putting non-combustible metal mesh over areas of windows and doors where they can be opened
- Reducing the amount of bushfire fuel around the house to create an asset protection zone or a defendable space.

WHAT SHOULD I DO IN THE EVENT OF A BUSHFIRE?

In the event of a bushfire, it is recommended that you leave your property as soon as possible and following any advice provided by your local fire-fighting service. For further guidance and tips on protecting yourself and your property during a bushfire, refer to the Rural Fire Service website.

CASE STUDY

NEWCASTLE INNER CITY BYPASS TIMBER NOISE WALL

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FIRECOAT EXTERIOR CASE STUDY

FIRECOAT – the world's first BAL-40-rated fire-retardant paint – has been successfully applied to safeguard the timber noise wall along the Newcastle Inner City Bypass near Warners Bay Road in New South Wales, Australia.

The application of FIRECOAT to this significant infrastructure site highlights a proactive approach to fire safety at a time when Australians are preparing for another extreme bushfire season.

'Fires exact a heavy toll on public infrastructure: they divert crucial resources for repair and replacement, disrupt local economies, and endanger natural habitats and essential services,' said Justin Rooney, Managing Director and Co-Founder of Flame Security International, the company behind FIRECOAT.

'Severe bushfire seasons challenge the resilience of valuable community, environmental and cultural sites, leaving no sector – be it bridges, powerlines, schools, or industries – untouched by their devastating effects.'

GAINING RECOGNITION AND WINNING AWARDS

FIRECOAT's exceptional performance has not gone unnoticed. Despite only entering the Australian market in 2023,
it has already garnered multiple prestigious awards and shortlists.

- The product has been recognised as the 2024 Higher Education Research Commercialisation Award winner and;
- Received the 2023 Shaping Australia Award in the 'Problem Solver' division.
- Flame Security International, the company behind FIRECOAT, was also a finalist in the AFR BOSS Most Innovative Companies of the Year for 2024.

CASE STUDY

RENOVATING IN A BUSHFIRE PRONE AREA

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If your dream is a home among the gum trees, fear of bushfire doesn't have to put you off. One northern Sydney couple found ways to protect their newly renovated 'forever home' – without compromising style.

As desirable neighbourhoods go, Wahroonga, in Sydney's leafy northern suburbs, is a prized location. The appeal of its tree-lined streets, large blocks, abundant gardens and heritage character is accentuated by its proximity to stretches of bushland, with Ku-ring-gai Chase National Park to the north and Lane Cove River National Park on the southern border.

However, this green city living has a trade-off: bushfires are a real and perpetual threat to properties in the suburb. When it's where you want to live, can you do anything to minimise the risk?

IS FIRE PROTECTION WORTH IT?

When Angela Greenwood and her partner bought their original, cedar-clad 1960s home 10 years ago, they knew their bushy Wahroonga block came with a high fire risk. When the last fire went through the National Park at the back of their place, it came up to the door of the neighbouring property – and there is still evidence as all the grass tree trunks are scorched black.

So when the time came to start their long-planned exterior renovations, they weren't surprised that the development application wanted a report from a fire engineer. But the proposed extension included a new deck shielded by a freestanding roof – a sizeable project in itself. The engineer's report confirmed that every component of their

'when you live in a high-risk area, anything you can do to protect your property will make a difference'

extension had to be rated to Flame Zone, even though the existing house wasn't.

The project immediately became more complex – and expensive. Now it would require specialist trades and products, much more time and effort, and a lot of research. Should they go ahead?

Angela and her partner were confident that the proposed extensions would enhance their lifestyle and enjoyment of their home enormously. They decided that renovating to Flame Zone requirements would be well worth it and proceeded to engage a specialist architect, engineer and builder.

There are no rules compelling Wahroonga home owners to fireproof existing properties. However, the renos also gave Angela and her partner the opportunity – and motivation – to rethink fire protection across the rest of the house.

'Our house is an original '60s house, made of cedar cladding,' Angela says. 'When we redid the kitchen, there wasn't even any insulation behind the cupboards. It was literally just one layer of cedar between the outside and inside! And we are so close to the bush, even radiant heat could be an issue if there was a fire.'

The couple realised that when you live in a high-risk area, anything you can do to protect your property will make a difference if a fire eventuates. Determined to mitigate their risk of loss, she began researching how to fireproof a home without altering its character.

BRINGING THE BUSH CLOSER

The cedar-clad house rests on a generous but steeply sloping block, surrounded by an abundance of trees and vegetation, with wallabies and water dragons as frequent visitors. Expansive paving stretched out from the western face of the house, providing ample outdoor living space.

The home's roof extended over the paving to create a narrow covered walkway and block out the strong western sun. It also cut off much of the beautiful bush views from inside – particularly for Angela's partner, who's 1.8 metres tall. That had to change!

To maximise their enjoyment of the enviable surroundings, they decide to trim back the roofline to reveal the surroundings and replace the paved area with a stylish raised deck. A new, freestanding roof above the deck would offer shelter from the western sun, open up the green views and admit more natural light into the house, while respecting the home's architectural style.

With few fire-rated options for the new 150 m2 deck, Angela and her partner ultimately opted for aluminium planks

with a timber-like look suited to the home and its leafy location. While aluminium may melt in an extreme fire scenario, it's not combustible, so it meets Flame Zone requirements. And in a fire scenario, the infill strips that close up gaps between the boards to weatherproof the surface will also keep out flying embers.

Their decking choice added to the project's complexity. A timber subframe was out of the question: it was steel or nothing, and the footings had to be drilled down to rock. Working with 21-metre-long aluminium panels wasn't easy for their poor builder. Meanwhile, the ceiling of the freestanding roof – 4 metres above the deck – had to be fitted with non-combustible fibre cement cladding.

Still, the project team delivered on every detail, right down to the extensive footings. The end result: a low-maintenance, highly fire-resistant deck that looks fabulous.

THE BEST FIRE PROTECTION FOR THE JOB

With the extension sorted, Angela started work on increasing the fire-resistance of the original home. The couple wanted to keep the cedar-framed sliding doors and windows that ran along the western side of the house, to retain the mid-century style. But not only was glass a vulnerable feature if a fire approaches, the cedar itself was also a weakness.

Angela ordered fireproof metal screens to cover the doors and windows, then explored how she could protect the prized cedar frames while accommodating the screens. The solution she found became a key element in their whole-of-home fire protection strategy.

'I started Googling, looking at screening and blinds, and I came across FIRECOAT,' says Angela. 'And it was available at Bunnings, so I thought, "Give it a go."'

FIRECOAT Exterior undercoat paint is the first of a new, highly fire-resistant product range that puts bushfire defence within reach of every Australian home owner. Developed with one of Australia's leading universities, UNSW Sydney, it's the only paint in the world to achieve a BAL-40 fire rating.

With delivery of the fireproof screens imminent, Angela was soon applying the fire-resistant undercoat to the cedar door and window frames with a conventional paintbrush.

Her first surprise was that FIRECOAT Exterior was not much dearer than any other exterior paint, despite its world-first BAL-40 rating. Her second was that it was just as easy to apply – or even easier – than other water-based undercoats.

'Paint has just gone up ridiculously over the last few years. FIRECOAT is a little bit more expensive than regular paint, but not overly,' Angela says. 'And it's amazing. It really goes on easily. It doesn't drip, because it's so thick, so that's fantastic. And it's very smooth to put on.'

The undercoats work by forming an intumescent layer across the underlying surface when exposed to high heat. This key feature makes them highly effective for defending property against fire, while being non-toxic, easy to use and environmentally safe.

Having discovered that increased fire protection was as simple as paint, Angela quickly factored FIRECOAT into their strategy. She intends to paint the exterior of the house once the western windows and doors are finished.

Of course, bushfires aren't the only threat to the people and possessions we love – many house fires break out in kitchens or start from lithium ion batteries. Would she consider using FIRECOAT Interior next? Angela laughs.

'I've just painted some of the inside; I don't really want to do it again so soon! But I saw the videos on the FIRECOAT website of a lounge room that's just caught fire. I like the idea that if there is a fire inside, FIRECOAT Interior will create a containment line, slowing the rate of the fire.''

The videos illustrate the concept behind FIRECOAT, an idea that appealed to Angela. While, as she says, 'nothing is fireproof', in a fire scenario FIRECOAT will buy Angela and her family time: time to evacuate to safety, and time for emergency services to arrive. It can also mean the difference between having to replace the home and possessions and only having to repair them.

MORE OPTIONS FOR A FIRE-RESISTANT HOME

Other plans for home improvements seemed unrelated to fire protection, but Angela has made some surprising discoveries.

'The other issue with our house – nothing to do with fire – is that it's in a gully, so we don't get a huge amount of breeze.'

Angela is looking at replacing existing windows and screens aren't necessarily going to suit them, so she is interested to learn that a new FIRECOAT product will offer an alternative when it launches in 2025. FIRECOAT WINDOW SHIELD is a fire-resistant glass covering that can be cut to size and fitted to windows and doors when a fire threatens, preventing the glass from shattering as heat increases.

And more FIRECOAT fire-resistant products for defending property against fire are in development, with several scheduled for release in 2025. They include FIRECOAT DEFEND, a temporary containment line product that can be sprayed around the perimeter of your house when a fire is approaching.

Angela and her partner have no doubts about their decision to undertake a fire-rated extension and carry it on to the original house. 'We've done a beautiful renovation that's all made of fire zone materials but still in keeping with the house.'

And as they continue their strategy for protecting their home from bushfire, Angela will be keeping an eye on the expanding FIRECOAT range.

FIRECOAT: VIDEOS & WEBINAR

Publication date
2 MAY 2025

FIRECOAT VIDEOS

ALL VIDEOS CAN BE VIEWED: FIRECOAT.AU/VIDEOS

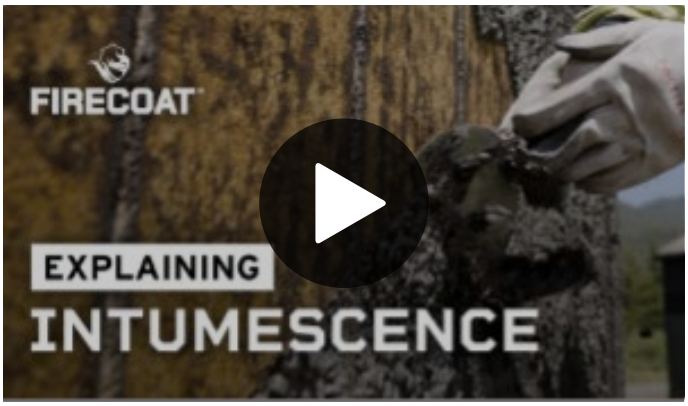
FIRECOAT Exterior Burn Test, Australia

FIRECOAT Exterior Burn Test, California

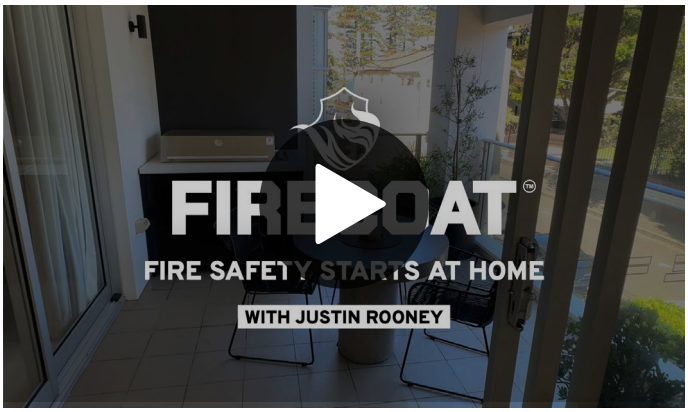
FIRECOAT Exterior BAL-40 Certification Burn Test, Australia (0.7mm)

FIRECOAT Exterior Burn Test, Point Reyes California

FIRECOAT Exterior Home Renovation, Wahroonga, NSW



Explaining Intumescence



Fire Safety Starts at Home: Using FIRECOAT with Justin Rooney

Flame Security International & UNSW

FIRECOAT WEBINAR

CREATING A FIRE RESILIENT FUTURE

Presenters included:

- Ben Hughes-Brown, Fire Engineer, Director Vortex Fire and Ignis Labs
- Justin Rooney, Managing Director and Co-Founder of Flame Security International
- James Telford, CEO of GSA Insurance Brokers
- Craig Lapsley, Managing Director Innovation Pro

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