



FIRE PROTECTION COATINGS

February 2021

COMPLIANCE WITHOUT COMPROMISE

FIRE-PROTECTED SURFACE FINISHES ON INTERIOR TIMBER SUBSTRATES UP TO GROUP 1-S AND FIRE-RATED STRUCTURAL STEEL MEMBERS FOR 30, 60, 90 and 120 MINS

A few minutes. That's the difference between a fire that causes serious damage and one that causes a catastrophic loss of life. These precious minutes are what drive us here at Fireshield. By preventing fire from starting or spreading, our fire protection systems help save lives, buildings and items of value.

Fireshield is a New Zealand owned and operated business, we are not your typical intumescent coatings company, we develop, test, manufacture our own products as well as supply products from other leading intumescent manufacturers around the globe.

With a complete range of passive fire products for the protection of interior timber and structural steel we are proud to bring our customers in Australia and New Zealand products that have been used globally for over 30 years.



The **only** intumescent products available in New Zealand and Australia to be part of the Declare and Red List free program run by the International Living Future Institute, an ingredient status program for building products.

Where does it go at the end of its life? This transparent platform and product database is changing the materials marketplace. Being Red List Free means our products are free of the most harmful environmental pollutants and toxins that are so prevalent in the building industry.



THE FIRST LAYER OF DEFENCE

Fireshield products have been used extensively throughout Europe for the past 30 years, and more recently in Australia, New Zealand and the Pacific Islands.

Fireshield founder and internationally renowned Fire Engineer, Per Olsson, has built the company from the ground up and takes cues from his native Sweden in devising world leading, elegantly simple solutions to complex intumescent problems.

FIRESHIELD RESEARCH, DEVELOPMENT & TESTING

Fireshield products are tested and assessed by independent ILAC accredited laboratories, fire testing and assessment facilities around the world.

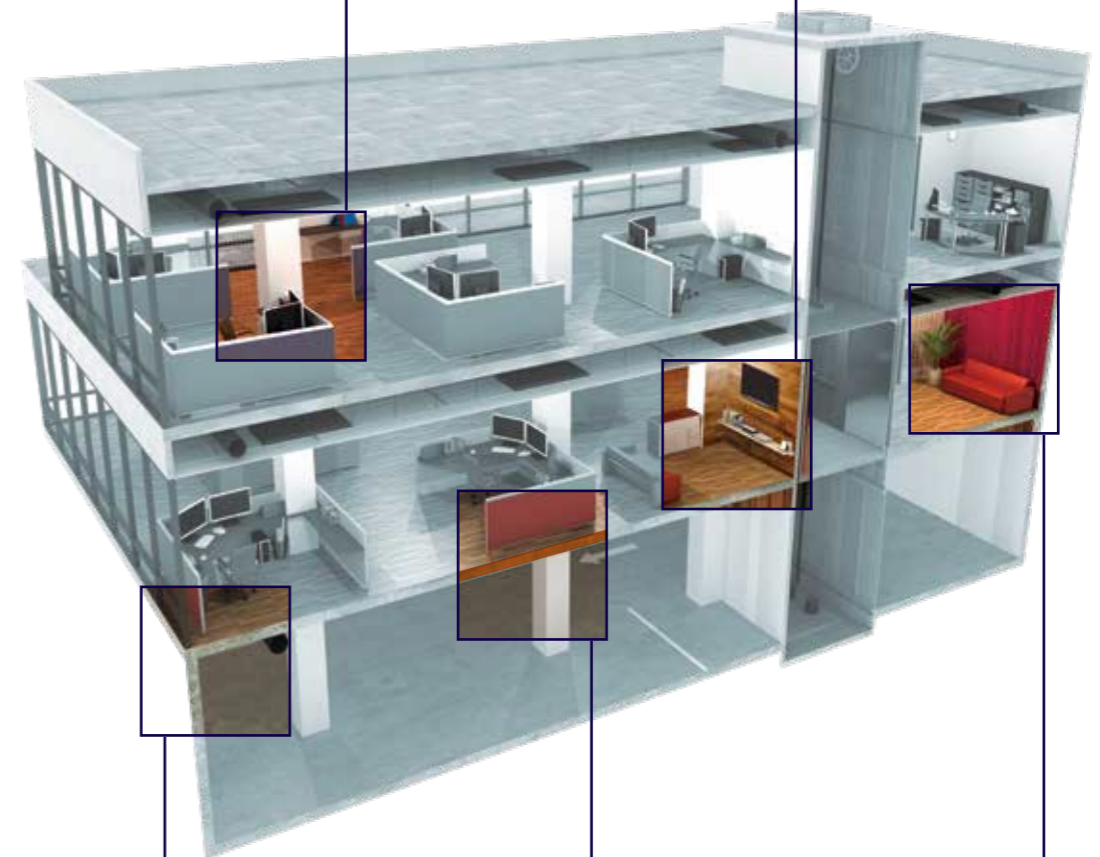
WHAT IS AN INTUMESCENT COATING?

Intumescent coatings, when exposed to high temperatures in a fire, expand and insulate the timber and steel, allowing for extra time to evacuate in the case of fire.

APPLICATIONS

INTERNAL STRUCTURAL STEEL
FIRESHIELD steel systems can be used on internal structural steel members, to achieve a 30, 60, 90 or 120-minute fire rating. An approved top coat can be applied to achieve any coloured finish.

NATURAL TIMBER WALL AND CEILING LININGS
FIRESHIELD TimberClear maintains the natural look of timber with a clear finish, achieving up to a maximum Group 1-S NZ and Group 1 AUS rating on internal wall and ceiling linings.



EXTERNAL STRUCTURAL STEEL
Fireshield SQ476 can be used on external structural steel members, to achieve a 30, 60, 90 or 120-minute fire rating and is fully warranted.

INTERNAL STRUCTURAL TIMBER
Fireshield timber systems can be used on internal structural timber members to reduce char rates for 30 and 60 minutes. This requires specific design, contact us for more information.

PIGMENTED TIMBER WALL AND CEILING LININGS
FIRESHIELD TimberWhite will achieve a pigmented finish up to a maximum Group 1-S NZ and Group 1 AUS rating on internal timber wall and ceiling linings.

TIMBER COATINGS



Fireshield's certified solutions provide:

- The freedom to design with interior timber and comply with
 - The New Zealand Building Code
 - Australian National Construction Code
- The ability to achieve
 - Group 1-S fire rating in New Zealand
 - Group 1 fire rating in Australia

For interior timber using Fireshield intumescent coatings systems.

COMPLIANCE WITHOUT COMPROMISE

Realise your vision in interior timber whilst meeting fire compliance standards.

The natural beauty of exposed timber has a textured warm aesthetic. Fireshield provides the high-level protection required for Group 1-S (NZ) and Group 1 (Australia) fire compliance without having to conceal or replace timber as part of your architectural vision. Our expert knowledge and advice will ensure you have a solution tailored to your specific circumstances.



TIMBERCLEAR BASE COAT

- Clear water-based finish
- Low VOC
- Halogen free
- Approved stains can be used beneath the TimberClear system

TIMBERCLEAR TOP COAT

- TimberClear must be top-coated with Fireshield TimberClear Top Coat
- Available in a matt & semi-gloss finish
- Solvent finish

BENEFITS

- Helps retain the natural look of timber
- Timber substrate requirements: ≥8mm thick + ≥338kg/m³ density
- Fireshield TimberClear offers clear timber coating systems that can provide:
 - a Group 1-S solution, compliant with the New Zealand Building Code 3.4(a)
 - a Group 1 solution, compliant with the Australian NCC CP4 using Codemark CW-30071

MASTERSPEC

Fireshield Timber Specification available on Masterspec section 6734FS - Fireshield Intumescent Coatings Timber.

AVAILABLE SIZE:

5.0 ltr

TIMBERCLEAR TOP COAT

9.6 ltr

TIMBERCLEAR BASE COAT



TIMBERCLEAR

TIMBERWHITE



Declare.



Fireshield TimberWhite is a waterborne, halogen-free, intumescent coating with a matte white architectural finish, designed for use on interior timber wall and ceiling surfaces. TimberWhite can be top coated any colour with one of the Fireshield Approved top coats.



FEATURES

- Matte white finish
- Water based
- Low VOC
- Halogen free
- Declare – Red List Free

MASTERSPEC

Fireshield Timber Specification available on Masterspec section 6734FS - Fireshield Intumescent Coatings Timber.

BENEFITS

- Smooth architectural white finish
- Can be top coated any colour.
- Timber substrate requirements: ≥8mm thick + ≥338kg/m³ density
- Fireshield TimberWhite offers a timber coating systems that can provide:
 - a Group 1-5 solution, compliant with the New Zealand Building Code 3.4(a)
 - a Group 1 solution, compliant with the Australian NCC CP4 using Codemark CW-30071

AVAILABLE SIZES:

9.6 ltr

FEATURES

- Whitewash finish
- Water based
- Low VOC
- Halogen free
- Declare – Red List Free

MASTERSPEC

Fireshield Timber Specification available on Masterspec section 6734FS - Fireshield Intumescent Coatings Timber.

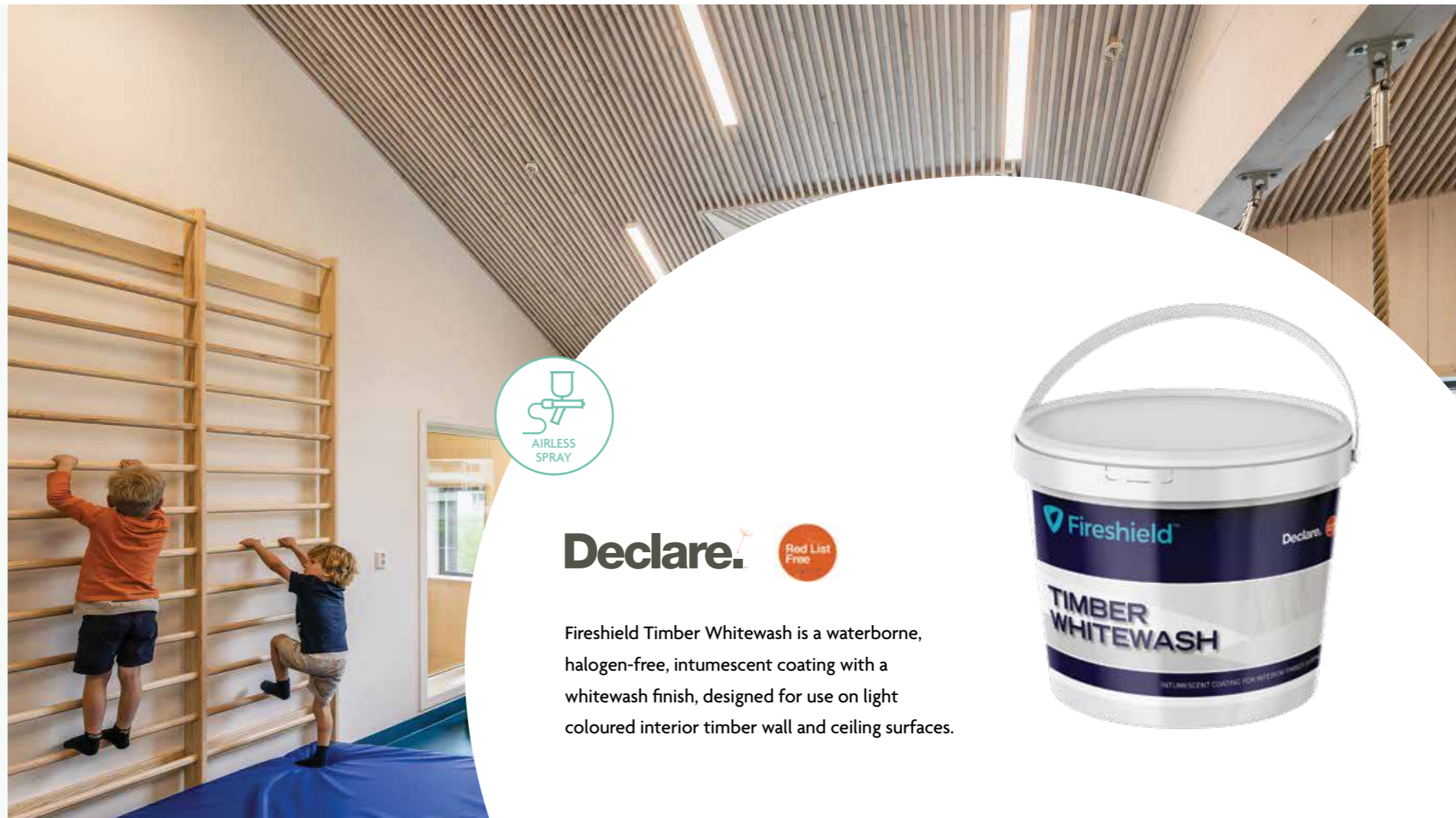
BENEFITS

- Attractive whitewash finish suitable for light timbers
- Timber substrate requirements: ≥8mm thick + ≥338kg/m³ density
- Fireshield Whitewash offers a timber coating systems that can provide:
 - a Group 1-5 solution, compliant with the New Zealand Building Code 3.4(a)
 - a Group 1 solution, compliant with the Australian NCC CP4 using Codemark CW-30071

AVAILABLE SIZES:

9.6 ltr

TIMBER WHITEWASH



Declare.



Fireshield Timber Whitewash is a waterborne, halogen-free, intumescent coating with a whitewash finish, designed for use on light coloured interior timber wall and ceiling surfaces.



STEEL COATINGS



Intumescent coating systems are one of a range of available passive fire protection (PFP) systems designed to contain and minimise the effects of a fire on the structure of a building. Fireshield steel intumescent coating systems have a number of advantages over other PFP systems available in New Zealand and Australia. They are easier to apply and maintain than concrete encasement and are quicker to install than fire-resistant board systems. Fireshield intumescent coatings can be overcoated with any approved decorative or protective finish and can be applied over any approved primer system giving unlimited, warranted systems and colours.

PRIMERS AND TOP COATS TO USE WITH FIRESHIELD INTUMESCENT PRODUCTS:

Fireshield intumescents can be used as part of a complete Fireshield system (primer + intumescent + top coat) or with a combination primers and top coats from other manufacturers for a fully compliant and warrantable system. This flexibility allows Specifiers the choice to work with products they trust and know in conjunction with fire protection from Fireshield.

For fire protection of steel, intumescent coating systems usually comprise several layers of different paints, typically:

- a two-coat system (primer + intumescent)
- three-coat system (primer + intumescent + top coat).

The choice of system depends on the potential corrosivity/weathering of the installation environment.

Fireshield approve specific primers and top coats as part of our intumescent coating systems, using recognised industry standards, including the most widely used EOTA's European Assessment Document EAD 350402-00-1106 and the CEN's European Standard EN16623.

PRIMERS

According to EAD 350402-00-1106, primers are tested and can be approved on a generic basis (i.e. if one primer type is demonstrated to work at a specified dry film thickness, the whole generic primer family can be approved). This is what we have done here at Fireshield to give you the Specifier peace of mind and confidence that the system is compatible and compliant.

The Fireshield approved generic families are:

- Waterborne Acrylic
- Two Component Epoxy
- Short/Medium Oil Alkyd

TOP COATS

The top coat provides the Fireshield intumescent system with a colour and in more demanding exposure conditions, protection from the environment. The choice of top coat is dependent on the weathering and corrosive conditions the coating system will be exposed to.

Unlike primers, top coats are tested and approved individually. Only top coats approved by Fireshield can be used, see the Approved Primers and Top Coats list at www.fireshieldcoatings.com

FIRESHIELD STEEL 1001



Declare. 

Fireshield Steel 1001 is a waterborne, halogen-free, thin film intumescent coating with a matt white finish, designed for use on interior structural steel. Fireshield Steel 1001 is optimised to achieve 30 and 60-minute FRR.

FIRE RATING: UP TO 90 MINS



FEATURES:

- Thin film, environmentally friendly technology
- Waterbased, matt white finish.
- Red List Free
- Declare Status
- Over 30 years of development.
- Easy to apply on site.
- Can be applied up to Zone C3 with appropriate primer and top coat systems

BENEFITS

- Smooth, clean finish that looks exceptional on exposed steel sections.
- Environmental accreditation from the international Living Future Institute.
- Can be used as a full Fireshield system or with multiple primers and top coats to produce fully compliant, warrantable systems.

AVAILABLE SIZE:

25 ltr

MASTERSPEC

Fireshield Steel Specification available on Masterspec section 6742FS - Fireshield Intumescent Coatings Steel.

FEATURES

- Thin film, environmentally friendly technology
- Waterbased, matt white finish.
- Red List Free
- Declare Status
- Easy to apply on site.
- Can be applied up to Zone C3 with appropriate primer and top coat systems.

BENEFITS

- Smooth, clean finish looks exceptional on exposed steel sections.
- Environmental accreditation from the international Living Future Institute.
- Can be used as a full Fireshield system or with multiple primers and top coats to produce fully compliant, warrantable systems.

AVAILABLE SIZE:

25 ltr

MASTERSPEC

Fireshield Steel Specification available on Masterspec section 6742FS - Fireshield Intumescent Coatings Steel.

FIRESHIELD STEEL 1002



Declare. 

Fireshield Steel 1002 is a waterborne, halogen-free, thin film intumescent coating with a matt white finish, designed for use on interior structural steel. Fireshield Steel 1002 is optimised to achieve 60 -120 minute FRR.

FIRE RATING: UP TO 120 MINS



FIRESHIELD STEEL SQ476



Fireshield SQ476 is a white, single pack solvent intumescent coating used to fire rate internal and external structural steel for up to 120 minutes.

FIRE RATING: UP TO 120 MINS



FEATURES

- Thin film technology
- Solvent-based, matt white finish.
- Easy to apply on site.
- Can be applied in all interior and exterior zones up to C5 Exterior with approved primer and top coat systems

BENEFITS

- Smooth, clean finish looks exceptional on exposed steel sections.
- Can be used for exterior and weather exposed surfaces including Zone C5
- Can be used with multiple primers and top coats to produce fully compliant, warrantable systems.

MASTERSPEC





Fireshield Steel Specification available on Masterspec section 6742FS - Fireshield Intumescent Coatings Steel.

AVAILABLE SIZE:




25 ltr



PRODUCT SELECTOR

PRODUCT SELECTOR	TIMBERCLEAR BASE COAT	TIMBERCLEAR TOP COAT	TIMBERWHITE	TIMBER WHITEWASH
				
BUCKET SIZE	9.6 ltr	5.0 ltr	9.6 ltr	9.6 ltr
WATER-BASED	✓	X	✓	✓
FINISH	Clear	Clear	Pigmented	Opaque or Whitewash
HALOGEN-FREE/ LOW VOC	✓	X	✓	✓
APPLICATION TO	Interior timber wall and ceiling linings	Sealer coat for the TimberClear basecoat.	Interior timber wall and ceiling linings	Light coloured interior timber wall and ceiling linings
TOP COAT REQUIRED?	✓ Fireshield TimberClear solvent. Top Coat is required to protect the base coat	TimberClear Top Coat is used to seal and protect the TimberClear basecoat and completes the TimberClear system.	X Can be top-coated with colour required or to protect the intumescent	X Can be top coated with clear sealer to protect the intumescent.
COMPLIANCE INFORMATION	New Zealand: Group 1-5 solution, compliant with the New Zealand Building Code 3.4(a) Australia: Group 1 solution, compliant with the Australian NCC CP4 using Codemark CW-30071		New Zealand: Group 1-5 solution, compliant with the New Zealand Building Code 3.4(a) Australia: Group 1 solution, compliant with the Australian NCC CP4 using Codemark CW-30071	New Zealand: Group 1-5 solution, compliant with the New Zealand Building Code 3.4(a) Australia: Group 1 solution, compliant with the Australian NCC CP4 using Codemark CW-30071



PRODUCT SELECTOR	STEEL 1001 BASECOAT	STEEL 1002	STEEL SQ476
			
BUCKET SIZE	18 ltr	18 ltr	18 ltr
WATER-BASED	✓	✓	X
SOLVENT	X	X	✓
HALOGEN-FREE	✓	✓	X
APPLICATION TO	Internal Structural Steel	Internal Structural Steel	Internal & External Structural Steel
TOP COAT REQUIRED IN C1 DRY ZONES?	X	X	X
C2-C3 INTERIOR ZONES?	✓ (with approved top coat)	✓ (with approved top coat)	✓ (with approved top coat)
CAN BE USED ON EXTERIOR STEEL?	X	X	✓
COMPLIANCE INFORMATION	New Zealand: Fire tested to EN13381-8:2013 and assessed by Exova Warringtonfire to BS476 parts 21 and 22 and 5th Edition Yellow Book using NZS 3404: Part 1, 1997 and complying with the New Zealand Building Code B1/VM1 and C2/AS1-C6/AS1 Section C5.1.1. Australia: Fire tested to EN13381-8:2013 and assessed by Exova Warringtonfire to AS1530.4 using AS4100:1998 complying with the NCC Building code of Australia Volume 2, Schedule 5	New Zealand: Fire tested to EN13381-8:2013 and assessed by Exova Warringtonfire to BS476 parts 21 and 22 and 5th Edition Yellow Book using NZS 3404: Part 1, 1997 and complying with the New Zealand Building Code B1/VM1 and C2/AS1-C6/AS1 Section C5.1.1. Australia: Fire tested to EN13381-8:2013 and assessed by Exova Warringtonfire to AS1530.4 using AS4100:1998 complying with the NCC Building code of Australia Volume 2, Schedule 5.	New Zealand: Tested to BS476 parts 21: 1987 as per NZS3404: Part 1, 1997 and complying with the New Zealand Building Code B1/VM1 and C2/AS1-C6/AS1 Section C5.1.1. Australia: Tested to BS476 parts 21: 1987 and assessed by Exova Warringtonfire to AS1530.4 using AS4100:1998 complying with the NCC Building code of Australia Volume 2, Schedule 5.



HOW TO ORDER

FIRESHIELD products can only be sold to Registered Applicators.

For enquiries, specification information, datasheets, safety data sheets, application advice, approved top coats, stains and primer coats, visit:

www.freshieldcoatings.com

Order online at **www.freshieldcoatings.com**

OR CONTACT US:

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