

# ARCHITECTURAL WHITE 4FR

Steel Intumescent coating for 30/60/90 minutes FRR



## PRODUCT DESCRIPTION

Fireshield ArchitecturalWhite<sup>4FR</sup> is a waterborne, halogen free, intumescent coating with a matt white finish, designed for use on interior structural steel. Fireshield ArchitecturalWhite<sup>4FR</sup> is optimised to achieve 30 and 60-minute FRR.

### CONDITIONS OF USE

Fireshield ArchitecturalWhite<sup>4FR</sup> is an industrial product and should only be applied by Accredited Applicators.

This product provides fire protection to steel beams and columns, for both open and hollow section profiles.

### COATING REQUIREMENTS:

Sequence of required coatings for **standard installation**:

1. Fireshield approved primer coat.
2. Fireshield ArchitecturalWhite<sup>4FR</sup>

Sequence of required coatings when used in areas where constant air **humidity is over 75%** or when a **washable surface** is required:

1. Fireshield approved primer coat.
2. Fireshield ArchitecturalWhite<sup>4FR</sup>
3. Fireshield Approved Top Coat

**NOTE:** Dry film thicknesses must be checked to ensure the specified thickness has been achieved before any topcoat is applied.

All steel sections must be coated with the correct film thickness as scheduled to achieve the required fire rating for compliance purposes. Final dry film thicknesses should not exceed over 30% of the specified dry film thickness scheduled.

### MAXIMUM FILM THICKNESS:

At +25°C and 50% relative humidity the recommended maximum wet film thickness is **800 µm per coat**.

Applying too thick or more than 1000 µm in one coat may cause:

- Cracking
- Poor adhesion
- Delay of drying time.

**NOTE:** Maximum film thickness may be reduced by poor air flow and environmental conditions differing from those listed above, which are a guide only. Contact Fireshield for more information.

### PRIMERS:

Fireshield ArchitecturalWhite<sup>4FR</sup> can only be applied to a primed surface. For the Fireshield Approved Primers list got to [www.fireshieldcoatings.com](http://www.fireshieldcoatings.com).

### TOPCOATS:

Fireshield ArchitecturalWhite<sup>4FR</sup> can only be top coated with Fireshield approved top coats. For the Approved Top Coats list got to [www.fireshieldcoatings.com](http://www.fireshieldcoatings.com)

### LIMITATIONS:

- For interior use only.
- Do not use on exterior steel structure.

## TECHNICAL INFORMATION

### STORAGE CONDITIONS:

Recommended storage conditions:

- Store at a temperature above +5°C and below +35°C
- Store indoors and undercover in temperate conditions.
- Store away from direct sunlight, do not expose to extreme heat.
- Do not allow to freeze.
- Keep containers closed when not in use.
- **Keep out of reach children!**

### SHELF LIFE:

12 months at +25°C if stored in original sealed containers under recommended storage conditions listed above.

**NON-VOLATILE CONTENT:** 68% +/- 2%

**SPECIFIC GRAVITY:** 1.4 +/- 3%

**VISCOSITY:** High viscosity

**FLASH POINT:** Non combustible

**VOC:** <50 gram/litre

**COLOUR/GLOSS:** White / Flat

**PACKAGING:** Weight 25 kg / Volume 18 litre approx.

**MIXING:** Mechanically mix. **DO NOT THIN!**

**CLEAN UP:** Warm potable, soapy water.

**THEORETICAL COVERAGE:** Approx. 7.0m<sup>2</sup> / litre at 100µm DFT.  
Approx. 1.4m<sup>2</sup> / litre at 500µm DFT.

### DRYING TIMES:

At a minimum air temperature of +23°C and relative air humidity of 50% the following drying times are applicable:

- 8 hours between coats of ArchitecturalWhite 4FR: and
- 48 hours minimum before top coating with Fireshield Approved top coat.
- Do not overcoat if not dry!

### NOTE:

Drying times have been calculated with a wet film thickness of 800 µm

Dry times may be lengthened by poor air flow and environmental conditions differing from those listed above, which are a guide only. Contact Fireshield for more information.

Application should not take place in conditions which are deteriorating, e.g. the temperature is falling or there is a risk of condensation forming. If condensation occurs over night during curing, dry times must begin again the following day.

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**APPLICATION NOTES**

The product must be applied in strict accordance with the Fireshield Application Instructions. In particular the applicator should ensure:

- Any steel surface that is to be coated is at a temperature above +5°C and below +35°C and is at least +3°C above the dew point.
- The surface to be coated must be completely clean and dry, remove all rust, dust, oil, grease, loose material or other contaminants.
- Check compatibility with any previous applied product before application.

**PRECAUTIONS:**

The following precautions must be taken:

- All work involving the application and use of this product should be compliant with all relevant National Health, Work Safety & Environmental standards and regulations.
- Read the Fireshield Application Instructions in full before application.
- Before use read the Fireshield ArchitecturalWhite<sup>4FR</sup> Material Safety Data Sheet (MSDS) and have a copy available on site at all times.
- Where conditions may require variation from the recommendations on this Product Data Sheet contact Fireshield for advice prior to painting. Do not apply in conditions outside the parameters stated in this document without the express written consent of Fireshield.

**ENVIRONMENT:**

During application and curing day or night ensure that:

- The air temperature must be between +10°C minimum to a maximum +35°C.
- The relative air humidity level is between 20% to 80%.
- Protect from wetting/moisture/windblown rain and water pooling on or around the coated steel section.

**APPLICATION METHOD:****AIRLESS SPRAY:**

Airless spray gives the best result. Airless spray with an inline heater (heater maximum temperature +35°C) can be used to assist application in the minimum temperature range.

**BRUSH:**

Brush application only suitable for small areas or touch-up and may result in a textured finish. Care must be taken to achieve the required specified dry film thickness. Typically, 100-300 microns(µm) can be achieved.

**ROLLER:**

Roller application only suitable for small areas or touch-up and may result in a textured finish. Care must be taken to achieve the required specified dry film thickness. Typically, 100-300 µm can be achieved.

**COMPLIANCE:****AUSTRALIA:**

Tested to EN13381-8:2013 and assessed by Exova Warringtonfire to AS1530.4 using AS4100:1998 complying with the NCC 2019 Building code of Australia Volume 2, Schedule 5.

**NEW ZEALAND:**

Tested to EN13381-8 :2013 and assessed by Exova Warringtonfire to BS476 parts 21 and 22 and 5<sup>th</sup> 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.

**SUPPLIED BY:****AUSTRALIA**

Fireshield Coatings  
13 North Concourse, Beaumaris,  
Victoria 3193, Australia  
ABN: 95 336 533 948  
Ph: 1800 092 097

**NEW ZEALAND**

Fireshield  
Level 1, 60 Cashel Street  
Christchurch 8013,  
New Zealand  
Ph: 0800 347 374



It is the user's responsibility to check that you have the latest technical datasheet available by visiting [fireshieldcoatings.com](http://fireshieldcoatings.com) or checking with your local Fireshield Representative as the information contained in this technical data sheet is modified from time to time in line with our policy of continuous product development. The information in this data sheet is not intended to be exhaustive; any person using the product for any purpose other than that specifically recommended in this data sheet does so at their own risk. All advice given or statements made about the product (whether in this data sheet or otherwise) are correct to the best of our knowledge, Fireshield has no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing to do so, we do not accept any liability at all for the performance of the product or for (subject to the maximum extent permitted by law) any loss or damage arising out of the use of the product. Fireshield hereby disclaim any warranties or representations, express or implied, by operation of law or otherwise, including, without limitation, any implied warranty of merchantability or fitness for a particular purpose. You should request a copy of this document and review it carefully.