

# TECHNICAL DATA SHEET

## FIRESHIELD 1FR

### (CLEAR INTUMESCENT)



#### PRODUCT DESCRIPTION

Fireshield 1FR is a halogen free, waterborne intumescent base coat.

#### SPECIAL PROPERTIES

Fireshield 1FR is an intumescent clear coating that foams into a thick layer when exposed to high temperatures derived from flames or intensive heat radiation from fire. The porous layer of foam effectively extinguishes the flow of heat to the treated surface. Fireshield 1FR shall always be used in conjunction with 1FR TOPcoat.

#### FIELD OF APPLICATION

Fireshield 1FR is used to prevent spread of fire on internal wall and ceiling linings made of solid wood or engineered timbers. Fireshield 1FR is also used for fire protection of structural timber works.

#### APPLICATION

**Refer to Fireshield 1FR Application Instructions.**

Ensure substrate is compliant, clean and clear of oils and dirt and moisture content is below 15% and will remain that way. Do not apply in conditions colder than 10°C or humidity above 80%.

If required, stain with an approved water-based product like Resene Colorwood.

Warm the intumescent, stir while warming until liquid temperature is 30°C, 40°C max. **DO NOT THIN!**

Use heated inline airless spray applicator for best results.

Spray 1 coat of Fireshield (water-based) Intumescent at 230µm wet film thickness = 300g/m<sup>2</sup>. Record appropriate number of measurements. Allow to dry for 48hrs, warm dehumidified environments will accelerate this process.

Spray 1 coat of Fireshield 1FR TOPcoat at 60µm wet film thickness. Refer to Fireshield 1FR TOPcoat data sheet for details.

Complete producer statement (PS3) and forward to main contractor or BCA and Resene Fireshield.

NOTE: Fireshield 1FR can be brushed or rolled on small or linear substrates, provided product viscosity and application conditions can be met. Airless spray for best finish.

All information in this sheet is to be considered as guidelines collected from technical tests and practical knowledge of the product. This information may not be used as a basis or verification for other tests or systems. Resene Paints Ltd and Fire Protection Coatings Ltd are not responsible for other application fields or incorrect handling. The user is responsible for using the latest version of this document. Consult Resene Paints Ltd Technical Services or [www.fireshield.co.nz](http://www.fireshield.co.nz)

#### DRYING TIME

Dry times at +23°C and humidity of 50% are as follows:

- 8 hrs between coats of Fireshield 1FR intumescent.
- 48 hrs before topcoating with Fireshield 1FR TOPcoat.

#### PROTECTIVE MEASURES

Preventive measures: Avoid contact with skin and eyes. Personal safety equipment: At handling where prolonged or repeated direct contact cannot be excluded protective gloves should be worn. Protective glasses are recommended when there is a risk of splashes. To avoid other types of direct contact suitable protective clothes are recommended. See further Safety Data Sheet.

#### ADDITIONAL DATA

Viscosity: High viscosity  
Flash point: Non-combustible  
Specific gravity: 1.3  
Non.vol.contnt: 65%

Thickness: 230µm wet film thickness will use 300h/m<sup>2</sup> and dry to 150µm dry film thickness.

Thinner: DO NOT THIN, wash up in warm soapy water

Storage: 12 months life-span. Do not store on concrete slabs and maintain a minimum 5°C storage temperature.

**MUST BE PROTECTED AGAINST FROST**

Wet paint quantity (g/m <sup>2</sup> )	Wet film (µm)	Dry film (µm)
300	230	150

#### APPROVALS

The Fireshield 1FR System has been tested in New Zealand and achieves Group 1-S, according to ISO 5660 Part 1 and Part 2. The product must be applied strictly in accordance with the application instructions, including accurate measurements and documentation.

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