

Fireshield TimberClear

Clear intumescent coating system for interior timber surfaces

PRODUCT INFORMATION

DESCRIPTION

Fireshield® TimberClear is a clear intumescent basecoat for use on interior timber substrates to provide a Group 1-S fire rating, it is the first coat of a two-coat system and must be sealed with Fireshield® TimberClear Top Coat Matt or Semi-Gloss to complete the fire protection system.

RECOMMENDED USE

Refer to the TimberClear Application Guide for further information, in particular:

- Fireshield® TimberClear is an industrial product and can only be applied by Fireshield® Registered Applicators.
- The timber substrate must be > 8mm and have a density of > 338kg/m³.
- The timber substrate moisture content must less than 15%.
- All timber surfaces must be coated with the correct film thickness as listed on this PDS to achieve the required Group Surface rating.
- Timbers that are prone to leeching or firing may benefit from a Fireshield® approved clear primer coat first.
- Compatibility with any previously applied product should be checked with Fireshield® before application of this product.
- Do not clean installed TimberClear systems with industrial strength cleaners, see Maintenance Guide for appropriate cleaners.
- Can be used for interior structural fire rating of timber members, contact Fireshield® for specific design options.

MAXIMUM FILM THICKNESS

At 23°C and 50% relative humidity the required wet film thickness of 230µm can be applied in one coat when using an airless spray unit, however consider reducing the film thickness when poor air flow and environmental conditions differing from those listed above are present and apply in two thinner coats.

CLEAR PRIMERS/STAINS

Fireshield® TimberClear can only be applied over Fireshield® approved clear primers and stains. For the Approved Clear Primers and Stains list go to fireshieldcoatings.com.

TOPCOATS

Fireshield® TimberClear is only compatible with Fireshield® TimberClear Top Coat Matt or Semi-gloss provided by Fireshield to complete the system. Do not apply any other top coats over Fireshield® TimberClear.

LIMITATIONS

- For interior use only in dry, C1 zones. Do not use in external applications!
- Intumescent coatings require an expansion gap of 50 x the dry film thickness from the coated surface to any adjoining surface.
- When considering off site application refer to the Fireshield® Application Guide for application, drying and handling/transport options as coated surfaces may adhere to one another. Contact Fireshield® for expert advice prior to coating.
- When using dark timber substrates or substrates with approved dark stains, consider applying TimberClear in two thinner coats to maximise the clear finish.
- Applying the product well above the recommended film thickness or outside of the recommended environmental conditions can result in a opaque, uneven or spotted finish.

TECHNICAL INFORMATION

Specific gravity	1.3
Non-volatile content	63% +3%
Flash point	Non combustible
Viscosity	High viscosity
Colour	Clear
Packaging	9.6 litre / 12.5kg weight approx.
Mixing	Mechanically mix.
Thinning	DO NOT THIN!
Clean up	Potable Water

GROUP 1-S / GROUP 1 COMPLIANCE FILM THICKNESS:

Wet Film Thickness	230 microns WFT
Dry Film Thickness	150 microns DFT
Grams/m ²	300 grams/m ²

DRYING TIMES

The following drying times have been measured with a wet film thickness of 230µm and at an air temperature of 23°C and relative air humidity of 50%:

- 8 hours between coats of TimberClear
- 48 hours before top coating with Timberclear Top Coat.
- Do not overcoat if not dry!

NOTE: Dry times may be lengthened or shortened by environmental conditions differing from those listed above, which are a guide only. Application should not take place in conditions which are deteriorating, e.g. the temperature is falling or there is a risk of condensation forming.

STORAGE CONDITIONS

Recommended storage conditions:

- Store at a temperatures 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 of children

SHELF LIFE

Minimum 12-months when stored in the conditions listed above in original sealed containers, product is subject to re-inspection thereafter as shelf life is not an expiry date.

WARRANTY

Project specific product warranties are available if required, contact Fireshield for more details.

APPLICATION NOTES

The product should be applied in accordance with the Fireshield® Application Guide, TimberClear is an industrial product and can only be applied by Fireshield® Registered Applicators, the Applicator should ensure:

- Ensure the timber substrate is > 8mm and has a density > 338kg/m³
- The surface to be coated is completely clean and dry. Remove all dust, oil, grease, loose material or other contaminants as per AS/NZS 2311 Sec 3.2.7.
- Application occurs using suitable equipment for the substrate, working conditions and desired finish, stir occasionally while using.
- Fill out Daily Record Sheets and PS3/Statement of Construction for compliance sign off at the conclusion of coating process and record all wet film measurements.

PRECAUTIONS

Read the Fireshield® TimberClear Material Safety Data Sheet (MSDS) before application and have a copy available on site at all times.

Read the Fireshield® Timber Application Guide AI-FSANZ in full before application, a copy is available on our website.

All work involving the application and use of this product should be compliant with all relevant National Health, Work Safety & Environmental standards and regulations.

Where conditions may require variation from the recommendations on this Product Data Sheet contact Fireshield® for advice prior to painting.

APPLICATION ENVIRONMENT

For optimal finish and drying conditions application at > + 20°C air temperature and 50% relative air humidity is advised, however the product can be applied in the following conditions:

- The air temperature > +10°C and < +35°C.
- The relative air humidity level is < 75%.
- The area is well ventilated with constant air flow across the coated surface. Electric heaters and dehumidifiers should be used to help control the environmental conditions if necessary.
- During application or drying protect from wetting/moisture/condensation and human impact.

These conditions are advised during application, curing and drying twenty four hours a day until the system is cured.

SYSTEM MAINTENANCE

The system has the ability to resist temporary contact with moisture, human impact and abrasion however, excessive wear or moisture contact may damage the system and if so, require inspection and possible remediation. A copy of the Maintenance Guide is available on our website.

SUPPLIER : FIRESHIELD

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Manufactured by:



It is the user's responsibility to check that you have the latest technical datasheet available by visiting 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.

APPLICATION METHOD

Always submit a sample for contract sign off prior to application, particularly when considering brush or roller application.

**AIRLESS SPRAY**

Airless spray is the recommended method of application and gives the best result. Airless spray with a heated hose or in-line heater (maximum temperature +30°C) can be used to assist application.

Airless Equipment Recommendations

Pump flow rate	5 litres per minute e.g Wagner/Graco MkV
Hose Diameter	Dedicated hoses not below 3/8"
Spray Tip	511 to 517 tip size. Choose appropriate fan width depending upon substrate to be coated 30° - 60°
Atomising Pressure	2,200 - 3300 psi
Heated hose or in-line Heater	Can be used in colder conditions to maintain product at room temperature to a maximum of +30°C.

NOTE: Ensure there is no excess water or moisture in the airless pump unit when spraying the TimberClear basecoat or the TimberClear Top Coat as this will cause permanent blotching to the basecoat that may not be immediately visible. Ensure environmental conditions listed are maintained to avoid blotching or a milky appearance.

**BRUSH**

Brush application will result in a textured finish. Care must be taken to achieve the required specified dry film thickness. Typically, 100-300µm can be achieved per coat.

**ROLLER**

Roller application will result in a textured finish. Care must be taken to achieve the required specified dry film thickness. Typically, 100-300µm can be achieved per coat.

COMPLIANCE

New Zealand Group 1-S: Tested to EN13501-1:2018 and achieves Fire Class B-s1-d0. This is recognised as equivalent to Group 1-S under the NZBC Clause 3.4(a) providing compliance with NZBC C/AS1-C/AS7

Australia Group 1: Codemark Certificate of Conformity CM-30071 providing Group 1 surface rating and compliance with the NCC 2022 C1P4 for Class 2-9 Buildings. See the Codemark certificate for all conditions relating to a compliant application and installation.



See TD-FSTOPNZ for Top Coat TDS