

TimberClear

Clear Intumescent Coating For Interior Timber Surfaces

PRODUCT INFORMATION

DESCRIPTION

Fireshield® TimberClear is a clear intumescent coating designed for use on interior surfaces of timber based substrates and is the initial coating of a two-coat system. Following the initial coat of Fireshield TimberClear a coat of **Fireshield TimberClear Top Coat Matt** or **Semi-Gloss** must be applied to complete the overall fire protection coating system.

RECOMMENDED USE

Fireshield TimberClear is an industrial product and can only be applied by Fireshield Registered Applicators. This product provides the following group rating for internal timber based substrate wall and ceiling surfaces:

New Zealand	Group 1-S
Australia	Group 1

See the TimberClear Application Guide for further information, in particular:

- The timber substrate moisture content must be 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 furring 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.

Maximum film thickness

At 23°C and 50% relative humidity, using an airless spray unit the maximum wet film thickness applied in one coat is 230µm.

NOTE: The maximum film thickness may be reduced by poor air flow and environmental conditions differing from those listed above, which are a guide only.

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 TimberClear.

LIMITATIONS

- The wood-based substrate must be ≥ 8mm or thicker and have a density ≥ 338kg/m³. For interior use only in dry, C1 zones.
- Can be used for interior structural fire rating of timber members, contact Fireshield for specific design options.
- Intumescent coatings require an expansion gap of 50 x the dry film thickness from the coated surface to any solid surface.
- When considering off site application refer to the Fireshield Application Guide AI-FSANZ02 for application, drying and handling/transport options as coated surfaces that are not fully cured may adhere to one another. Contact Fireshield for expert advice prior to coating.
- **Do not use in external applications!**

TECHNICAL INFORMATION

Specific gravity	1.3
Non-volatile content	65%
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	Water

COATING THICKNESS (to achieve Group 1-S / GROUP-1)

Minimum WFT	≥ 230 microns WFT
Minimum DFT	≥ 150 microns DFT
Minimum grams/m²	≥ 300 grams/m²

DRYING TIMES

The following drying times have been measured with a wet film thickness of 230µm:

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 TimberClear and
- 48 hours minimum before top coating with Timberclear Top Coat Matt or Semi-gloss
- Do not overcoat if not dry!

NOTE: 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.

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

12-months at +25°C if stored in original sealed containers under recommended storage conditions listed on this PDS. Do not use product that is beyond the Manufacturers shelf life date shown on the bucket. Contact Fireshield® if in doubt.

APPLICATION NOTES

The product must be applied in strict accordance with the Fireshield application instructions. In particular the Applicator should ensure:

- Ensure the timber substrate is $\geq 8\text{mm}$ or thicker and has a density $\geq 338\text{kg/m}^3$
- 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.
- The product is occasionally stirred while using.
- Application occurs using suitable equipment for the substrate, working conditions and desired finish.
- Fill out Daily Record Sheets and PS3/Statement of Construction for compliance sign off at the conclusion of coating process record all wet film measurements.

PRECAUTIONS

The following precautions must be taken:

- 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-FSANZ02 in full before application.
- 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. Do not apply in conditions outside the parameters stated in this document without the express written consent of Fireshield.

APPLICATION ENVIRONMENT

During application and drying, day or night ensure that:

- The air temperature is above $+10^\circ\text{C}$ and below $+35^\circ\text{C}$.
- The relative air humidity level is below 75%.
- The area is well ventilated with constant air flow.

During application or drying protect from wetting/moisture/condensation and human impact. Electric heaters and dehumidifiers can also be used to help control the environmental conditions if necessary.

MAINTENANCE

The system has the ability to resist minor contact with moisture, 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 from fireshieldcoatings.com.

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

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 $+30^\circ\text{C}$) can be used to assist application in the minimum environmental temperature range.

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	Orifice size range of 511 to 517 tip size. Choose appropriate fan width depending upon substrate) to be coated $30^\circ - 60^\circ$
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 $+30^\circ\text{C}$.

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, $100-300\mu\text{m}$ can be achieved per coat.

Roller

Roller application not advised, if used 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, $100-300\mu\text{m}$ can be achieved per coat.

COMPLIANCE

New Zealand: 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: 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.

WARRANTY

12-month manufacturers shelf life warranty applies to product within the shelf life period.



See TD-FSTOPNZ-06 for Top Coat details