

TimberOne

Single pack waterborne intumescent system for interior timber surfaces.

PRODUCT INFORMATION

DESCRIPTION

Fireshield® TimberOne is a waterborne, halogen free, intumescent coating with translucent finish to show the natural grain of the timber.

TimberOne is designed to provide the highest group surface fire rating on interior surfaces of light coloured timber substrates such as pine, birch and spruce.

TimberOne can be used to reduce the yellowing effect of pine substrates such as CLT, it can be tinted any colour.

Seal TimberOne with TimberOne Topcoat when:

- Applied in humid areas >75% RH or
- When a wipeable surface is required.

RECOMMENDED USE

Fireshield® TimberOne is an industrial product and can only be applied by Registered Applicators providing a PS3 at the conclusion of the coating process.

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

- The timber substrate moisture content $\leq 15\%$.
- All timber surfaces must be coated with the correct film thickness as scheduled to achieve the required Group Surface rating.
- Do not clean surface with industrial strength cleaners, see the Fireshield Maintenance Guide for appropriate cleaners.
- The recommended 200µm wet film thickness can be achieved in one coat with an airless spray unit.

TimberOne provides the following certified fire rating for internal timber based substrate wall and ceiling surfaces:

- **Group 1-S**

PRIMERS/STAINS

Not recommended for use with any primers or stains.

TOPCOATS

Fireshield® TimberOne is only compatible with Fireshield® TimberOne Top Coat Matt or semi-gloss provided by Fireshield.

LIMITATIONS

- The wood-based substrate must be $\geq 8\text{mm}$ or thicker and have a density $\geq 338\text{kg/m}^3$
- For interior use only in dry, C1 zones.
- All intumescent coatings require an expansion gap of 50 x the dry film thickness from the coated surface to an adjacent solid surface.
- **Do not use in external applications!**

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 Fireshield® Timber Coating Maintenance Guide is available from Fireshield®.

TECHNICAL INFORMATION

Specific gravity	1.2
Non-volatile content	57% +/- 3%
Flash point	Non combustible
Viscosity	High viscosity
Colour	Opaque White
Packaging	8.3 litre / 10kg weight approx.
Mixing	Mechanically mix.
Thinning	DO NOT THIN!
Clean up	Water

FILM THICKNESS FOR GROUP 1-S COMPLIANCE

Minimum WFT	> 200 microns WFT
Minimum DFT	> 100 microns DFT
Minimum grams/m ²	> 250 grams/m ²
Spread Rate @200µm WFT	4.8m ² /litre

NOTE: Spread rate is theoretical at zero wastage, please allow appropriate wastage factor in all final spread rate calculations.

DRYING TIMES

At a wet film thickness of 200µm, a minimum air temperature of 23°C and relative air humidity of 50% the following drying times are applicable:

- **1 hour between coats of TimberOne and**
- **4 hours minimum before top coating with TimberOne Top Coat.**

NOTE: Do not overcoat if not dry! Dry times may be lengthened by poor air flow and environmental conditions differing from those listed above, which are a guide only.

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 TDS. Shelf life date is on the bucket.

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 .
- 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.

PRECAUTIONS

The following precautions must be taken:

- Read the Fireshield® TimberOne Material Safety Data Sheet (MSDS) before application and have a copy available on site at all times.
- Read the Fireshield® Timber Application Guide 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 Technical 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.

SUPPLIER : Fireshield®

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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 $30^\circ - 60^\circ$
Pump Pressure	1750-2350 psi
Heated hose or in-line Heater	Optional: 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, $100\text{-}200\mu\text{m}$ 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, $100\text{-}200\mu\text{m}$ can be achieved per coat.

COMPLIANCE

New Zealand: Tested to EN13501-1:2010 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

WARRANTY

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



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.