SPECIFICATION

PRODUCT: FireZone 92 - FIRE RESISTANT CLEAR COAT SYSTEM

SUBSTRATE: INTERIOR TIMBER – WALL & CEILING LININGS

SPECIFICATION CODE: FZ-92.1S

FIRE RATING: Group 1S in accordance with NZBC Clause 3.4(a) as tested on 20mm spruce being a Type 2 substrate. Test Reference: 2013–Efectis-R0341c. European Classification to EN13501-1:2007 as per MBIE guidance 30 March 2015.

PRODUCT DESCRIPTION

FireZone 92 is a clear fire resistant coating system designed to protect timber substrates from fire by developing a thick char barrier when exposed to high temperatures or flame. Tested to EN13501-1:2007 in accordance with NZBC Clause 3.4(a), FireZone 92 system has achieved a B-s2-d0 European reaction to fire classification rating on uncoated, 20mm spruce timber with a density of approx. 460kg/m3, being a Type 2 substrate in accordance with NZBC C/VM2 Amendment 4, Table A.2.
The system comprises two coats of water based intumescent basecoat and one coat of water based top coat.

PRODUCT CHARACTERISTICS

FireZone 92-BC is a water based, clear intumescent basecoat, capable of providing a fire resistant barrier on interior timber linings.
FireZone 92-TC is a water based, clear top coat, designed to provide a serviceable and protective finish to the FireZone 92 system.
FireZone 92 system is suitable for residential, commercial and industrial projects for both new and refurbishment applications.
The system must be applied complete and no substitutions can be applied for any part of the system.

MATERIALS

FireZone 92 is a water based intumescent clear coating system for interior timber linings. All products are manufactured from high-grade materials to rigid specifications. As we have no control over the conditions under which our products are transported, stored, handled or used, customers are advised to check them before use. Customers must read the manufacturer's standard terms and conditions of sale. All coating systems used are to be FireZone products, prepared, mixed and applied in accordance with the relevant label instructions, data sheets, and specifications, or products approved by Zone Architectural Products.

THINNER / ADDITIVES

Thinning of FireZone products is not recommended. Do not use additives.

CLEAN-UP

Clean up with water

COLOURS: Clear

SHEEN: Matt

LIMITATIONS

- FireZone 92 system is approved for interior use only
- The manufacturer has tested the FireZone 92 fire resistant coating system to EN 13501-1:2007, in accordance with NZBC Clause 3.4(a). Contact Zone Architectural Products for further information
- Ensure that the intended substrate is suitable for use with FireZone 92 for thickness, density and type
- Consult the project fire engineer to confirm that the application of FireZone 92 will achieve the required reaction to fire ratings
- Do not apply any stains or other coatings to the substrate without consulting Zone Architectural Products

Zone Architectural Products is NOT responsible for determining the regulatory requirements with respect to passive fire performance standards of the elements and buildings on which it is used, and these regulations may change from time to time. It is strongly suggested that, before this coating is specified its use is checked with a Fire Engineer to determine its suitability to the NZBC applicable at that time.

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APPLICATION

Thoroughly power mix all components of the FireZone system for approximately 5 minutes immediately prior to application

FireZone 92 must be applied by Zone **APPROVED APPLICATORS**

- Refer to individual component product data sheets for mixing requirements and specific application information

SPRAY EQUIPMENT

- FireZone 92 may be applied by spray
- Refer to FireZone 92 application data sheet for further information

BRUSH / ROLLER

- FireZone 92 may be applied by brush and roller
- Refer to FireZone 92 application data sheet for further information

APPLICATION CONDITIONS

ALWAYS undertake an on-site sample of the product prior to starting the job and get client/architect approval before proceeding. Ensure the opacity and finish is acceptable. If in doubt contact the supplier.

- Room and substrate temperature at application must be at least 15℃ and rising. The recommended temperature range for application is between 18°C and 27°C. Do not apply if temperature will fall below 15℃ within two hours of application. Application should not proceed if the surface or air temperature exceeds 30℃
- Ensure there is adequate "through ventilation" in all areas where application will occur. Airflow is important to ensure the product cures correctly
- Maximum relative humidity for application is 70%.
- The use of forced air heaters and fans may be required to ensure the environment is suitable for application
- Ensure substrate moisture levels are less than 15%
- Ensure product is always stored and transported between 10 and 25 degrees Celsius

It is the sole responsibility of the applicator to ensure that the FireZone 92 system has been applied in accordance with the specification. Ensure that air temperature, humidity and substrate moisture levels are checked and recorded at regular intervals throughout the application.

WORKMANSHIP

GENERAL

In all respects these are deemed to be those methods, practices and techniques contained in AS/NZS 2311 - Guide to the Painting of Buildings. All work is to be carried out by suitably qualified and approved personnel familiar with the coating systems and techniques specified.

APPROVED APPLICATORS

This coating systems must only be applied by Zone Approved Applicators. Refer to Zone Architectural Products for a list of current approved applicators.

ADJACENT SURFACES

Protect all adjacent surfaces by way of masking and drop cloths. Clean up any drips runs or spills immediately, do not allow to dry.

STANDARD OF FINISH

Prepare samples of finished work, obtain client approval prior to commencing full project application. Apply the product to the sample using the same application method that will be used to complete the project. Ensure that sample patches are on a sample of the project substrate that is able to be sent for approval. Check that the gloss, colour and opacity of the applied product are acceptable.

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HEALTH & SAFETY

All work carried out under this specification shall be in tradesman like manner, with due regard to prevention of contamination of the site and associated work. Appropriate steps are to be taken to protect the health and safety of any person who is on the site for any reason. Refer to the governing Health and Safety regulations. Minimize hazards on site by using the proper trade approved equipment and techniques. Ensure the appropriate protective clothing and equipment has been supplied and is used correctly. Refer to product material safety data sheets and product data sheets for information on appropriate PPE. Ensure that all people in the immediate vicinity are evacuated unless they are wearing the appropriate protective equipment and clothing. Do not apply this product without consulting the safety data sheets, and ensuring that all protective measures are taken to protect all people and animals in the vicinity of the application.

SURFACE PREPARATION

FireZone 92 system can be applied directly to bare, uncoated timber substrates that have been suitably prepared to accept a clear coating.

PREPARATION - NEW TIMBER SUBSTRATE

Lightly sand, if required, to provide a smooth surface suitable for accepting application of a clear coating. Ensure the substrate is compatible with the FireZone 92 coating system and apply the full system with **no** substitutions.

CLEAN SURFACES

Ensure all surfaces are thoroughly cleaned down to remove all contaminants before proceeding with application

SUBSTRATE MOISTURE CONTENT

Moisture content of timber must be below 15%

COATING SYSTEM - INTERIOR TIMBER SURFACES - BARE UNCOATED

	Product	Data Sheet	Theoretical Spread Rates*	Wet Film Thickness (WFT)**
1st PRODUCT Intumescent Basecoat	FireZone 92-BC	FireZone 92	10 m^2/litre	83 microns
2nd PRODUCT Intumescent Basecoat	FireZone 92-BC	FireZone 92	12 m^2/litre	83 microns
3rd PRODUCT Intumescent Top coat	FireZone 92-TC	FireZone 92	12 m^2/litre	83 microns

The above described system has been assessed to achieve a Group 1S in accordance with NZBC Clause 3.4(a) as tested on 20mm spruce

*Practical spread rates will vary from the quoted theoretical spread rates due to factors such as application conditions, surface roughness and porosity.

**Ensure that the correct WFTs are achieved.

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RECOAT AND DRY TIMES at 15- 20°C ambient temperature and 55% relative humidity with adequate airflow

	FireZone 92-BC Basecoat	FireZone 92 TC Top coat
Touch dry after	1 hour	2 hours
Hard dry after	4 hours	4 Hours
Re-coat time (min)	4 hours	4 hours
Re-coat time (max)	N/A	N/A
Curing	20 days	20 days

Ensure there is adequate free flowing ventilation and enough time allowed between successive coats to permit proper drying. Do not recoat surfaces until paint has dried to where it feels firm, does not deform or feel sticky under moderate thumb pressure and where applying another coat does not cause a lack of adhesion or cracking / deformation of the surfaces. Protect surfaces from being exposed to direct sunlight, excessive heat, low temperature contamination or humidity during the drying period. Drying and re-coating times will vary with actual dry film thickness, temperature, relative humidity and ventilation. Protect sheets appropriately if block stacking for transport and to ensure that damage to the coating will not occur. Please refer to product data sheets at www.zone.net.nz

CAUTION

The correct temperature, relative humidity and airflow must be maintained throughout the application/drying/curing period of FireZone 92. Failure to do so may lead to the product not curing correctly, which may affect its hardness, clarity or other attributes. It is the applicators responsibility to ensure all application conditions are in line with the specification.

GENERAL

FireZone 92 has been designed for internal use on timber substrates. The expected life of the system is dependent on individual site conditions but is expected to be not less than 15 years, with maintenance and recoat of the top coat expected at 5-7 years. A fitness for purpose warranty reflecting this will be issued on request of the Approved Applicator. The substrate must not be modified in any manner unless the supplier is consulted and approves the modification in writing, as the fire rating may be compromised by modification including over coating.

Should the surface described in this specification be different to that which is being used on the project, refer to the client for direction. Spread rates are theoretical. Notwithstanding good application practice, some minor DFT variance can be expected, with a greater thickness occurring in internal angles and on substrates with a textured profile. Protect coated surfaces from dust and contamination during and within 4 hours of application. This specification should be read in conjunction with the manufacturer's recommendations contained in the relevant product data sheets, safety data sheets, and application guidelines issued from time to time.

CERTIFICATION

Approved Applicators are responsible for project specification and certification. It is the applicators responsibility to ensure that they have applied the coatings in accordance with the project specification and the relevant instructions and data sheets. The applicator must keep accurate records detailing application is in accordance with the specification. Refer to project manager, main contractor, architect or manufacturer for details. Intumescent coating certificates can be issued on completion of application and once applicators QA has been sighted and passed as acceptable by Zone to support code compliance.

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CHECKLIST

☐	**STORAGE**	Have the products been stored and transported correctly at all times (10ºC - 25ºC)?
☐	**TEMPERATURE**	Is temperature within limits (15ºC - 27ºC)?
☐	**HUMIDITY**	Is the relative humidity less than 70%?
☐	**CONSISTENCY**	Are the contents thoroughly mixed?
☐	**MOISTURE**	Is moisture content of timber below 15%?
☐	**SURFACE**	Are all substrates clean, dry, sound, and correct for application of FIREZONE 92. Has an adhesion test and sample of FIREZONE 92 been completed?
☐	**COLOUR**	Has gloss, colour and opacity been checked and approved on samples prior to full application?
☐	**MEASUREMENT**	Correct quantities available to complete in accordance with minimum spread rate? Is a Wet film comb on site?
☐	**SAFETY**	Safety data sheets on site and health & safety measures in place?
☐	**NEED HELP?**	Phone: 0800 508 800 Email: info@zone.net.nz Website: www.zone.net.nz

DISCLAIMER: Any advice, recommendation, information, assistance or service provided by Zone Architectural Products is provided without liability or responsibility PROVIDED THAT the foregoing shall not exclude, limit, restrict or modify the right entitlements and remedies conferred upon any person or the liabilities imposed upon Zone Architectural Products by any condition or warranty implied by Government Act or Local Authority Ordinance void or prohibiting such exclusion limitation or modification. Coating systems can be expected to perform as indicated on the specification so long as applications and application procedures of the individual products are followed as recommended on the appropriate product data sheets. Please note that this document is valid for 60 days from the date of issue and is subject to change without notification. This specification should be read in conjunction with the product data sheets specified within this document.

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