

# SPECIFICATION

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**PRODUCT:** FireZone 52 WHITE FIRE RESISTANT INTUMESCENT COATING

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**SUBSTRATE:** 12-16mm LATH AND PLASTER CEILING WITH TIMBER FLOOR ABOVE

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**SPECIFICATION CODE:** FZ-52LP-90C

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**FIRE RATING:** 90/90/90

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## PRODUCT DESCRIPTION

A water-based, thin film, one-component acrylic fire resistant coating containing 67% solids by weight, designed to protect various substrates from fire by developing a thick char barrier when exposed to high temperatures or flame.

## PRODUCT CHARACTERISTICS

FireZone 52 is a white pigmented intumescent coating capable of providing a fire resistant barrier on a variety of substrates including; paper-faced gypsum plaster board, plaster, medium density fibre board, particle board and other wood products, concrete and cementitious fibre board. Suitable for residential, commercial and industrial projects, for both new and refurbishment applications.

## MATERIALS

FireZone 52 is a nontoxic water based acrylic fire resistant coating. All FireZone 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 as directed in accordance with the relevant label instructions, data sheets, and specifications.

## THINNER / ADDITIVES

Use only if and when expressly directed and approved by Zone Architectural Products, for a particular product and application.

## COLOURS

White. Should be top coated with standard acrylic top coats to desired finish colour.

## SHEEN

Low Sheen

## LIMITATIONS

FireZone 52 is approved for interior use (for exterior use, please contact Zone Architectural Products), and is not designed for use on structural steel. The manufacturer has tested FireZone 52 fire resistant paint, as a component in various fire resistant rated assemblies. FireZone 52 has been tested, and achieved the 90 minute FRR, on the following ceiling assembly minima:

- Ceiling/Floor: 12-16mm (5/8") lath and plaster, fixed to the underside of 195 x 50 timber joists, at 400mm centres. Full timber blocking at 1200mm centres, and herring bone bracing. Tongue and groove, 100 x 20mm, floorboards were affixed to the unexposed face of the joists.

Ensure that the floor/ceiling assembly is approved by a fire engineer as being suitable to achieve the FRR, prior to application of FireZone 52.

Contact Zone Architectural Products for more information. Zone Architectural Products is not responsible for determining the regulatory requirements with respect to passive fire performance standards of the elements on which it is used.

## APPLICATION

**Application is by APPROVED APPLICATORS only.**

FireZone 52 must be applied by airless sprayer.

Power mix FireZone 52 for a minimum of 5 minutes, working from bottom to top of pail, to ensure a smooth and consistent product prior to application. Ensure that product is mixed during application so no settling occurs.

### SPRAY EQUIPMENT

- Pump: For best results use a piston pump airless spray with a minimum 4 litres per minute rating, at 3000psi.
- Tip: 517 - 521, or similar.
- Filter: 60 mesh
- Pressure: 2100 PSI or higher
- Hose: Use minimum size of 10mm (3/8") airless spray line for the first 15 metres from pump.
- Use of a dedicated spray line is required.

Recommended dry film thickness (DFT) depends on the substrate and the level of protection specified. See test data for recommendations, or contact Zone Architectural Products for technical assistance.

## APPLICATION CONDITIONS

Temperature of substrate and application must be at least 10°C and rising. The recommended temperature range for application is between 12°C and 25°C. Do not apply if temperature will fall below 10°C within two hours of application. Do not apply if the relative humidity is at or above 85%. At all times protect the coating from moisture damage. It is the sole responsibility of the applicator to ensure that FireZone 52 has been applied in accordance with the specification. Application should not proceed if surface or air temperatures exceed 30°C.

## 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 FireZone coating systems and techniques specified.

### APPROVED APPLICATORS

FireZone coating systems must only be applied by 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, and obtain the 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 done 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.

## 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 has reason to be on site. 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.

## LEAD / ASBESTOS

Existing coatings may contain lead and or Asbestos. Test surfaces accordingly. All necessary precautions must be taken with existing painted surfaces that contain lead or asbestos. Consult with local authorities for instructions on the removal, treatment and disposal of contaminants.

## SURFACE PREPARATION

**FireZone 52 Basecoat must be applied over FireZone 52 Adhesion Primer to conform to the test conditions.**

### PREPARATION

Lightly sand or scrape to remove all loosely adhering coatings, drummy plaster or other surface defects to improve adhesion of subsequent coats.

### CLEAN SURFACES

Thoroughly wash and rinse the surfaces. Remove all dirt, dust, grease, wax, oil, and other contaminants with warm soapy water and a sponge. Change the wash and rinse solutions frequently. Clean with soft cloth. Allow to dry. Fill holes, cracks and surface imperfections with an appropriate filler. All loose and flaking paint to be scraped off the substrate and remaining edges sanded smooth.

### CRITICAL LIGHTING CONDITIONS

Where critical lighting conditions exist, it is recommended that a second coat of primer/sealer is applied, especially where variations in porosity of substrate are present. This will minimize substrate defects and joint photographing through the finish coats.

## COATING SYSTEM – LATH PLASTER CEILING – FRR 90/90/90

	Product	Data Sheet	Theoretical Spread Rates**	Wet Film Thickness	Dry Film Thickness*
<b>1<sup>st</sup> PRODUCT Sealer Undercoat</b>	FireZone 52 Adhesion Primer	FireZone 52 Adhesion Primer	10 m <sup>2</sup> /litre**	100 microns	50 microns*
<b>2<sup>nd</sup> PRODUCT Intumescent Basecoat</b>	FireZone 52 Basecoat	FireZone 52 Basecoat	0.96 m <sup>2</sup> /litre**	1,050 microns	700 microns*
<b>3<sup>rd</sup> PRODUCT Top coat</b>	Approved Acrylic	Manufacturer data sheet	Refer to manufacturer	Refer to manufacturer	Refer to manufacturer

\* Dry film thickness for FireZone 52 - DFT's will vary depending on FRR required, as per fire engineers report. Refer FireZone 52 data sheet.

\*\* Practical spread rate will vary from the quoted theoretical spread rate due to factors such as method and condition of application and surface roughness.

FireZone 52 must be top coated with approved acrylic top coats to improve serviceability. Ensure that all top coats are approved in writing by Zone Architectural Products

## RECOAT AND DRY TIMES

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 or low temperature during the drying period. Drying and re-coating times will vary with actual dry film thickness, temperature, relative humidity and ventilation. Please refer to product data sheets which are available at [www.zone.net.nz](http://www.zone.net.nz)

## GENERAL

FireZone recommends that all areas that have had FireZone 52 applied as a passive fire protection coating, be labelled to clearly show that the assembly is fire rated. Labels are available from Zone Architectural Products on request.

Should the surface described in this specification be different to what 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 contamination during and within 6 hours of application. This specification should be read in conjunction with the manufacturer's recommendations contained in the relevant data sheets.

## CERTIFICATION

For work that requires certification ensure that the contract details are submitted to Zone Architectural Products prior to commencing application. Contact third party inspector to verify dry film thickness of completed works for final certification as required. Refer to project manager, main contractor, architect or manufacturer for details.

Intumescent coating certificates can be issued on completion of application to support code compliance.

## CHECKLIST

<input type="checkbox"/>	<b>TEMPERATURE</b>	Is temperature within limits (10°C - 30°C)
<input type="checkbox"/>	<b>HUMIDITY</b>	Is the relative humidity less than 85%?
<input type="checkbox"/>	<b>CONSISTENCY</b>	Are the contents thoroughly mixed?
<input type="checkbox"/>	<b>SURFACE</b>	Are all substrates clean, dry and sound and correct for application of FireZone 52? Has an adhesion test and sample of FireZone 52 been completed?
<input type="checkbox"/>	<b>COLOUR</b>	Has gloss, colour and opacity been checked and approved on samples?
<input type="checkbox"/>	<b>MEASUREMENT</b>	Correct quantities available to complete in accordance with minimum spread rate? Wet film comb on site?
<input type="checkbox"/>	<b>SAFETY</b>	MSDS on site and health & safety measures in place
<input type="checkbox"/>	<b>NEED HELP?</b>	Phone: 0800 508800 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. This specification should be read in conjunction with the product data sheets specified within this document.