SPECIFICATION

PRODUCT: CAP 800-1S FIRE RESISTANT CLEAR COAT SYSTEM

SUBSTRATE: INTERIOR TIMBER – Uncoated Timber

SPECIFICATION CODE: ZP800-1S

FIRE RATING: Group1S to ISO-5660.2002 in accordance with NZBC C/VM2 2012 as tested on 9.5mm Douglas Fir Plywood being a Type 1 (most reactive) substrate. As tested by APL – Test Reference: 138/7/8/10B

PRODUCT DESCRIPTION

CAP800-1S 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 ISO-5660.2002 in accordance with NZBC verification method C/VM2, CAP800-1S system has achieved a Group1S rating on uncoated, 9.5mm Douglas Fir Plywood being a Type 1 substrate in accordance with NZBC C/VM2 Amendment 4, Table A.2. The system comprises of one coat CAP100 sealer, two coats CAP800 intumescent basecoat and one coat CAP830 top coat.

PRODUCT CHARACTERISTICS

CAP100 is a single component clear acrylic, designed as a sealer coat prior to the application of CAP800 intumescent basecoat.
CAP800 is a two component water soluble clear solvent intumescent basecoat, capable of providing a fire resistant barrier on interior timber linings.
CAP830 is a two component solvent borne clear top coat, designed to provide a serviceable and protective finish to the CAP800-1S system
CAP800-1S 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

CAP800-1S is a solvent based intumescent clear coating system for interior timber linings. All CAP 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 CAP products, prepared, mixed and applied in accordance with the relevant label instructions, data sheets, and specifications.

THINNER / ADDITIVES

Refer to product data sheets for advice regarding thinning and clean-up.

COLOURS

Clear

SHEEN

Matt

LIMITATIONS

CAP800-1S system is approved for interior use only; the substrate must be sealed with CAP100 and must be top coated with CAP830 top coat. The manufacturer has tested the CAP800-1S fire resistant coating system at an ISO accredited laboratory to ISO5660.2002, in accordance with NZBC C/VM2. Contact Zone Architectural Products Ltd for more information. Zone Architectural Products Ltd 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.

APPLICATION

CAP800-1S must be applied by **APPROVED APPLICATORS**
- Refer to individual component product data sheets for mixing ratios and specific application information

SPRAY EQUIPMENT CAP800 INTUMESCENT BASECOAT
- Refer to Zone Architectural Products Ltd for spray application instructions

BRUSH / ROLLER
- CAP800-1S may be applied by brush and roller, use good quality synthetic filament brush ware and foam roller sleeves
- Refer to Zone Architectural Products Ltd for detailed application instructions

APPLICATION CONDITIONS

ALWAYS do 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 20°C and 27°C. Do not apply if temperature will fall below 15℃ within two hours of application.
- 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 65%.
- 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%

It is the sole responsibility of the applicator to ensure that the CAP800-1S system has been applied in accordance with the specification. Application should not proceed if the surface or air temperature exceeds 35℃. Ensure that air temperature, humidity, and substrate moisture levels are checked at regular intervals throughout the application, and are recorded.

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 CAP coating systems and techniques specified.

APPROVED APPLICATORS
CAP coating systems must only be applied by Approved Applicators. Refer to Zone Architectural Products Ltd 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.

SURFACE PREPARATION

CAP800-1S system can be applied directly to bare, uncoated timber substrates, that have been suitably prepared to accept a clear coating.

PREPARATION - 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 CAP800-1S coating system and apply the full system with **no** substitutions. Do not proceed with full project application unless a sample patch has been finalized and accepted by the client.

CLEAN SURFACES
Fill holes, cracks and surface imperfections with an appropriate filler after application of the CAP100 sealer coat. Sand any filler to be flush and uniform with adjacent surface and spot seal. Sand entire surface to a smooth, clean, uniform finish; free of any contamination prior to application of subsequent coats. Sand lightly with fine sandpaper (P240-P320) between coats to promote adhesion and remove nibs and dust particles. Thoroughly clean all surfaces of all dust and other contaminants by wiping down with a clean damp cloth. Ensure that all areas that have been exposed to human hand contact a thoroughly cleaned of all oils etc.

SUBSTRATE MOISTURE CONTENT
Moisture content of timber MUST be below 15%

COATING SYSTEM - INTERIOR TIMBER SURFACES - BARE UNCOATED

	Product	Data Sheet	Theoretical Spread Rates (sqm/litres) *	Wet Film Thickness** (microns)	Dry Film Thickness (microns)
1st PRODUCT Intumescent Sealer	CAP100	CAP100	10 sqm	100µm WFT	35µm DFT
2nd PRODUCT Intumescent Basecoat	CAP800	CAP800	3 sqm*** (applied in 2 to 3 coats)	340µm WFT	185µm DFT
3rd PRODUCT Intumescent Topcoat	CAP830	CAP830	16 sqm	65µm WFT	45µm DFT

The above described system has achieved a Group1S to ISO-5660.2002 in accordance with NZBC C/VM2 2012 as tested on 9.5mm Douglas Fir Plywood
*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.
***Apply two or three coats to achieve final theoretical spread rate and required total WFT

RECOAT AND DRY TIMES

CAP100 Minimum recoat 4 hours
CAP800 Minimum recoat 12 hours
CAP830 recommended application in one coat only. Contact Zone Architectural Products Ltd for further information

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

GENERAL

CAP800-1S has been designed for internal use on timber substrates. The expected life of the system is dependant 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.

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

Approved painting contractors are responsible for project specification. It is the applicators responsibility to ensure that they have applied the coatings in accordance with the project specification, and the relevant label instructions and data sheets. 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

☐	**TEMPERATURE**	Is temperature within limits (15ºC - 27ºC)?
☐	**HUMIDITY**	Is the relative humidity less than 65%?
☐	**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 CAP800-1S. Has an adhesion test and sample of CAP800-1S been completed?
☐	**COLOUR**	Has gloss, colour and opacity been checked and approved on samples?
☐	**MEASUREMENT**	Correct quantities available to complete in accordance with minimum spread rate? Wet film comb on site?
☐	**SAFETY**	MSDS on site and health & safety measures in place.
☐	**NEED HELP?**	Phone: 0800 508 800 Email: info@zone.net.nz Website: www.zone.net.nz