



CAP Fire Resistant Coatings

TESTED AND APPROVED FIRE RATED CLEAR COATINGS THAT MEET ASTM E84 CLASS A – APRIL 2015



CAP clear coatings: tested to ASTM E84 with Class A results

The next generation of clear coatings that meet the demands of today's building codes.

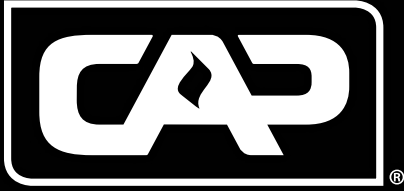
Designed primarily for use on wood lined ceilings and walls, the CAP800 Series clear coating systems have passed numerous international fire tests to the highest standards when tested on wood substrates. In the USA two systems are available, the CAP800-827 system that meets ASTM E84 Class A, and our new Certified CAP800-830 system which meets ASTM E84 Class A Extended (30 minutes) with a smoke index 50 or less and flame spread index 25 or less. In Canada, the CAP800-830 system also has a Certified Pass to CAN/ULC S102 with a smoke index of 25 and flame spread of 5.

The CAP800-827 system is a water based, fast drying, three coat system, successfully tested on Radiata Pine plywood by Intertek and QAI Laboratories.

The CAP800-830 system is a combination of water based and solvent technology, fast drying, three or four coat system, tested on Douglas Fir plywood and Radiata Pine by QAI Laboratories, certified and listed.

In addition, where testing a clear coating on wood is not required, the CAP110 is a water based two or three coat, low sheen clear coating system, tested and certified to ASTM E 84 Class A on a non-combustible substrate by QAI Laboratories.

Introduction	1
CAP Products	3
Test Results and Certification	4
Specifications	5
Product Data Sheets	11



Engineering & design

Durable, hardwearing top coat

Excellent clarity

Certified and Listed

Class A on both bare and stained wood

For all commercial wood interior linings

Project management

Genuine 2 day application process

Lower labor application costs

Easy to handle and ship

Easy to touch up

Made in USA

Environment

Low VOC option

Water based option

Ideal for refurbishment of existing and historical buildings

CAP Clear Coating Systems

1. CAP800-827 SYSTEM

CAP800 is a clear, water based, low VOC intumescent coating, capable of preventing spread of flame and development of smoke on wood when applied in combination with CAP100 sealer and CAP827 top coat. It provides ASTM E84 Class A smoke and flame spread indices on interior wood products, in both natural and stained finishes, on solid wood, plywood, and wood veneer. Suitable for residential, multifamily, commercial and industrial projects, for both new and rehab/remedial applications.

CAP827 Matte or CAP827 Satin are clear water based specially formulated, UV resistant protective top coats, capable of preventing spread of flame and development of smoke on wood when applied over CAP800. Suitable for residential, multifamily, commercial and industrial projects, for both new and rehab/remedial applications.

2. CAP800-830 SYSTEM

A three product system where CAP100 sealer is followed by the combination of CAP800A and CAP800B which when mixed create a clear, water soluble hard intumescent coating, capable of preventing spread of flame and development of smoke on wood. CAP830 is a clear solvent based hard wearing varnish top coat, specially formulated for application over CAP800A/CAP800B when mixed. Meets ASTM E84 Class A and ASTM E84 Extended (30 minute) Class A when tested on wood. Achieves smoke index of 50 or less and flame spread index of 25 or less on interior wood products, in both natural and stained finishes, such as solid wood, plywood, and wood veneer. Suitable for residential, multifamily, commercial and industrial projects, for both new and rehab/remedial applications.

3. CAP110 SYSTEM

CAP110 is a water based, low VOC clear coating, providing ASTM E84 Class A smoke (50 or less) and flame spread (25 or less) indices for interior use. This coating has only been tested on a non-combustible substrate. Listed and certified by QAI Laboratories.

Test Results and Certification

FIRE TESTING STANDARDS ACHIEVED

Assessment Standard	Accredited Test Laboratory	System	Substrate	Result
ASTM E84-10	Intertek	800-827	½" Radiata Pine plywood	Class A Smoke: 165 Flame Spread: 20
ASTM E84-10	QAI	800-827	½" Radiata Pine plywood Stained	Class A Smoke: 140 Flame Spread: 25
ASTM E84-10	QAI	800-830	½" Radiata Pine plywood Stained	Class A Smoke: 50 Flame Spread: 20
ASTM E84-10 Certified	QAI	110	Non combustible substrate	Class A Smoke: 5 Flame Spread: 0
ASTME84 (extended) 30 minute test Certified & Listed	QAI	800-830	1" Douglas Fir plywood	Class A Smoke: 30 Flame Spread: 5
CAN/ULC S102 Certified & Listed	QAI	800-830	1" Douglas Fir plywood	Smoke: 25 Flame Spread: 5

CUSTOM TESTING

Tepromark Architectural Products can assist in arranging engineering evaluations, fire testing and subsequent specifications to address individual project requirements for smoke and flame spread indices on wood linings.

APPLICATION OF PRODUCT

CAP Coatings are specified and used to meet and maintain building regulations related to fire safety. The application process when complete using a wet film thickness (WFT) gauge for guidance, must achieve the minimum dry film thickness (DFT) required for the coating system to perform to specification on the substrate and assembly to which it has been applied. **The applicator is responsible for achieving the required minimum DFT in accordance with the specification.**

Tepromark Architectural Products can assist in arranging the 3rd party inspection of the applied finishes both during and upon project completion subject to being requested to do so prior to the purchase and application of the coating system, and being in receipt of all relevant details with respect to the project including the name of the owner, site address, main contractor, and total surface area to be fire rated.

For further information and assistance, contact Tepromark Architectural Products on 800.645.2622 or sales@tepromark.com.



Short Specification: CAP110 System

CAP110 System:	Clear – flat (matte)
Standard:	ASTM E84-10 Class A, Smoke 50 or less, Flame Spread 25 or less Confirm system compliance with the appropriate code officials.
Installation:	Manufacturer approved applicators only
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Coating Type:	Water based, clear – flat (matte)
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System:	CAP110 to meet ASTM E84 Class A 50 or less smoke, and 25 or less flame spread
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Preparation:	To meet minimum requirements of substrate type & condition
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1st Application:	CAP110 applied to achieve 100% coverage of the substrate. Generally 400 sq ft/gallon
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2nd Application:	CAP110 applied to achieve a minimum total for both coats of 200 sq ft /gallon excluding waste
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*Spread rates above will vary subject to nature of substrate and exclude waste.

Prior to general project commencement, complete a sample area and get client approval.

For approved applicator listing & for any further information contact Tepromark Architectural Products
800.645.2622 or sales@tepromark.com.



Short Specification: CAP800-827 System

Wood Lined Interiors: ASTM E84 Class A

CAP800-827 System: Clear - matte or satin
For use on: Wood lined interior ceilings, walls and wooden joinery
Standard: ASTM E84-10 Class A, Smoke 450 or less, Flame Spread 25 or less
Confirm system compliance with the appropriate code officials.
Installation: Manufacturer approved applicators only

Substrate:	Interior wood linings, bare or stained
Coating Type:	Water based, clear – matte or satin
System:	CAP800-827 to meet ASTM E84 Class A on Radiata Pine plywood
Preparation:	To meet minimum requirements of substrate type & condition
1st Application:	CAP100 applied to achieve 100% coverage of the substrate. Sand when dry
2nd Application:	CAP800 applied at 200 sq ft/gallon* (8 mils WFT) to achieve minimum required dry film thickness (DFT)**
3rd Application:	CAP827 Matte or CAP827 Satin @ 400 sq ft/gallon theoretical spread rate

*Spread rates above will vary subject to nature of substrate and exclude waste.

****Attention:** High humidity will often cause the dried and cured CAP800 to rewet itself before it has been top coated, resulting in a sticky surface. When the relative humidity drops below approximately 75%, the surface will become dry again and it can then be top coated with CAP827. Once the CAP827 top coat has been applied and has cured, the entire coating system will remain permanently dry and durable.

Prior to general project commencement, complete a sample area and get client approval.

For wet film thickness (WFT), application rates, dry film thickness (DFT) minima, approved applicator listing & for any further information contact Tepromark Architectural Products 800.645.2622 or sales@tepromark.com.



Short Specification: CAP800-830 System

Wood Lined Interiors: ASTM E84 Class A, Smoke Index 50 or less, Flame Spread Index 25 or less

CAP800-830 System: Clear - satin
For use on: Wood lined interior ceilings, walls and wooden joinery
Standard: ASTM E84-10 Class A, Smoke 50 or less, Flame Spread 25 or less
Confirm system compliance with the appropriate code officials.
Installation: Manufacturer approved applicators only

Substrate: Interior wood linings, bare or stained

Coating Type: Water based and solvent, clear - satin

System: CAP800-830 System

Preparation: To meet minimum requirements of substrate type & condition

1st Application: CAP100 applied to achieve 100% coverage of the substrate. Generally 400 sq ft/gallon.* Sand when dry.

2nd Application: CAP800A mixed with CAP800B applied to achieve minimum dry film thickness of 4.5 mils. Lightly sand when dry.**

3rd Application: CAP830A mixed with CAP830B applied to achieve 100% coverage and even sheen/gloss level at 550 to 600 sq ft/gallon.

*Spread rates above will vary subject to nature of substrate and exclude waste.

****Attention:** High humidity will often cause the dried and cured CAP800 to rewet itself before it has been top coated, resulting in a sticky surface. When the relative humidity drops below approximately 75%, the surface will become dry again and it can then be top coated with CAP830. Once the CAP830 top coat has been applied and has cured, the entire coating system will remain permanently dry and durable.

Prior to general project commencement, complete a sample area and get client approval.

For wet film thickness (WFT), application rates, dry film thickness (DFT) minima, approved applicator listing & for any further information contact Tepromark Architectural Products 800.645.2622 or sales@tepromark.com.

Short Specification: CAP800-830 System

Wood Lined Interiors: ASTM E84 Extended 30 minute Certified Class A, Smoke Index 50 or less, Flame Spread Index 25 or less

CAP800-830 System: Clear - satin
For use on: Wood lined interior ceilings, walls and wooden joinery
Standard: ASTM E84 (extended) 30 min, UL723, ULC S102, NFPA255, Class A, Smoke 50 or less, Flame Spread 25 or less
Confirm system compliance with the appropriate code officials.
Installation: Manufacturer approved applicators only

Substrate:	Interior wood linings
Coating Type:	Water based and solvent, clear - satin
System:	CAP800-830 System
Preparation:	To meet minimum requirements of substrate type & condition
1st Application:	CAP100 applied to achieve 100% coverage of the substrate. Generally 400 sq ft/gallon.* Sand when dry.
2nd Application:	CAP800A mixed with CAP800B applied to achieve 9 mils wet film thickness (WFT). Lightly sand when dry.**
3rd Application:	CAP800A mixed with CAP800B applied to achieve minimum total dry film thickness (DFT) of 9.75 mils (both coats). Sand when dry
4th Application:	CAP830A mixed with CAP830B applied to achieve 100% coverage and consistent sheen/gloss level at 550 to 600 sq ft/gallon.*

*Spread rates above will vary subject to nature of substrate and exclude waste.

****Attention:** High humidity will often cause the dried and cured CAP800 to rewet itself before it has been top coated, resulting in a sticky surface. When the relative humidity drops below approximately 75%, the surface will become dry again and it can then be top coated with CAP830. Once the CAP830 top coat has been applied and has cured, the entire coating system will remain permanently dry and durable.

Prior to general project commencement, complete a sample area and get client approval.

For wet film thickness (WFT), application rates, dry film thickness (DFT) minima, approved applicator listing & for any further information contact Tepromark Architectural Products 800.645.2622 or sales@tepromark.com.



Specification

Section 09 93 23 – Transparent Finishes

PART 1 GENERAL

1.1 SECTION INCLUDES

- a. Interior coating with transparent and semi-transparent finishes.

1.2 RELATED SECTIONS

- a. Section 06 01 40 Architectural Woodwork Refinishing
- b. Section 06 05 83 Shop Applied Wood Coatings
- c. Section 09 9100 Painting
- d. Section 09 96 00 High Performance Coatings

1.3 REFERENCES

- a. Solvent Cleaning
- b. Hand Tool Cleaning
- c. Power Tool Cleaning

1.4 SUBMITTALS

- a. Submit in accordance with Section 01 33 00, Submittal Procedures.
- b. Product data: Manufacturer's Product Data Sheets on each coating product should include:
 - 1. Product characteristics
 - 2. Surface preparation instructions and recommendations
 - 3. Sealer requirements and finish specification
 - 4. Storage and handling
 - 5. Application methods
 - 6. Cleanup information
- c. Selection Samples: submit a complete set of finishes representing the range available.
- d. Maintenance Manual: at project completion the applicator shall provide a maintenance guide with respect to the coatings applied, detailing the scope of product use, annual inspection, care and cleaning instructions and contact information for repair and touch up of damaged surfaces.

1.5 MOCK UP

- a. Sample area relevant to the size and nature of the project for client approval should include:
 - 1. Finish surfaces for verification of opacity and sheen
 - 2. Finish area designated by architect

1.6 DELIVERY, STORAGE AND HANDLING

- a. Delivery: Ship manufacturer's unopened containers to the workplace, labelled to clearly identify:
 - 1. Product name and type
 - 2. Application instructions
 - 3. Surface preparation instructions
 - 4. Product mixing and preparation instructions
 - 5. VOC content
 - 6. Finish
 - 7. Batch number
 - 8. Environmental handling

- b. Storage and disposal: Store and dispose of solvent based and 2 pack coating products and materials used with these products including cleaning fluids all in accordance with local regulations. Store in sealed containers all products according to manufacturer's instructions. Protect from freezing.
- c. Handling: Maintain an appropriate clean and dry storage area to prevent contamination, damage or loss.

1.7 PROJECT CONDITIONS

Maintain environmental conditions within limits prescribed by the manufacturer with respect to relative humidity, temperature and air flow. Do not apply coatings when conditions exceed limits prescribed by the manufacturer.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- a. Acceptable Manufacturers:
CAPTEX LTD
- b. North American Representative:
Tepromark Architectural Products LLC
PO Box 390407, Minneapolis, MN 55439
Tel: 800.645.2622
www.tepromark.com

2.2 SCOPE

- a. Define all surfaces and substrates to be coated with fire rated clear coatings in accordance with the Finishes Schedule and Drawings.
- b. Where the project involves redecoration of existing surfaces, the scope must identify these areas.
- c. The descriptions of each system can be incorporated to what is to be coated. Include any requirements to be fire rated, and the relevant building code fire performance standard required for wood finished
- d. Surfaces to be coated: Wood Interior Systems - Transparent

2.3 STAIN AND TRANSPARENT FINISHES

- a. Wood Interior Systems -
 - 1. Water based varnish-CAP800-827 System
 - 1st Coat: CAP100
 - 2nd Coat: CAP800
 - 3rd Coat: CAP827 Satin or CAP827 Matte
 - 2. Water and Solvent based varnish - CAP800-830 System
 - 1st Coat: CAP100
 - 2nd Coat: CAP800A/CAP800B mixed
 - 3rd Coat: CAP800A/CAP800B mixed (optional - total system to meet minimum DFT)
 - 4th Coat: CAP830A/CAP830B mixed

2.4 MATERIALS – GENERAL REQUIREMENTS

- a. Paint and Coatings – General
 1. Unless otherwise indicated, provide factory-mixed coatings. When required, mix coatings to correct consistency in accordance with manufacturer's instructions before application. Do not reduce, thin, or dilute coatings or add materials to coatings unless such procedure is specifically described in manufacturer's product instructions.
- b. Sealers and Primers
 1. Use only the recommended sealers in accordance with manufacturer's instructions.
 2. The execution of backpriming of woodwork is usually specified in the woodwork section, although the materials may be specified here.

2.5 ACCESSORIES

- a. Coating Application Accessories:
 1. Provide all primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean up materials required, per manufacturer's specification.

PART 3 EXECUTION

3.1 EXAMINATION

- a. Do not begin application of coatings until substrates have been properly examined and prepared. Notify Architect of unsatisfactory conditions before proceeding.
- b. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
- c. Proceed with work only after conditions have been corrected and approved by all parties, otherwise application of coatings will be considered as an acceptance of surface conditions.
- d. Previously Painted Surfaces: Verify that existing painted surfaces do not contain lead based paints, notify Architect immediately if lead based paints are encountered.

Note: If lead based paints are suspected on the project, all removal must be done in accordance with the EPA Renovation, Repair and Painting rules and all applicable state and local regulations. Verify that owner has completed a Hazardous Material Assessment Report for the project prior to issue of Project Drawings.

3.2 SURFACE PREPARATION

- a. Proper product selection, surface preparation, and application affect the outcome of coating performance. Coating integrity and service life will be less due to improperly prepared substrate. The correct and appropriate surface preparation process will ensure coating adhesion and prolong the life of the coating system.
- b. Selection of the proper method of surface preparation depends on the nature of the substrate, the environment, expectations of the client and the expected service life of the coating system. Cost, surface contamination, texture and the effect on the substrate of the coating will also influence the surface preparation methods.
- c. The surface must be dry and in sound condition. Remove oil, dust, loose rust, peeling paint or other

contamination to ensure good adhesion.

- d. Remove mildew before painting by washing with an appropriate solution. Apply the solution and scrub the mildewed area. Allow solution to remain on the surface for 15 minutes. Rinse thoroughly with clean water and allow the surface to dry at least 48 hours before painting. Wear protective eyewear, gloves, and protective clothing. Immediately wash off with water any of the mixture that comes in contact with your skin.
- e. No exterior painting should be done immediately after rain, during periods of high humidity or foggy weather, when rain is predicted, or when temperature is below 50°F.
- f. Surface Preparation:
 1. Wood – Interior:

All finishing lumber must be stored in dry, warm rooms to prevent absorption of moisture, shrinkage, and roughening of the wood. All surfaces must be sanded smooth, with the grain, never across it. Surface blemishes must be corrected and the area cleaned of dust before coating. Patching compounds will generally be visible through clear coatings.
 2. Remedial work:

On interior cracks and damage on wood substrate exposed surfaces, use an appropriate patching material. Patching compounds will generally be visible through clear coatings.

3.3 INSTALLATION

- a. Testing: Due to the wide variety of substrates, preparation methods, application methods and environments, the applicator should test the product in an inconspicuous location for adhesion and compatibility prior to full-scale application.
- b. Apply all coatings and materials with manufacturer's specifications in mind. Mix coatings according to manufacturer's recommendations.
- c. Do not apply to wet or damp surfaces. Wait until wood is below 15% moisture.
- d. Apply coatings using methods recommended by manufacturer.
- e. Apply coatings evenly without runs, drips, or sags, brush marks, and consistent sheen.
- f. Apply coatings at spreading rate required to achieve the manufacturer's minimum recommended dry film thickness.
- g. Regardless of number of coats specified, apply as many coats as necessary for uniform appearance and minimum dry film thickness.
- h. Inspection: the coated surface must be inspected and approved by the Architect or Engineer just prior to the application of each coat.

3.4 PROTECTION

- a. Protect finished coatings from damage until completion of project.
- b. Touch-up damaged coatings after substantial completion, following manufacturer's recommendation for touch up or repair of damaged coatings. Repair all defects that could inhibit the performance of the coatings.

3.5 SCHEDULES

- a. To be included as required.



Product Data Sheet

CAP100

DESCRIPTION

CAP100 is a water based sealer. It must be applied as the dedicated sealer for both CAP800-827 and CAP800-830 clear coating systems. CAP800-827 and CAP800-830 systems applied to wood have been tested by Intertek and QAI to ASTM E84 on Douglas Fir and Radiata Pine plywood and both systems have achieved a Class A rating.

PRODUCT FEATURES AND RECOMMENDED USES

- Water soluble
- Suitable for bare and stained wood
- Low VOCs
- Very good mechanical resistance
- Easy to apply
- Low odor
- Designed exclusively for use as the sealer for CAP800-827 and CAP800-830 clear coating systems

Notwithstanding the above, ensure the CAP clear coating system is approved by appropriate code officials for its intended use.

PHYSICAL DATA (@75°F)

Volume Solids:	35%
Shelf Life:	12 months
Color :	Clear
Gloss Gradation:	Satin at 60° angle
Flash Point:	N/A
VOC:	Less than 50 g/l

DRYING TIME GUIDE

A constant air flow, warm ambient temperatures and low relative humidity will reduce actual time.

Temperature	50-70°F	70-85°F	85-95°F
Touch dry time	1-2 hours	30 min	30 min
Hard dry time	4 hours	1.5 hours	45 min
Next coat (minimum)	6-8 hours	4 hours	2-4 hours
Curing	20 days	20 days	20 days

Note: Always ensure CAP100 is hard and dry prior to over coating. A minimum of 4 hours between coats is best practice.

SURFACE PREPARATION

All surfaces should be clean, dry (below 15% moisture), and free of dust, grease or other contaminants. Lightly sand the wood to ensure a smooth and consistent substrate is achieved. Rough and textured substrates may need additional preparation.

APPLICATION CONDITIONS

Protect from freezing. Do not apply when temperature is below 50°F or above 95°F, **or relative humidity is above 90%**. Ventilate the area during and following application.

APPLICATION METHOD

Mix well before use. Pour contents into a pail and hand or power mix for 2 to 3 minutes. Apply a small amount to a sample board prior to full application and check that opacity and drying times are acceptable. **DO NOT** thin CAP100

Application by brush, roller or airless spray by approved applicators only. Following application when hard and dry and prior to the application of the intumescent basecoat, lightly sand using 220 grit or similar sandpaper.

Spray: use airless pump, dedicated hose (3/8" with 1/4" whip) and 11 to 13 thou tip to achieve 100% coverage of the substrate in cross hatch application process, avoiding runs, sags and incomplete coverage. Textured substrates will require additional product to ensure all exposed surfaces are coated. Narrow substrate widths and textured substrates will use more product than smooth and wide panels. Use a narrow fan width and correct tip size to reduce waste.

Roller: use a new product dedicated sleeve with a 3/8" nap or similar for best results.

Brush: a good quality new or product dedicated brush can be used for coating edges and touching up.

CLEAN UP

Clean or flush all application equipment with water only and allow to dry. Dispose of waste water in accordance with local government regulations, and do not allow waste water to flow into storm water drains or natural waterways.

PACK SIZE

Available in 1 and 5 gallon pails.

STORAGE

Keep in a cool frost free place. Keep from freezing.

HEALTH AND SAFETY

The Safety Data Sheet of the product should be thoroughly studied and kept on site at all times. All precautionary statements should be strictly followed. Users to employ standard precaution measures to avoid inhalation of vapor and to prevent skin and eye contact with wet coating or spray mist. Everyone in the vicinity must employ similar safety precautions. Ensure work space is well ventilated.

Use the following protective safety equipment:

- Protective clothing –full disposable suit including mask and goggles
- Breathing equipment –use approved respirator for all products
- Solvent resistant disposable gloves
- Safety glasses or safety goggles
- Suitable footwear

Product Data Sheet

CAP110

DESCRIPTION

CAP110 is a water based clear coating that provides a very flat finish.

SYSTEM FEATURES AND RECOMMENDED USES

- Certified and listed
- Tested on non combustible substrate to meet ASTM E84 Class A
- Low VOC water soluble sealer and base coat for easy clean up
- Very good mechanical resistance
- Flat (matte) finish
- Hard wearing
- Typical application is 3 coats

Ensure the CAP110 coating is approved by appropriate code officials for its intended use.

PHYSICAL DATA (@75°F)

Volume Solids:	35%
Shelf Life:	12 months
Color :	Clear
Gloss Gradation:	Satin at 60° angle
Flash Point:	N/A
VOC:	Less than 50 g/l

DRYING TIME GUIDE

A constant air flow, warm ambient temperatures and low relative humidity will reduce actual time.

Temperature	50-70°F	70-85°F	85-95°F
Touch dry time	1-2 hours	30 min	30 min
Hard dry time	4 hours	1.5 hours	45 min
Next coat (minimum)	6-8 hours	4 hours	2-4 hours
Curing	20 days	20 days	20 days

Note: Always ensure CAP110 is hard and dry prior to application of second coat. A minimum of 4 hours between coats is best practice.

SURFACE PREPARATION

All surfaces should be clean, dry (below 15% moisture), and free of dust, grease or other contaminants. Rough and textured substrates may need additional preparation.

APPLICATION CONDITIONS

Protect from freezing. Do not apply when temperature is below 50°F or above 95°F, or relative humidity is above 90%. Ventilate the area during and following application.

APPLICATION METHOD

Mix well before use. Pour contents into a pail and hand or power mix for 2 to 3 minutes. Apply a small amount to a sample prior to full application and check that finish and drying times are acceptable. **DO NOT** thin CAP110.

Application by brush, roller or airless spray by manufacturer approved applicators only.

Spray: use airless pump, dedicated hose (3/8" with 1/4" whip) and 11 to 13 thou tip to achieve 100% coverage of the substrate in cross hatch application process, avoiding runs, sags and incomplete coverage. Textured substrates will require additional product to ensure all exposed surfaces are coated. Narrow substrate widths and textured substrates will use more product than smooth and wide panels. Use a narrow fan width and correct tip size to reduce waste.

Roller: use a new product dedicated sleeve with a 3/8" nap or similar for best results.

Brush: a good quality new or product dedicated brush can be used for coating edges and touching up.

CLEAN UP

Clean or flush all application equipment with water only and allow to dry. Dispose of waste water in accordance with local government regulations, and do not allow waste water to flow into storm water drains or natural waterways.

PACK SIZE

Available in 1 gallon and 5 gallon pails.

STORAGE

Keep in a cool frost free place. Keep from freezing.

HEALTH AND SAFETY

The Safety Data Sheet of the product should be thoroughly studied and kept on site at all times. All precautionary statements should be strictly followed. Users to employ standard precaution measures to avoid inhalation of vapor and to prevent skin and eye contact with wet coating or spray mist. Everyone in the vicinity must employ similar safety precautions. Ensure work space is well ventilated.

Use the following protective safety equipment:

- Protective clothing – full disposable suit including mask and goggles
- Breathing equipment – use approved respirator for all products
- Solvent resistant disposable gloves
- Safety glasses or safety goggles
- Suitable footwear



Product Data Sheet

CAP800 (Intumescent Basecoat for CAP800-827 System)

DESCRIPTION

CAP800 and CAP800GB additive when mixed, is a two-component, intumescent clear coating basecoat, used as part of the CAP800-827 clear coating system. This data sheet relates to the two components CAP800 and CAP800GB when mixed. The two components must be mixed correctly for the product to catalyze and perform as intended by the manufacturer.

SYSTEM FEATURES AND RECOMMENDED USES

- Low VOC
- Water soluble sealer and base coat for easy clean up
- Satin finish
- Fast drying
- Non yellowing
- Good mechanical resistance
- Low odor
- Easy to clean
- For use on wood substrates. The full CAP800-827 system comprises two coats of CAP800, and one of the CAP827 top coat. The complete system needs to be applied in accordance with the manufacturer's specified minimum wet film thickness to achieve ASTM E84 Class A, as tested on Radiata Pine plywood by Intertek.

Notwithstanding the above, ensure the CAP800-827 system is approved by the appropriate code officials for its intended use

PHYSICAL DATA (@75°F)

Volume Solids:	54% when mixed
Pot Life:	24 hours when mixed
Shelf Life:	6 months each component un-mixed
Color :	Clear
Gloss Gradation:	Semi gloss at 60° angle
Flash Point:	N/A
VOC:	No greater than 50 g/l when mixed

DRYING TIME GUIDE

A constant air flow, warm ambient temperatures and low relative humidity will reduce actual time.

Temperature	50-70°F	70-85°F	85-95°F
Touch dry	3 hours	2 hours	1 hour
Hard dry	4 hours	4 hours	2-4 hours
Recoating	6 hours	4 hours	2-4 hours
Top coating (minimum)	12 hours	8 hours	6 hours
Curing	20 days	20 days	20 days

SURFACE PREPARATION

All surfaces must be clean, dry (below 15% moisture), and free of dust, grease or other contaminants. Smooth surfaces are best for application of the coating system. Following the first coat of CAP800 and once it is dry, a light sand is recommended. Use 220 grit or finer sandpaper.

MIXING PROCEDURE

CAP800 and CAP800GB must be combined as supplied.

Mix both products together thoroughly by hand, using a clean stir stick in a clean container of suitable size. Do **not** add water or thin the product.

APPLICATION CONDITIONS

Protect from freezing. Do not apply when temperature is below 50°F or above 95°F, **or relative humidity is above 85%**. Ventilate the area during and following application.

APPLICATION METHOD

Application by brush, roller or spray by approved applicators only. It is essential that the minimum DFT thickness has been achieved.

Spray: use manufacturer approved spray equipment with dedicated hose (3/8" with 1/4" whip) and 11 to 13 thou tip to achieve 100% coverage of the substrate in cross hatch application process, avoiding runs, sags and incomplete coverage. Textured substrates will require additional product to ensure all exposed surfaces are coated. Narrow substrate widths and textured substrates will use more product than smooth and wide panels. Use a narrow fan width and correct tip size to reduce waste.

Roller: use a new product dedicated foam sleeve with a 1/4" nap or less for best results.

Brush: a good quality new or product dedicated brush can be used for coating edges and touching up.

CLEAN UP

Thoroughly flush all spray equipment immediately upon completion with copious quantities of fresh clean water to clean. Do not allow waste water to enter storm water drains or any natural waterways. All hoses, brushes and rollers may be cleaned in warm soapy water and allowed to dry.

PACK SIZE

Available as part of a 1600 sf kit. Kit includes CAP 100 sealer and CAP 827 topcoat. Based on theoretical coverage excluding waste and other factors that may affect coverage per gallon.

STORAGE

Keep in a cool frost free place. Keep from freezing.

HEALTH AND SAFETY

The Safety Data Sheet of the product should be thoroughly studied and kept on site at all times. All precautionary statements should be strictly followed. Users to employ standard precaution measures to avoid inhalation of vapor and to prevent skin and eye contact with wet coating or spray mist. Everyone in the vicinity must employ similar safety precautions. Provide adequate ventilation.

Use the following protective safety equipment:

- Protective clothing – full disposable suit including mask and goggles
- Breathing equipment – use approved respirator for all products
- Solvent resistant disposable gloves
- Safety glasses or safety goggles
- Suitable footwear



Product Data Sheet

CAP827 (Top Coat for CAP800-827 System)

DESCRIPTION

CAP827 is a water based, clear acrylic topcoat used as part of the CAP800-827 intumescent clear coating system.

SYSTEM FEATURES AND RECOMMENDED USES

- Water soluble system
- Satin finish
- Can be used over bare and stained wood
- Fast drying - Two day application process from sealer to top coat (subject to ambient atmospheric conditions)
- Low VOCs
- Low odor
- Easy to clean
- UV resistant
- Designed for use on interior wood substrates where ASTM E84 Class A is specified

Notwithstanding the above, ensure the CAP800-827 system is approved by appropriate code officials for its intended use

PHYSICAL DATA (@75°F)

Volume Solids:	29%
Shelf Life:	12 months
Color :	Clear
Gloss Gradation:	Satin
Flash Point:	Greater than 212°F
VOC:	20 grams / litre

DRYING TIME GUIDE

Aa constant air flow, warm ambient temperatures and low relative humidity will reduce actual time.

Temperature	50-70°F	70-85°F	85-95°F
Touch dry	1-2 hours	1 hour	30 min
Hard dry	3-4 hours	2-3 hours	1 hour
Curing	20 days	20 days	20 days

SURFACE PREPARATION

All surfaces must be clean, dry (below 15% moisture), and free of dust, grease or other contaminants. Smooth surfaces are best for application of the coating system. Ensure that the CAP800 intumescent basecoat has been applied to the correct thickness, has been lightly sanded, and is dry enough for application of the CAP827.

APPLICATION CONDITIONS

Protect from freezing. Do not apply when temperature of paint or surface is below 50°F or above 95°F, **or relative humidity is above 90%**. Ventilate the area during and following application.

APPLICATION METHOD

Mix well before use. Pour contents into a pail and hand or power mix for 5 minutes. Apply a small amount to a sample board prior to full application and check that opacity and drying times are acceptable. **DO NOT** thin CAP827.

Application by brush, roller or airless spray by manufacturer approved applicators only.

Spray: use airless pump, dedicated hose (3/8" with 1/4" whip) and 11 to 13 thou tip to achieve required wet film build in cross hatch application process, avoiding runs, sags and inadequate film build. Check regularly that the required application thickness has been consistently achieved by use of WFT comb. Textured substrates will require additional product to ensure all exposed surfaces are coated. Narrow substrate widths and textured substrates will use more product than smooth and wide panels. Use a narrow fan width and correct tip size to reduce waste.

Roller: use a new, product dedicated sleeve, with a 1/4" nap or similar for best results.

Brush: a good quality new or product dedicated brush can be used for coating edges and touching up.

CLEAN UP

Clean or flush all application equipment with water only (warm water for best results) and allow to dry. Dispose of waste water in accordance with local government regulations, and do not allow waste water to flow into storm water drains or natural waterways.

PACK SIZE

Available in 1 and 5 gallon pails.

STORAGE

Keep in a cool frost free place. Keep from freezing.

HEALTH AND SAFETY

The Safety Data Sheet of the product should be thoroughly studied and kept on site at all times. All precautionary statements should be strictly followed. Users to employ standard precaution measures to avoid inhalation of vapor and to prevent skin and eye contact with wet coating or spray mist. Everyone in the vicinity must employ similar safety precautions. Ensure work space is well ventilated.

Use the following protective safety equipment:

- Protective clothing – full disposable suit including mask and goggles
- Breathing equipment – use approved respirator for all products
- Solvent resistant disposable gloves
- Safety glasses or safety goggles
- Suitable footwear



Product Data Sheet

CAP800A-CAP800B (Intumescent Basecoat for CAP800-830 System)

DESCRIPTION

A clear intumescent basecoat made by mixing CAP800A and CAP800B immediately prior to application, which is used as part of the CAP800-830 clear coating system. This data sheet relates to the two components CAP800A, and CAP800B once they have been mixed. The two components must be mixed correctly for the product to catalyze and perform as intended by the manufacturer.

SYSTEM FEATURES AND RECOMMENDED USES

- Water soluble low VOC sealer and intumescent basecoat
- Satin finish
- Suitable for bare and stained wood
- Two day application process from sealer to top coat (subject to ambient atmospheric conditions)
- Very good mechanical resistance
- Easy to clean
- Certified and Listed to ASTM E84 Extended Class A, smoke 30, flame spread 5 on bare plywood
- Passed ASTM E84-10 Class A, smoke 50, flame spread 20 on stained plywood
- UV resistant
- Designed for use on interior wood substrates where ASTM E84 Class A is specified

Notwithstanding the above, ensure the CAP800-830 system is approved by the appropriate code officials for its intended use.

PHYSICAL DATA (@75°F)

Volume Solids:	54% when mixed
Mixing Ratio:	Component A, 1.0: Component B, 1.1
Pot Life:	12 hours when mixed
Shelf Life:	6 months each component un-mixed
Color:	Clear
Gloss Gradation:	Semi gloss at 60° angle
Flash Point:	N/A
VOC:	No greater than 50 g/l when mixed

DRYING TIME GUIDE

A constant air flow, warm ambient temperatures and low relative humidity will reduce actual time.

Temperature	50-70°F	70-85°F	85-95°F
Touch dry time	4 hours	2-3 hours	1-2 hours
Hard dry time	8 hours	6 hours	4-6 hours
Next coat (minimum)	12 hours	12 hours	12 hours
Curing	20 days	20 days	20 days

SURFACE PREPARATION

All surfaces must be clean, dry (below 15% moisture), and free of dust, grease or other contaminants. Smooth surfaces are best for application of the coating system. Ensure that the CAP100 sealer has been applied, is dry and has been lightly sanded.

MIXING PROCEDURE

Add CAP800A to CAP800B as supplied in the ratio of CAP800A 1.0 : CAP800B 1.1. Mix thoroughly by hand, using a clean stir stick in a clean container of suitable size, and allow to stand for 20 minutes. The product will warm up when first mixed.

Always mix again for a further 1-2 minutes immediately prior to use. Do not add water or thin the product.

APPLICATION CONDITIONS

Protect from freezing. Do not apply when temperature is below 50°F or above 95°F, or **relative humidity is above 75%**. Ventilate the area during and following application.

APPLICATION METHOD

Application by brush, roller or spray by approved applicators only. It is essential that the minimum DFT thickness has been achieved. For best results and easiest application, apply the product once heated to 100° F. max. Lightly sand between coats using 220 grit or finer sandpaper.

Spray: use manufacturer approved spray equipment with dedicated hose to achieve required wet film thickness in cross hatch application process, avoiding runs, sags and inadequate film build. Check regularly that the minimum application thickness has been achieved by use of WFT comb.

Roller: use a new product dedicated solvent resistant foam sleeve with a 1/4" nap or less for best results. Heating the mixed product up to but not exceeding 100° F will help to ensure a constant viscosity and improved control over WFT in variable ambient conditions.

Brush: a good quality new or product dedicated brush can be used for coating edges and touching up.

CLEAN UP

Thoroughly flush all spray equipment immediately upon completion with copious quantities of fresh clean water to clean. Do not allow waste water to enter storm water drains or any natural waterways. All hoses, brushes and rollers may be cleaned in warm soapy water and allowed to dry.

PACK SIZE

Available in two kit options: 380 sq ft or 1500 sq ft. Kits include CAP100 sealer and CAP830 top coat. Based on theoretical coverage excluding waste & other factors that may affect coverage per gallon.

STORAGE

Keep in a cool frost free place. Keep from freezing.

HEALTH AND SAFETY

The Safety Data Sheet of the product should be thoroughly studied and kept on site at all times. All precautionary statements should be strictly followed. Users to employ standard precaution measures to avoid inhalation of vapor and to prevent skin and eye contact with wet coating or spray mist. Everyone in the vicinity must employ similar safety precautions and to fully protect all foodstuffs as odors can penetrate packaging into food and drink products. Ensure work space is well ventilated. Use the following protective safety equipment:

- Protective clothing – full disposable suit including mask & goggles
- Breathing equipment – use approved respirator for all products
- Solvent resistant disposable gloves
- Safety glasses or safety goggles
- Suitable footwear



Product Data Sheet

CAP830 (Top Coat for CAP800-830 System)

DESCRIPTION

CAP830 is a solvent based two-component, clear topcoat used as part of the CAP800-830 intumescent clear coating system.

SYSTEM FEATURES AND RECOMMENDED USES

- Fast drying
- Satin finish
- Suitable for bare and stained wood
- Two day application process from sealer to top coat (subject to ambient atmospheric conditions)
- Very good mechanical resistance
- Easy to clean
- Certified and Listed to ASTM E84 Extended Class A, smoke 30, flame spread 5 on bare plywood
- Passed ASTM E84-10 Class A, smoke 50, flame spread 20 on stained plywood
- UV resistant
- Designed for use on interior wood substrates where ASTM E84 Class A is specified

Notwithstanding the above, ensure the CAP800-830 system is approved by appropriate code officials for its intended use.

PHYSICAL DATA (@75°F)

Volume Solids:	68% when mixed
Mixing Ratio:	Component A, 100 parts Component B, 5 parts
Pot Life:	6 hours when mixed
Shelf Life:	6 months each component unmixed
Color :	Clear
Gloss Gradation:	Semi gloss at 60° angle
Flash Point:	81°F
VOC:	318 g/l when mixed

DRYING TIME GUIDE

A constant air flow, warm ambient temperatures and low relative humidity will reduce actual time.

Temperature	50-70°F	70-85°F	85-95°F
Touch dry	2 hours	1 hour	0.5 hours
Hard dry	4 hours	3 hours	2 hours
Curing	20 days	20 days	20 days

SURFACE PREPARATION

All surfaces must be clean, dry (below 15% moisture), and free of dust, grease or other contaminants. Smooth surfaces are best for application of the coating system. Ensure that the CAP800A/CAP800B intumescent basecoat has been applied to the correct thickness, and is dry enough for application of the CAP830

MIXING PROCEDURE

Mix CAP830A with CAP830B as supplied in the ratio of CAP830A: 100 parts to CAP830B: 5 parts. Hand mix only for 2-3 minutes until fully combined, stand for 5 minutes and briefly stir well again before application. **DO NOT THIN.**

APPLICATION CONDITIONS

Protect from freezing. Do not apply when temperature is below 50°F or above 95°F. Ventilate the area during and following application.

APPLICATION METHOD

Application by roller or spray by manufacturer approved applicators only.

Warning: Do not apply MORE than the recommended thickness. The CAP830 is a hard wearing top coat especially formulated for use over CAP800A/CAP800B intumescent, and is to be applied in accordance with the recommended wet film thickness in a single coat.

Spray: use airless pump, dedicated hose (3/8" with 1/4" whip) and 11 to 13 thou tip to achieve required wet film build in cross hatch application process, avoiding runs, sags and inadequate film build. Check regularly that the required application thickness has been consistently achieved by use of WFT comb.

Roller: use a new, product dedicated solvent resistant foam sleeve with a 1/4" nap or less for best results.

CLEAN UP

Clean application equipment immediately upon completion of project using Xylene or MEK thinners or similar. Allow solids to settle out of used/waste solvent and re-use. Use kitty-litter or similar absorbent material to absorb waste material and dispose of in accordance with local authority regulations. DO NOT allow product or cleaning fluid to enter storm water, sewers or natural waterways. Refer to Safety Data Sheets in case of spills.

PACK SIZE

Available in two kit options: 380 sq ft or 1500 sq ft. Kits include CAP100 sealer and CAP800 base coat. Based on theoretical coverage excluding waste & other factors that may affect coverage per gallon.

STORAGE

Keep in a cool frost free place. Keep from freezing.

HEALTH AND SAFETY

The Safety Data Sheet of the product should be thoroughly studied and kept on site at all times. All precautionary statements should be strictly followed. Users to employ standard precaution measures to avoid inhalation of vapor and to prevent skin and eye contact with wet coating or spray mist. Everyone in the vicinity must employ similar safety precautions and to fully protect all foodstuffs as odors can penetrate packaging into food and drink products. Ensure work space is well ventilated

Use the following protective safety equipment:

- Protective clothing – full disposable suit including mask and goggles
- Breathing equipment – use approved respirator for all products
- Solvent resistant disposable gloves
- Safety glasses or safety goggles
- Suitable footwear



Specification Support

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