



**V.O.C. COMPLIANT PRIMER FINISH
FOR STRUCTURAL STEELWORK**

PRODUCT DATA
**COPON
EP 2000**

PRODUCT DESCRIPTION

TWO COMPONENT COMPLIANT SOLVENT BASED EPOXY PRIMER/FINISH

COPON EP2000 has been developed as a high performance protective coating for application to abrasive blast cleaned structural steel and other mild steel fabrications.

COPON EP2000 is designed principally for fast throughput production line application, allowing varying dry film builds between 25 and 125 microns in one coat.

COPON EP2000 has been developed from the proven range of Copon epoxy coatings. Copon has over 40 years experience in the manufacture of high performance epoxy coatings for long term maintenance free protection in diverse operational environments worldwide.

COPON EP2000 has excellent build characteristics providing a 10-20 year maintenance free system for environments classified by BS 5493 - interior dry, non polluted, CIRIA 174 C1 and C2, ISO BN 12944.

COPON EP2000 can be overcoated with most high performance coatings including thin and thick film intumescent fire protection products.

Standard Colour Availability Manufactured only in a Red Oxide colour.

GENERAL PROPERTIES AND APPROVALS

Abrasion Resistance (ASTM D4060)	900 mgm weight loss per 1000 cycles - 1 kg load - CS17 wheel
Impact Resistance (BS 3900 E3)	Direct - 5 mm Reverse - 2.5 mm
Direct Pull Adhesion (ASTM 4541)	5500 psi (abrasive blasted steel)
Salt Fog Resistance (ASTM B117)	Excellent, unaffected after, 5,000 hours exposure
Tensile Shear Adhesion (ASTM D1002)	2000 psi
Flexibility (BS 3900 E1)	Pass 1/2 inch
Humidity Resistance (BS 3900 Part F2)	Unaffected after 5,000 hours exposure
Scratch Resistance (BS 3900 Part E2)	No failure 2.5 kg load

PHYSICAL CONSTANTS

Total Solids Content (Average) by Volume	50%
Specific Gravity (Average Mixed)	1.230
V.O.C. (As Supplied)	415 gm/litre (compliant as a Primer/Finish single coat EPA PG6/23)
Film Thickness (Typical)	Wet 150 microns Dry 75 microns
Note:	The thickness to be applied should be agreed between the specifier and the manufacturer dependant on operational performance requirements.
Theoretical Coverage Rate	6.6 m ² per litre at 75 microns dft

SURFACE PREPARATION

METHOD	Steel Surfaces should be abrasive blasted to a minimum Standard of Sa2½ - BS 7079: Part A1 1989, with a profile of 30-75 microns. If the steelwork is to be fabricated prior to coating, immediately prior to the application of COPON EP2000, degrease where necessary to remove all oil, grease, weld flux, and all other surface contaminants. All sharp edges and surface defects to be ground and weld spatter removed. All surfaces must be dry.
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MIXING

Number of Components	Supplied in two parts: Base component and Activator component.
Mixing Ratio (by volume)	3 parts Base component. 2 parts Activator component
Pot (Usable) Life	Approximately 8 hours at 20°C
Shelf Life	Minimum 12 months in original sealed container.
Method of Mixing	Stir the contents of the Base component, continue stirring and gradually add the total contents of the Activator component, continue stirring until a homogeneous mix is obtained, a mechanical agitator should be used. <i>(continued overleaf)</i>

APPLICATION

APPLICATION CONDITIONS

- * COPON EP2000 will not cure below 5°C. For optimum performance a minimum of 10°C is the required temperature.
- * Relative humidity should not exceed 85% during application and curing.
- * The surface temperature of the steel should be at least 3°C above the dew point during application and the initial curing stage.

APPLICATION METHOD COPON EP2000 can be applied by airless or conventional spray (brush for small areas).

Typical Airless Spray Settings Are:-

Airless Spray Devilbiss airless 45:1 pump ratio
Tip Size 15-21 Thou orifice
Input Air Pressure 60 psi
Tip Pressure Minimum 2,000 psi (145 bar)

Conventional Spray Pressure Pot
Needle Setup 1.2-1.4mm
Depending on prevailing conditions, COPON EP2000 systems may require thinning for spray application. Where thinning is required not more than 2-5% COPON SA65 THINNERS should be added by volume.
Clean all equipment immediately after use with COPON SA65 THINNERS.

- Notes:**
- The above are guidelines only. Tip sizes can be varied depending on fan width required.
 - Avoid exceeding maximum dry film thickness.
 - Excessive spraying pressures should be avoided, the minimum pressure at the pump conducive to good atomisation should be used.

DRYING AND CURE TIMES AT 20°C

Touch Dry	1 hour
Hard Dry	4 - 6 hours
Overcoating	minimum 4 hours maximum 7 days
Full Cure	7 - 10 days

Note: Where overcoating is required, surfaces that have exceeded the 7 day overcoating window must be lightly abraded.

HEALTH & SAFETY

- In the wet state COPON EP2000 is flammable.
- Adequate ventilation must be provided during use
- Undue contact with the skin should be avoided.

NOTE: Full Health & Safety Data is available from E Wood Ltd.

PACKAGING AND STORAGE

Supplied in either 5, 20 and 200 litre containers.

Use within 2 years of purchase. Store in original sealed containers at temperatures between 5°C and 30°C.

Copon System Recommendations take precedence over individual Copon Product Data sheets and are available on request.



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