



LISTING INFORMATION OF Carboline Pyroclad X1

SPEC ID: 29501

Carboline Company
350 Hanley Industrial Ct.
Saint Louis, MO 63114

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Carboline Pyroclad X1 is a two component fire resistant mastic intumescent coating. Carboline Pyroclad X1 is applied through a heated plural component spray system to primed structural steel components for the purpose of increased fire resistance. The A and B components are manufactured in separate batches and shipped to job sites in 5 gallon pails or 50 gallon drums.

RATINGS

Standard	Rating	Design Listing
ASTM E84	Flame Spread Index – ≤ 25	NA
UL 1709	Smoke Developed Index - ≤ 450 See Design Listing	CC/IF 120-01

UL 1709 Environmental Exposures

Pyroclad X1 has been evaluated for use in exterior and interior environmental conditions as described in UL 1709 Appendix A and listed in the table below.

Exposure Description Condition	Applicable Design Listing
Accelerated Aging	CC/IF 120-01
High Humidity	CC/IF 120-01
Salt Spray Exposure	CC/IF 120-01
Combination Wet, Freeze and Dry Cycling	CC/IF 120-01
Industrial Atmosphere	CC/IF 120-01

<u>Attribute</u>	<u>Value</u>
Criteria	ASTM E84 (2012)
Criteria	UL 1709 (2011)
CSI Code	07 81 00 Applied Fireproofing
Intertek Services	Certification
Listed or Inspected	LISTED
Listing Section	OTHER PRODUCTS
Report Number	100463890SAT-010B
Spec ID	29501

DRAWING INDEX

CC/IF 120-01

CC/IF 120-01

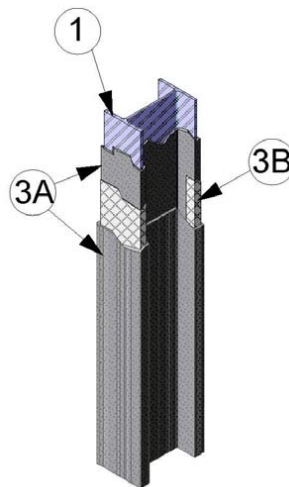
07 80 00 Fire and Smoke Protection
 07 81 00 Applied Fire Proofing
 07 84 23 Intumescent Fireproofing

CC/IF 120-01

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Carboline Company
 CC/IF 120-01
 Column
 Pyroclad X1
 UL 1709

Assembly Rating – See Table 1 CC/IF 120-01
 Environmental Exposure - See Table 2 CC/IF 120-01



Fire Resistance Rating	Thickness
60 min.	321 mils
120 min	661 mils

- SOLID STRUCTURAL STEEL COLUMN** - Use solid steel sections, I-shape or W-shape with a section factor (A/V or Hp/A) equivalent to or less than a W10X49 wide flange steel column (if section factor of column to be used in listed in W/D then the section factor shall be equivalent to or greater than a W10X40 wide flange steel column).
- PRIMER** (not shown) – Spray or roll apply Carboline Carbogaurd 890 primer or other approved epoxy primers (see manufacturer specification for approved primers) to bare steel column.
- FIRE-RESISTIVE COATING** – Refer to Table 1 CC/IF 120-01 for specific

application thickness of fire resistive coating.

A. CERTIFIED MANUFACTURER:
 Carboline Company

CERTIFIED PRODUCT: Fire-resistive Coating

MODEL: Pyroclad X1

Intumescent Fireproofing - Spray or paint in one or more coats according to manufacturer's instructions to a nominal 1/3 the required thickness before applying the carbon fiber high temperature mesh (Item 3B). Spray or paint in

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07 80 00 Fire and Smoke Protection
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one or more coats according to manufacturer's instructions to required final thickness after installing carbon fiber high temperature mesh (Item 3B).

B. Carbon Fiber High Temperature Mesh – Install Carboline High Temp Mesh consisting of a woven carbon fiber fabric (see manufacturer

CC/IF 120-01

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specifications for approved carbon fiber high temperature meshes) at nominal 1/3 depth of the intumescent fireproofing (Item 3A). Wrap mesh completely around steel structural column (Item 1) flange faces allowing a nominal 2 in. of the mesh to wrap around the inner flange of the solid structural steel column (Item 1)

Pyroclad X1 has been evaluated for use in exterior and interior environmental conditions as described in UL 1709 Appendix A and listed in the table below.

Table 2 CC/IF 120-01

Exposure Description Condition	Applicable Design Listing
Accelerated Aging	CC/IF 120-01
High Humidity	CC/IF 120-01
Salt Spray Exposure	CC/IF 120-01
Combination Wet, Freeze and Dry Cycling	CC/IF 120-01
Industrial Atmosphere	CC/IF 120-01

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