

## Design/System/Construction/Assembly Usage Disclaimer

- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, system, devices, and materials.
- Authorities Having Jurisdiction should be consulted before construction.
- Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
- Only products which bear UL's Mark are considered Certified.

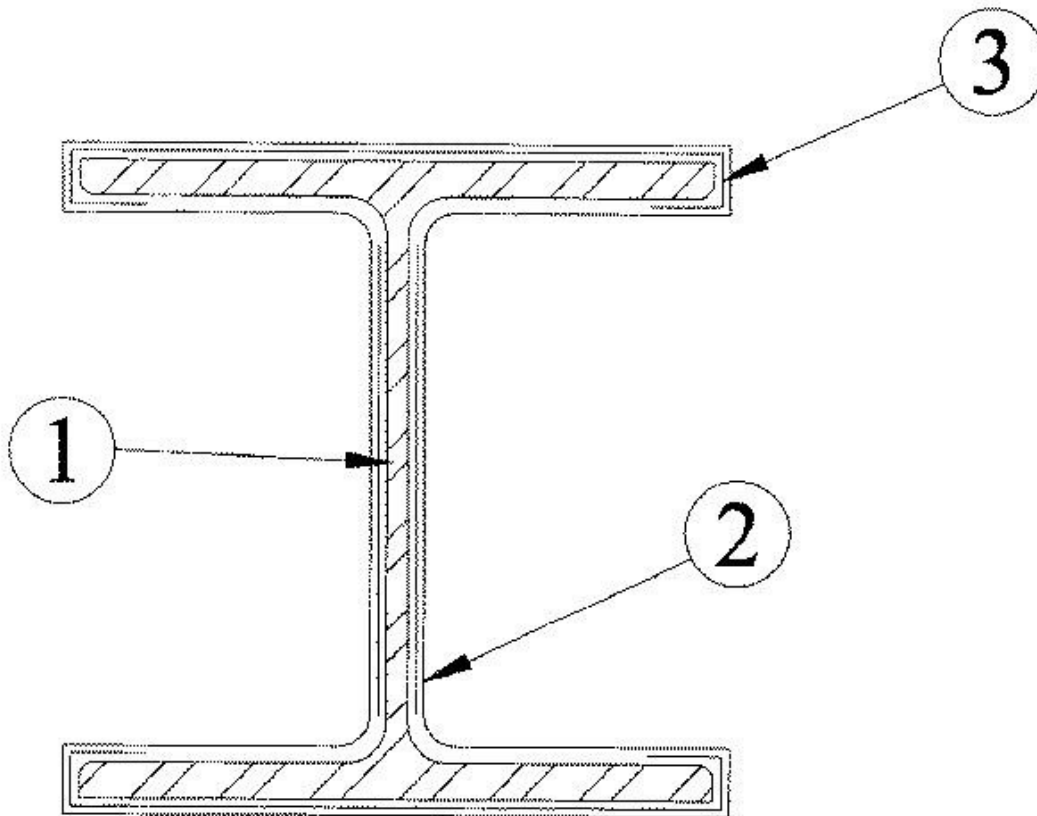
BYBU - Fire-resistance Ratings - ANSI/UL 1709

**Design No. XR618**

August 01, 2023

Ratings — 1/2, 1, 1-1/2, 2, 2-1/2, 3, and 4 Hr

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.



1. **Steel Column** — Min W10X49 wide flange steel column.

2. **Mastic and Intumescent Coating\*** — Spray applied in one or more coats to the thickness shown in the table below to column surfaces which must be free of dirt, loose scale and oil. Column surfaces to be primed with 2 mils of an epoxy primer. Coating lightly rolled after final coat with a paint roller.

Rating Hr	Min Thkns In.
1/2	0.078(+)
1	0.12
1-1/2	0.21
2	0.31
2-1/2	0.41
3	0.50
4	0.69

(+) Glass Fiber Mesh not required with this rating.

**CARBOLINE CO** — Types Thermo-Lag 3000-SP, Thermo-Lag 3000-P, Thermo-Lag 3000-SA, Thermo-Lag 3000-A, Thermo-Lag 3000-FC, Thermo-Lag E100, and Thermo-Lag E100S INVESTIGATED FOR UL 2431 CLASSIFICATION CATEGORY I- A and EXTERIOR ENVIRONMENTAL PURPOSE.

3. **Glass Fiber Mesh** — Nom 3/16 in. by 3/16 in. glass fiber mesh applied over each flange for the 1 through 4 hr ratings. In addition, the 1-1/2 hr through 3-1/2 hr shall have mesh placed in each web covering the whole web area. The mesh shall be placed at approximately mid-depth of the coating for the 1 and 1-1/2 hr ratings and at 0.12 in. for the remaining ratings.

4. **Top Coat\*** — Type Carbomastic 94 TL topcoat applied over mastic and intumescent coating (Item 2) at 0.005 to 0.012 in. thicknesses.

**\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**

Last Updated on 2023-08-01

The appearance of a company's name or product in this database does not in itself assure that products so identified have been manufactured under UL Solutions' Follow - Up Service. Only those products bearing the UL Mark should be considered to be Certified and covered under UL Solutions' Follow - Up Service. Always look for the Mark on the product.

UL Solutions permits the reproduction of the material contained in Product iQ subject to the following conditions: 1. The Guide Information, Assemblies, Constructions, Designs, Systems, and/or Certifications (files) must be presented in their entirety and in a non-misleading manner, without any manipulation of the data (or drawings). 2. The statement "Reprinted from Product iQ with permission from UL Solutions" must appear adjacent to the extracted material. In addition, the reprinted material must include a copyright notice in the following format: "©2024 UL LLC."