



BYBU.XR649 - Fire-resistance Ratings - ANSI/UL 1709

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.

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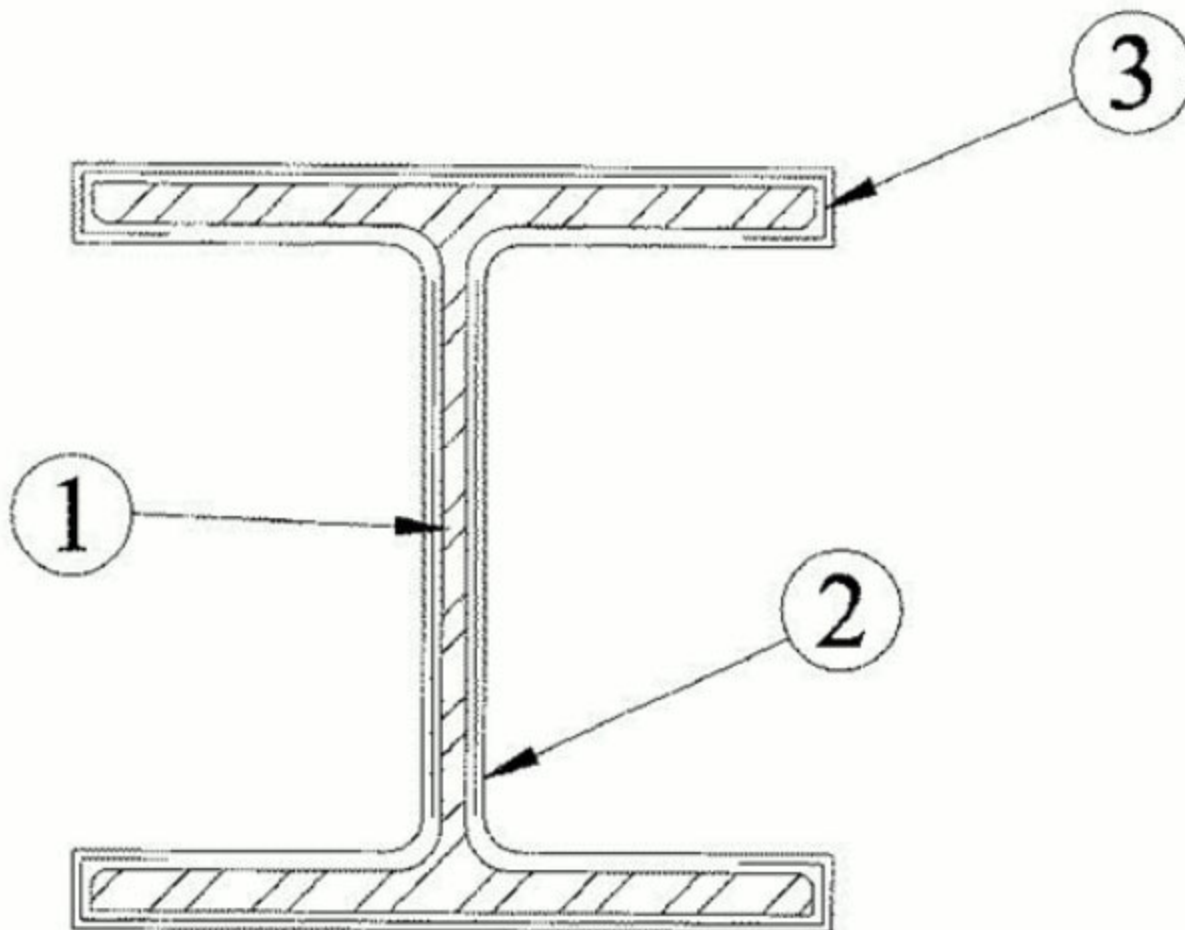
[See General Information for Fire-resistance Ratings - ANSI/UL 1709](#)

Design No. XR649

October 03, 2019

Rating — 3-1/2 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 flanged steel column. Hot dipped galvanized steel per ASTM A123. The column surfaces shall be prepared in accordance with the manufacturer's recommendations for galvanized steel and then primed with 3.5 mils of a cross-linked epoxy primer.

2. **Mastic and Intumescent Coating*** — Spray applied in one or more coats to the thickness shown in the table below over the primer coat. Coating lightly rolled after final coat with a paint roller.

Rating Hr	Min Thkns In.
3-1/2	0.664

CARBOLINE CO — Types Thermo-Lag 3000-SP, Thermo-Lag 3000-P, Thermo-Lag 3000-SA, Thermo-Lag 3000-A and Thermo-Lag 3000-FC. 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 identified as FP-Fiberglass Mesh applied over each flange with additional mesh placed in each web covering the entire web area. The mesh shall be placed at approximately 0.12 in. from the column surface.

4. **Top Coat* - (Not shown)** — Type Carbomastic 94 MC topcoat applied over mastic and intumescent coating (Item 2) at 0.005 to 0.012 in. thicknesses.

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Last Updated on 2019-10-03

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