



BYBU.XR702 - 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.

BYBU - Fire-resistance Ratings - ANSI/UL 1709

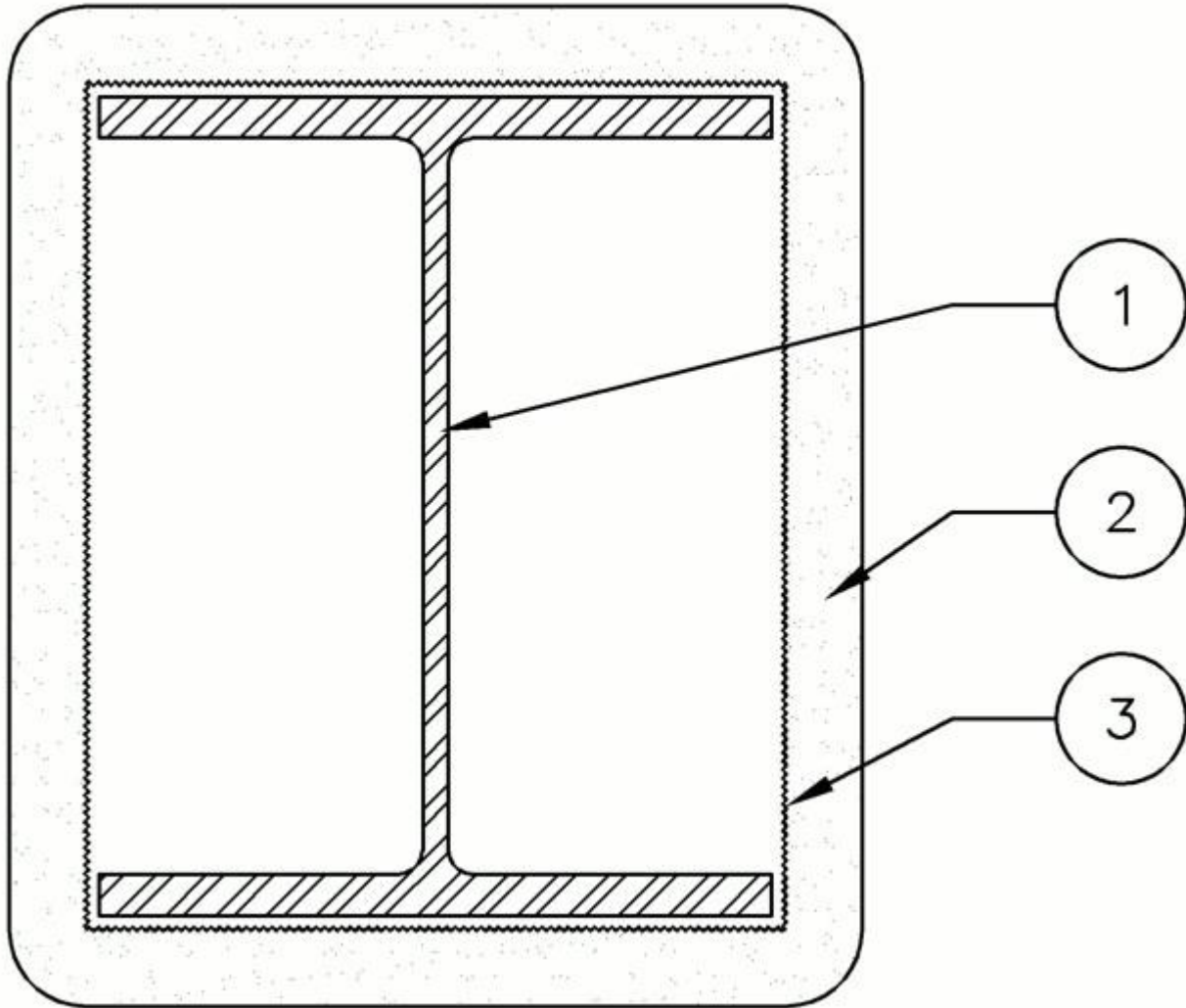
See General Information for Fire-resistance Ratings - ANSI/UL 1709

Design No. XR702

October 11, 2019

Ratings 3/4, 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 size of column, Type W10x49.

2. **Spray-Applied Fire Resistive Materials*** — See table below for appropriate thickness. Prepared by mixing with water according to instructions on each bag of mixture. Mixture can be spray or trowel applied in one or more coats to steel surfaces. Min avg density of 55 pcf with min ind value of 50 pcf. For method of density determination, see Design Information Section, Sprayed Material. Surface of material may be lightly finished with a trowel. As an option, the column surface may be primed. Types 241 and 241 HD investigated for UL 2431 Classification Category I-A and Exterior Environmental Purpose, additionally evaluated for acid and solvent spray exposures.

Min Required Thickness (inch) for Hourly Rating Period (min)

Column Size	W/D	45	60	90	120	150	180	240
W10x49	0.84	5/8	11/16	7/8	1	1-1/8	1-1/4	1-1/2

CARBOLINE CO — Type 241, Type 241 HD.

CARBOLINE (INDIA) PVT LTD — Type 241, Type 241 HD.

CARBOLINE KOREA LTD — Type 241, Type 241 HD.

PERLITA Y VERMICULITA SLU — Type 241, Type 241 HD.

STONCOR MIDDLE EAST L L C — Type 241, Type 241 HD.

STONCOR SOUTH CONE S A — Type 241, Type 241 HD.

3. **Metal Lath** — 3.4 lb per sq yd galv expanded steel. Lath lapped 1 in. at joint and tied together with No. 18 SWG galv steel wire spaced vertically 10 in. OC.

4. **PD Clips** — (Optional, Not Shown) — For use with Metal Lath (Item 3). To be used in conjunction with plastic-nosed corner bead (Item 5). Clips spaced vertically 12-14 in. OC on column flange edges over Metal Lath and to be fully embedded in Spray-Applied Fire Resistive Materials (Item 2) and installed per manufacturer's instructions.

5. **Corner Bead** — (Not Shown) — Required for use with PD Clips (Item 4). Plastic-nosed corner bead mounted to PD Clips and installed per manufacturer's instructions.

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Last Updated on 2019-10-11

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