



# BYBU.XR734 - 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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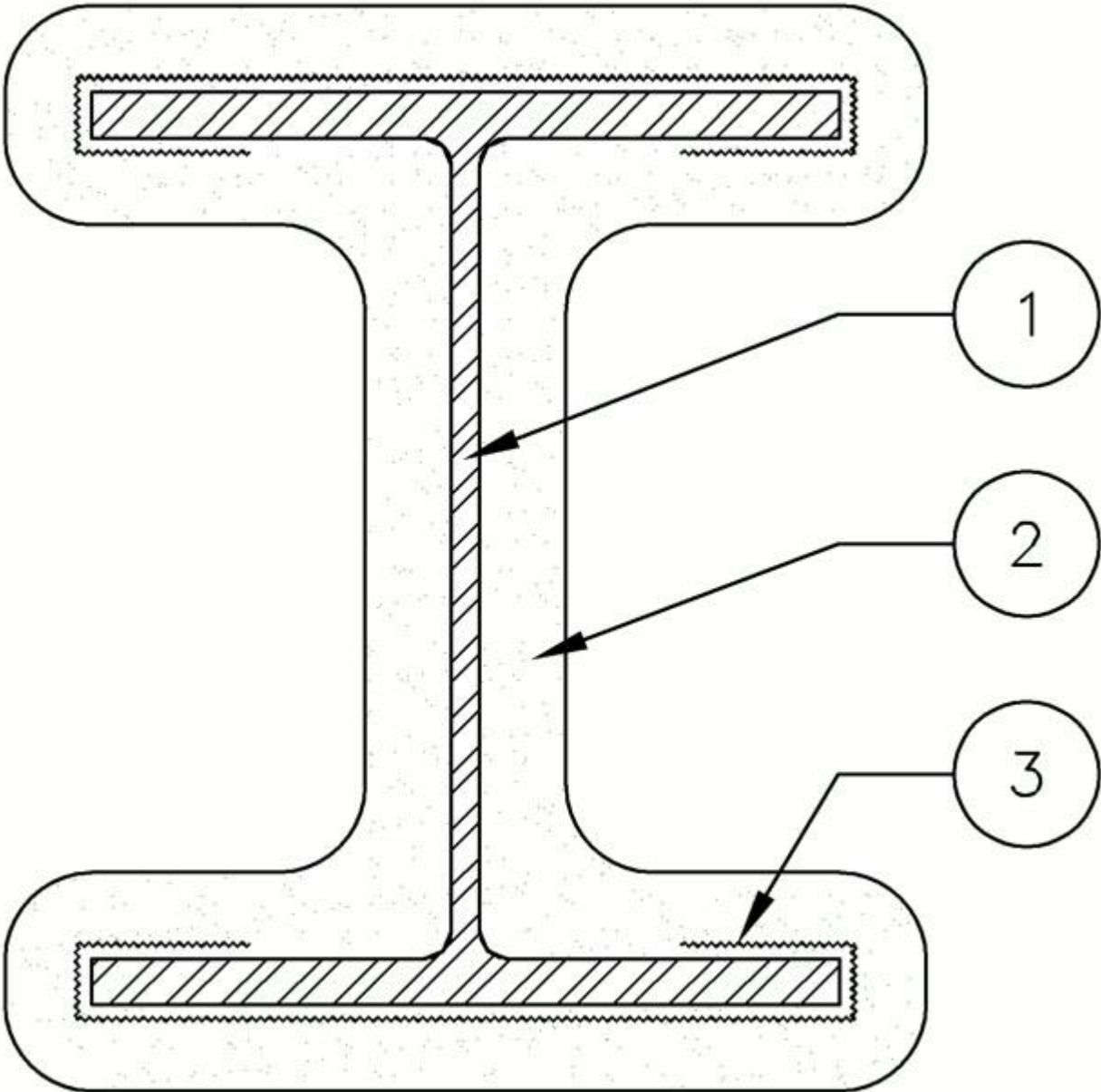
## BYBU - Fire-resistance Ratings - ANSI/UL 1709

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

### **Design No. XR734**

October 11, 2019

**Ratings-3/4, 1, 1-1/2, 2, 3 & 4 Hr.**



1. **Steel Column** — Min. size of column, Type W6x9.

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 and mesh surfaces. 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. Type 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 (in) for Hourly Rating Period (min)**

W/D	Hp/A	45	60	90	120	150	180	240
0.338	396	3/4	7/8	1-1/16	1-5/16	1-1/2	1-5/8	1-15/16
0.4	335	3/4	7/8	1-1/16	1-5/16	1-1/2	1-5/8	1-15/16
0.5	268	11/16	13/16	1-1/16	1-1/4	1-7/16	1-5/8	1-15/16
0.6	223	11/16	13/16	1	1-1/4	1-7/16	1-5/8	1-15/16
0.7	191	11/16	13/16	1	1-3/16	1-3/8	1-5/8	1-15/16

0.8	168	5/8	3/4	1	1-3/16	1-3/8	1-9/16	1-15/16
0.84	160	1/2	11/16	15/16	1-1/8	1-5/16	1-3/8	1-9/16
0.9	149	1/2	11/16	15/16	1-1/8	1-5/16	1-3/8	1-9/16
1	134	1/2	11/16	15/16	1-1/8	1-5/16	1-3/8	1-9/16
1.1	122	1/2	11/16	7/8	1-1/8	1-5/16	1-3/8	1-9/16
1.2	112	1/2	5/8	7/8	1-1/16	1-1/4	1-3/8	1-9/16
1.3	103	1/2	5/8	13/16	1-1/16	1-1/4	1-3/8	1-9/16
1.4	96	7/16	9/16	13/16	1	1-3/16	1-3/8	1-9/16
1.5	89	7/16	9/16	3/4	1	1-3/16	1-3/8	1-9/16
1.6	84	7/16	9/16	3/4	15/16	1-1/8	1-5/16	1-9/16
1.7	79	3/8	1/2	11/16	15/16	1-1/8	1-5/16	1-9/16
1.8	74	3/8	1/2	11/16	7/8	1-1/16	1-1/4	1-9/16
1.9	71	5/16	7/16	11/16	7/8	1-1/16	1-1/4	1-9/16
2	67	5/16	7/16	5/8	13/16	1	1-3/16	1-9/16
2.1	64	1/4	3/8	5/8	13/16	1	1-3/16	1-9/16
2.2	61	1/4	3/8	9/16	3/4	15/16	1-1/8	1-1/2
2.3	58	1/4	3/8	9/16	3/4	15/16	1-1/8	1-1/2
2.4	56	1/4	5/16	1/2	11/16	7/8	1-1/16	1-7/16
2.5	54	1/4	5/16	1/2	11/16	7/8	1-1/16	1-7/16
2.55	53	1/4	1/4	7/16	5/8	13/16	1	1-3/8

**CARBOLINE CO** — Type 241 and Type 241HD

**CARBOLINE (INDIA) PVT LTD** — Type 241 and Type 241HD

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

**STONCOR MIDDLE EAST L L C** — Type 241 and Type 241HD

**STONCOR SOUTH CONE S A** — Type 241 and Type 241HD

3. **Reinforcing Mesh or Metal Lath** — Galv expanded steel lath, weighing 3.4 lb per sq yd. Lath secured to column by bending tight around flanges a min of 1-1/2 in. toward web of column.

4. **Corner Bead** — (Optional, Not Shown) Double corner bead may be installed in accordance with Carboline's approved application guide.

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

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