

BXUV.N805 - FIRE-RESISTANCE RATINGS - ANSI/UL 263

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.

BXUV - Fire Resistance Ratings - ANSI/UL 263 Certified for United States

BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada

See General Information for Fire-resistance Ratings - ANSI/UL 263 Certified for United States
Design Criteria and Allowable Variances

See General Information for Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada
Design Criteria and Allowable Variances

Design No. N805

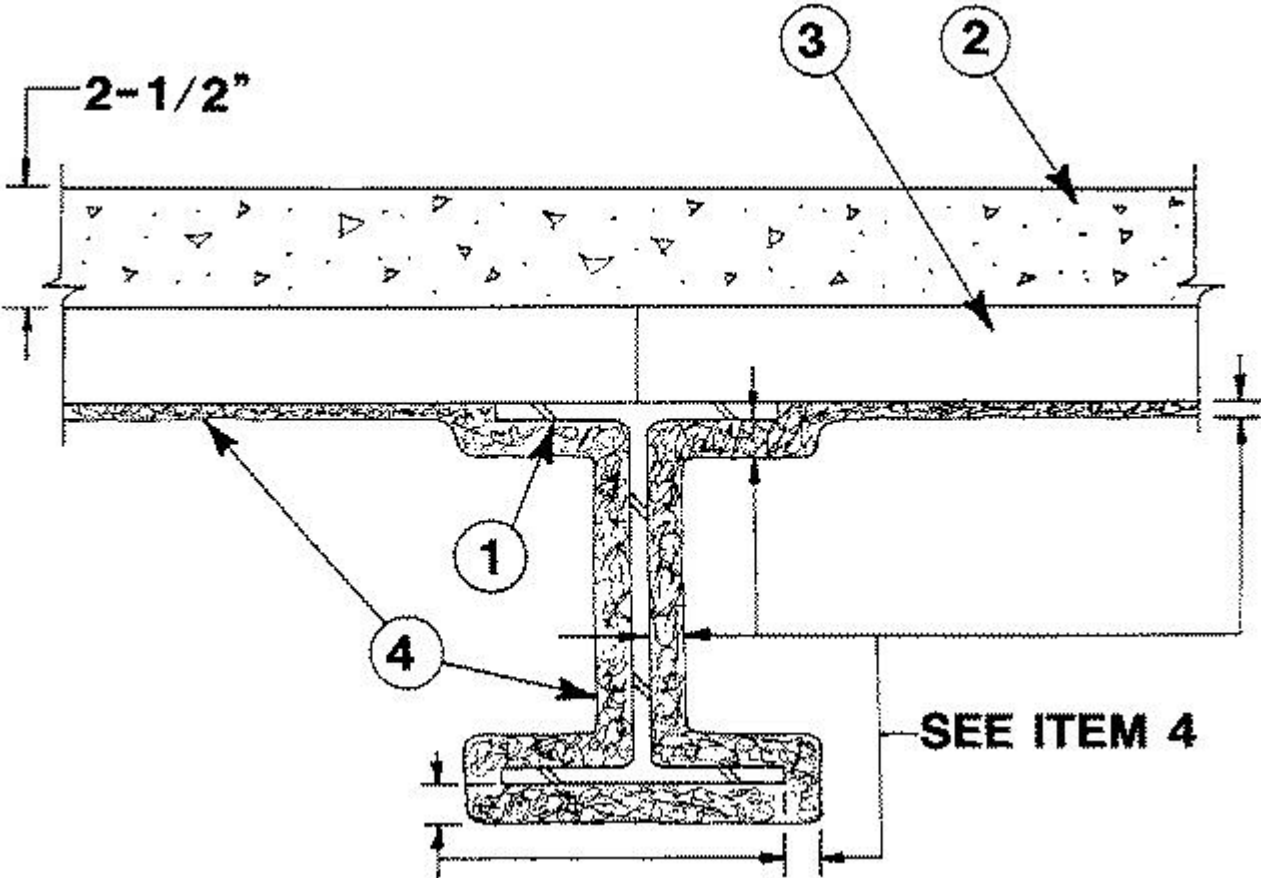
May 07, 2018

Restrained Beam Ratings — 1, 2, 3 and 4 Hr.

Unrestrained Beam Ratings — 1, 2, 3 and 4 Hr.

This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7

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



1. **Beam** — W8X20, min size.
2. **Normal Weight or Lightweight Concrete** — Normal weight concrete, carbonate or siliceous aggregate, 148 pcf unit weight, 3500 psi compressive strength. Lightweight concrete, expanded shale, clay, or slate aggregate by rotary-kiln method, 110 pcf unit weight, 3500 psi compressive strength, vibrated.
3. **Steel Floor and Form Units*** — 1-5/16 in. deep corrugated units; and 1-1/2, 1-5/8, 2 or 3 in. deep fluted and cellular units, welded to beam.
4. **Spray-Applied Fire Resistive Materials*** — Spray applied in one coat to a final untamped thickness as shown in table below, to steel surfaces which must be clean and free of dirt, loose scale and oil. When fluted or corrugated units are used, the crest areas above the beam shall be filled with Spray-Applied Fire Resistive Material. Use of adhesive is optional. Min avg density of 13 pcf with min ind density of 11 pcf for Types II, II HS, or DC/F. Min avg and min ind densities of 22 and 19 pcf, respectively, for Type HP. For method of density determination refer to Design Information Section.

Concrete NW

Restrained Beam Rating Hr	Unrestrained Beam Rating Hr	Min Thkns In.	
		Beam	Deck
—	1	1/2	1/4
2	—	3/4	1/4
—	2	15/16	1/2
3	—	1-1/4	1/2
—	3	1-5/16	1/2
4	—	1-5/8	5/8
—	4	1-11/16	5/8

The thickness of Spray-Applied Fire Resistive Materials for the beams (normal weight concrete on the top) shown in the table below are applicable when the thickness applied to the beams' lower flange edges is reduced to one-half:

Restrained Beam Rating Hr	Unrestrained Beam Rating Hr	Min Thkns In.	
		Restrained Beam Rating Hr	Unrestrained Beam Rating Hr
—	1	—	5/8
2	—	7/8	—
—	2	—	1-1/16
3	—	1-7/16	—
—	3	—	1-7/16
4	—	1-7/8	—
—	4	—	1-7/8

Lightweight Concrete

Restrained Beam Rating Hr	Unrestrained Beam Rating Hr	Min Thkns In.	
		Beam	Deck
—	1	5/8	1/2
—	2	1-1/8	1/2
2	—	1	1/2

The thickness of Spray-Applied Fire Resistive Materials for the beams (lightweight concrete on the top) shown in the table below are applicable when the thickness applied to the beams' lower flange edges is reduced to one-half:

Restrained Beam Rating Hr	Unrestrained Beam Rating Hr	Min Thkns In.	
		Restrained Beam Rating Hr	Unrestrained Beam Rating Hr
—	1	—	3/4
—	2	—	1-5/16
2	—	1-1/8	—

ISOLATEK INTERNATIONAL — Types D-C/F, HP, II or Type II HS with or without Type EBS or Type X adhesive/sealer is optional.

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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's Follow-Up Service. Only those products bearing the UL Mark should be considered to be Certified and covered under UL's Follow-Up Service. Always look for the Mark on the product.

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