

BXUV.S806 - 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. S806

May 08, 2018

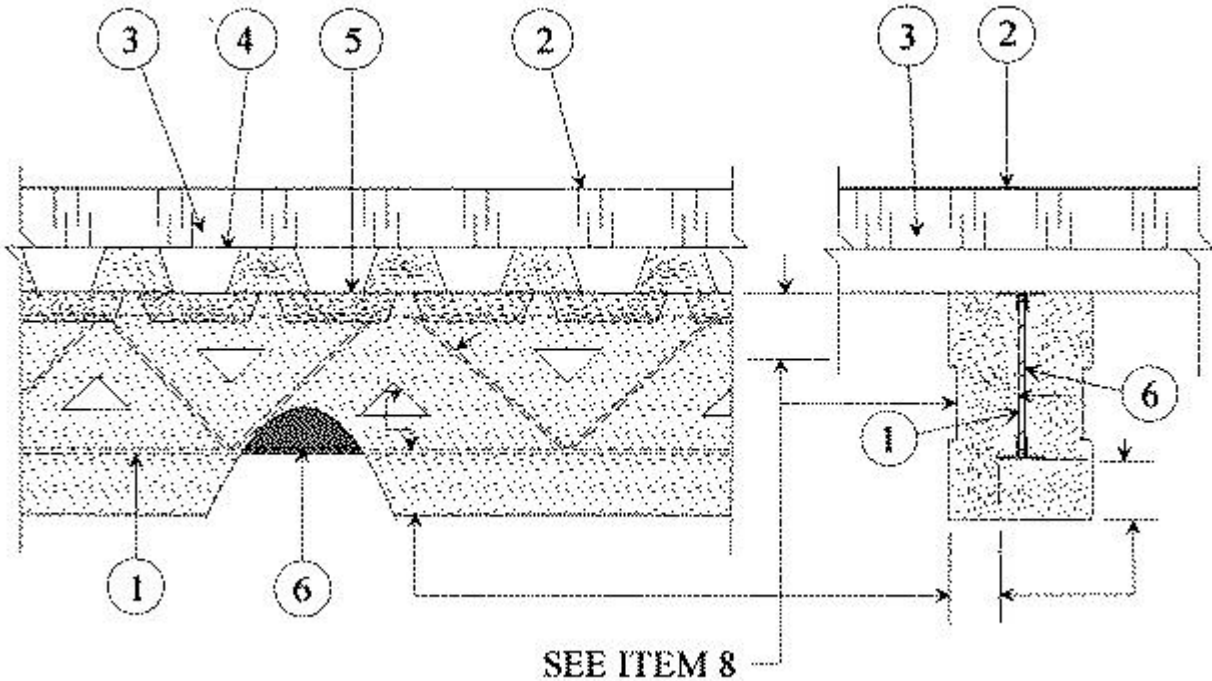
Restrained Beam Ratings — 1, 1-1/2 and 2 Hr

Unrestrained Beam Ratings — 1, 1-1/2 and 2 Hr

Restricted Load Condition — See Item 1

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. **Steel Joist** — 12K5 min size. Maximum allowable tensile stress of 26,000 psi.
2. **Roof Covering*** — Consisting of hot mopped, cold application or single-ply material compatible with insulation(s) described herein which provide Class A, B or C coverings. See Roofing Material and Systems Directory-Roof Covering Materials (TEVT).
3. **Roof Insulation*** — Consisting of building units, foamed plastic or mineral and fiber boards, applied in one or more layers. When multiple layers are used, end and side joints shall be offset a min of 12 in. in both directions in order to lap all joints. See category for names of companies providing Classified Products — Building Units (BZXX), Foamed Plastic (CCVW) or Mineral and Fiber Boards (CERZ). Roof insulation shall be compatible with roof covering materials Class A, B or C system. See Roofing Materials and Systems Directory—Roof Covering Materials (TEVT).
4. **Adhesive*** — (Optional) — May be applied to steel roof deck units or between insulation layers at a max application rate of 0.4 gal per 100 sq ft. See Adhesives (BYWR) category for name of manufacturers.
5. **Steel Roof Deck** — (Unclassified) — Fluted, 24 MSG, galv, 1-1/2 in. deep with 3-1/2 in. wide flutes spaced 6 in. OC and 30 in. overall width. Ends overlapped at supports a min 1-1/2 in. and welded to supports, min 12 in. OC. Adjacent units button-punched or welded together at midspan along side joints.
6. **Metal Lath** — (Optional) — Diamond mesh, 3/8 in. expanded steel lath, 1.7 to 3.4 lb per sq yd. Lath secured to one side of each steel joist with No. 18 SWG galv steel wire at joist web and bottom chord members, spaced 15 in. OC max. When used, the metal lath is to be fully covered with no minimum thickness requirements.
7. **Glass Fiber Mesh** — (Optional) — Square fiberglass mesh, nom 6 strands per in. in both directions, weighing approximately 4.3 oz/sq yd shall be attached to one side of each joist web member with min 1-1/4 in long by 1/2 in. wide hairpin clips formed from No. 18SWG steel wire, 0.064 in. diam. The method of attaching the mesh must be sufficient to hold the mesh and spray-applied fire protection material in place during application of the Spray-Applied Fire Resistive Materials material and until it has cured. An acceptable method to attach the mesh is by embedding the mesh in min 1/4 in. long beads of hot melted glue. The beads of glue shall be spaced min. 12 in. OC. along the top chord of the bar joists.
8. **Spray-Applied Fire Resistive Materials*** — Applied by spraying with water in one or more coats to the final thicknesses shown below. Beam surfaces shall be clean and free of dirt, oil and loose scale. Areas between the underside of the roof deck units and the beam's top flange shall be filled with the protection material. The use of adhesive prior to application of the protection material is optional. Tamping is optional.

Restrained Beam Rating Hr	Unrestrained Beam Rating Hr	Min Thkns of Spray Applied Fire Resistive Mtl

1	1	1-1/16
1-1/2	1-1/2	2-1/16
2	1-1/2	2-1/2
2	2	3

ISOLATEK INTERNATIONAL — Type D-C/F, II, or Type II HS with min avg density of 13 pcf and min ind density of 11 pcf. Type HP with min avg and min ind densities of 22 and 19 pcf, respectively. Type D-C/F, HP, II, or Type II HS investigated for exterior use. Type EBS or Type X adhesive/sealer is optional. For method of density determination, refer to Design Information Section Sprayed Material

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Last Updated on 2018-05-08

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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