

# BXUV.P676 - 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. P676**

August 27, 2015

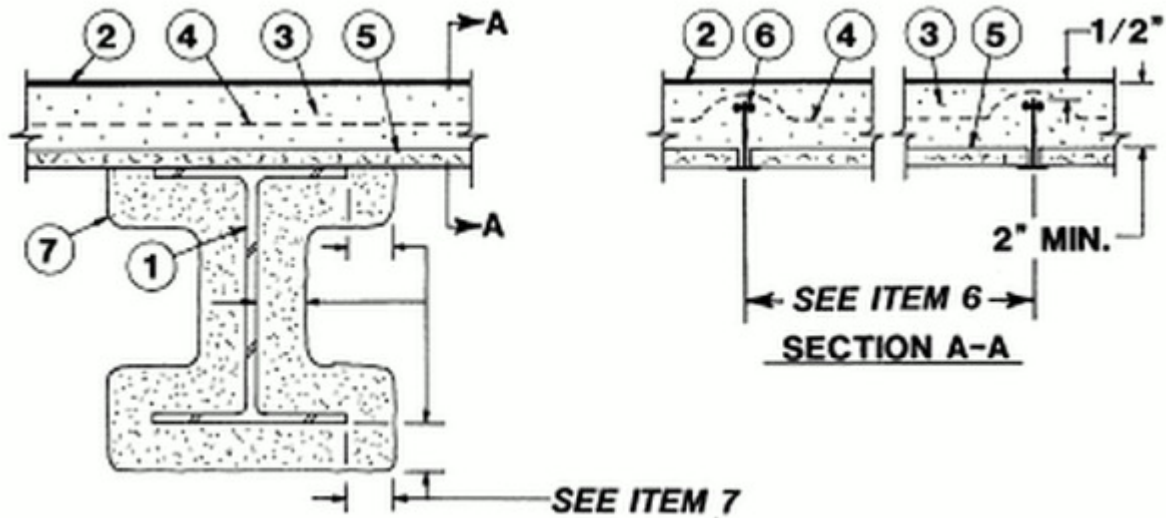
**Restrained Assembly Ratings — 1-1/2 and 2 Hr. (See Item 6)**

**Unrestrained Assembly Ratings — 1-1/2 and 2 Hr. (See Item 6)**

**Unrestrained Beam Ratings — 1-1/2 and 2 Hr. (See Item 6)**

**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** — W8 x 21, min size.

2. **Roof Covering\*** — Consisting of hot mopped or cold application materials compatible with insulation(s) described herein which provide Class A, B or C coverings. See Roofing Materials and Systems Directory-Roof Covering Materials (TEVT).

3. **Gypsum Concrete** — Air dry density and strength approx 50 pcf and 500 psi, respectively. Dry gypsum mixture supplied in bags containing not more than 5 per cent by weight of wood shavings or chips.

4. **Wire Mesh** — (for use with Item 3) — No. 19 SWG galv steel wire twisted to form hexagons with 2-in sides. In addition, straight 16 SWG galv steel wire woven into the mesh and spaced 3 in. apart as stiffeners. Mesh installed without attachment and overlapped 6 in. at the sides.

5. **Gypsum Board\*** — 1 in. thick gypsum panels nom 24 in. wide placed between sub-purlins, with end joints staggered in adjacent courses.

**CGC INC** — Type SLX.

**UNITED STATES GYPSUM CO** — Type SLX.

**USG BORAL DRYWALL SFZ LLC** — Type SLX

**USG MEXICO S A D E C V** — Type SLX.

6. **Sub-purlins** — Spaced 24-1/2 in. O.C. Max spacing of supports not to exceed 8 ft 0 in. for a 2 hr rating and not to exceed 9 ft 0 in. for a 1-1/2 hr rating. Sub-purlins welded to supports with 1-1/2 in. long fillet welds on each side of each support.

**Gypsum Board  
Thkns In.**

**Subpurlin Type**

Gypsum Board Thkns In.	Subpurlin Type
1/2	5-6-17-2
	2-5-17-2
	1-5-17-2
	000-5-14-2
1	2-3-17-2-1/2
	1-3-17-2-1/2
	000-3-14-2-1/2
1-1/2	000-3-14-3

1-3-17-3

**7. Spray-Applied Fire Resistive Materials\*** — Applied by mixing with water and spraying in several coats to a final thickness of 1-1/2 in. to beam surfaces which must be clean and free of dirt, loose scale and oil. Min avg and min ind density of 15/14 pcf respectively. Min avg and min ind density of 19/18 pcf respectively for Type 7GP and 7HD. For method of density determination, see Design Information Section.

**GCP KOREA INC** — Types MK-6/CBF, MK-6/ED, MK-6/HY, MK-6s, Monokote Acoustic 1.

**PYROK INC** — Type LD.

**SOUTHWEST FIREPROOFING PRODUCTS CO** — Types 4, 5, 5EF, 5GP, 5MD, 7GP, 7HD, 8EF, 8GP, 8MD, 9EF, 9GP, 9MD.

**GCP APPLIED TECHNOLOGIES INC** — Types MK-6/HY, MK-6s, Monokote Acoustic 1, RG.

**7A. Spray-Applied Fire Resistance Materials\*** — As an alternate to Item 7 - Applied by mixing with water and spraying in one or more coats to a final thickness of 7/16 in. to beam surfaces which must be clean and free of dirt, loose scale and oil. Min avg and min ind density of 15 and 14 pcf, respectively, for Types 300, 300AC, 300ES, 300HS, 300N, 3000, 3000ES and SB. For Types 400AC and 400ES min average and min individual density of 22 and 19 pcf, respectively. For method of density determination see Design Information Section.

**BERLIN CO LTD** — Types 300, 300ES, 300N or SB.

**GREENTECH THERMAL INSULATION PRODUCTS MFG CO L L C** — Types 300, 300AC, or 400AC.

**ISOLATEK INTERNATIONAL** — Types 300, 300AC, 300ES, 300HS, 300N, SB, 400AC, 400ES, 3000 or 3000ES.

**NEWKEM PRODUCTS CORP** — Types 300, 300ES, 300N or SB.

**7B. Spray-Applied Fire Resistance Materials\*** — As an alternate to Item 7 and 7A - Applied by mixing with water and spraying in one or more coats to a final thickness of 7/16 in. to beam surfaces which must be clean and free of dirt, loose scale and oil. Min avg and min ind density of 17.5 and 16 pcf, respectively for Type 300TW. Min avg and min ind density of 22 and 19 pcf, respectively, for Type 400. For method of density determination see Design Information Section.

**GREENTECH THERMAL INSULATION PRODUCTS MFG CO L L C** — Type 400.

**ISOLATEK INTERNATIONAL** — Types 300TW or 400.

**NEWKEM PRODUCTS CORP** — Type 400.

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

Last Updated on 2015-08-27

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.

UL permits the reproduction of the material contained in the Online Certification Directory subject to the following conditions: 1. The Guide Information, Assemblies, Constructions, Designs, Systems, and/or Certifications (files) must be presented in their entirety and in a non-misleading manner, without any manipulation of the data (or drawings). 2. The statement "Reprinted from the Online Certifications Directory with permission

from UL" must appear adjacent to the extracted material. In addition, the reprinted material must include a copyright notice in the following format: "© 2019 UL LLC"