

BXUV.D915 - 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. D915

October 19, 2017

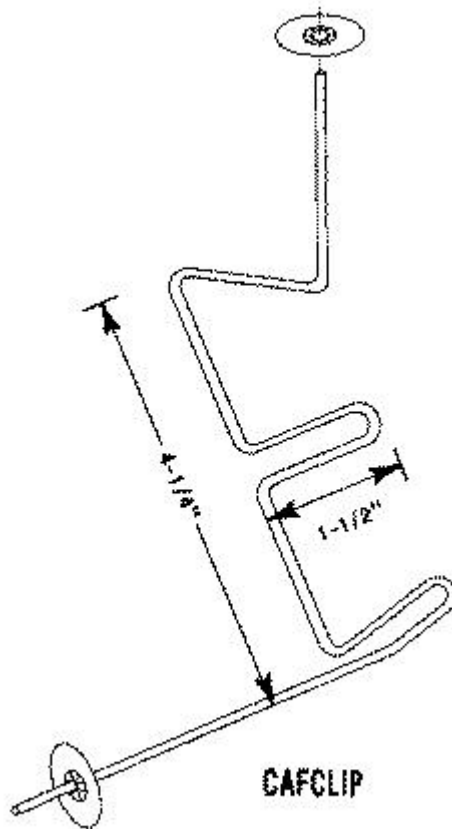
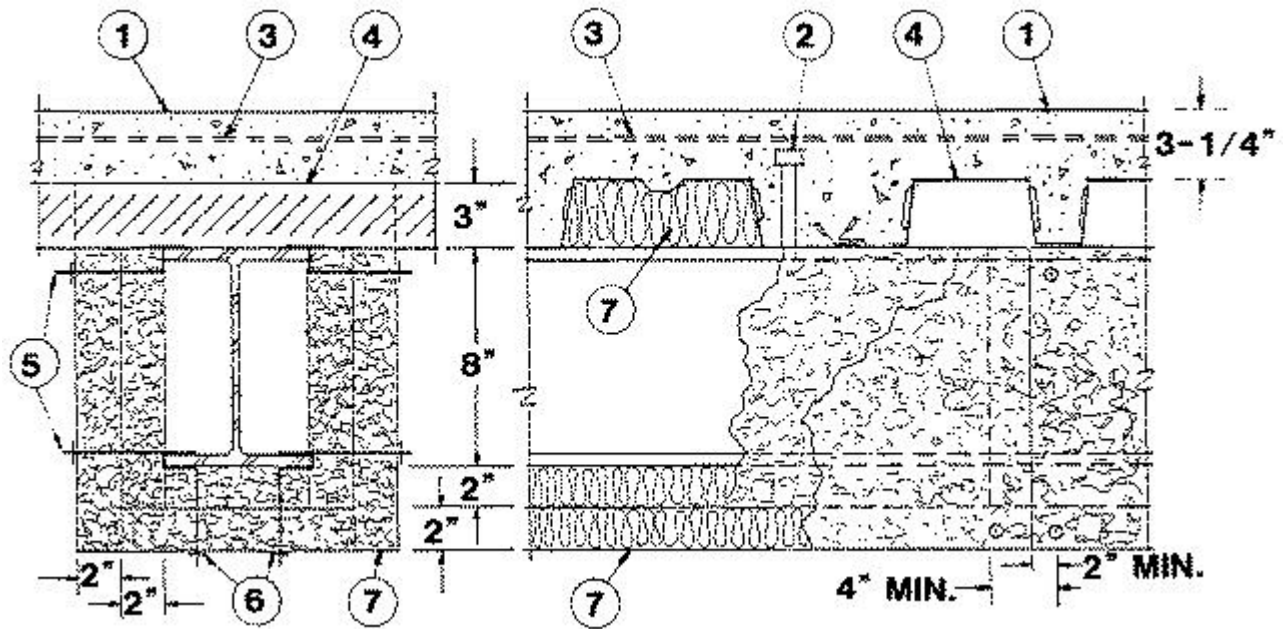
Restrained Assembly Rating — 2 Hr.

Unrestrained Assembly Rating — 1-1/2 and 2 Hr. (See Item 4)

Unrestrained Beam Ratings — 1-1/2 Hr. and 2 Hr. (See Item 4)

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.**



Beam — W8X13 min size.

1. **Lightweight Concrete** — Expanded clay aggregate by the sintered grate process. Unit weight 118 pcf. Compressive strength 3000 psi.

2. **Shear Connectors** — Studs, 3/4 in. diam by 5 in. long, headed type or equivalent per AISC specifications. Welded to top flange of beam through deck.

3. **Welded Wire Fabric** — 6 by 6 — 10/10 SWG.

4. **Steel Floor and Form Units*** — Composite, 3 in. deep, galv units. Fluted units may be phosphatized/painted. Any combination of fluted or cellular units. Min gauges are 22 MSG for fluted and 20/20 MSG for cellular. Welded to supports approx 11 in. OC for cellular units and 15 in. OC for fluted units. Units welded along side joints 5 ft OC.

The Unrestrained Assembly Rating is 1-1/2 hr if cellular units are used and 2 hr when only fluted units are used. The clear spans must be 10 ft or less.

The Unrestrained Beam Rating is 1-1/2 hr when cellular units are used and 2 hr when only fluted units are used.

5. **Fasteners** — Cafclip 11 SWG fasteners spaced not greater than 16 in. O.C. and 3 in. from ends of batts. Cafclips secured to bottom beam flange. Cafclips secured to upper beam flange by fitting between beam and steel deck. As an alternate to Cafclips, No. 10 SWG steel wire studs (not shown) resistance welded to beam web near upper beam flange. When batt height used as beam web protection exceeds 12 in. additional No. 10 SWG steel wire studs to be located in lengthwise rows spaced not greater than 12 in. O.C. and 3 in. from ends of batts. Spacing between stud rows to be approx equal and not greater than 12 in. Batt impaled over studs. Min. 1/2 in. fastener excess, bent or cut. As an alternate detail, spacing for edge fasteners, across joint, not to exceed 12 in. O.C. when tie wire secured behind the clinch shields and spanned twice across joint.

6. **Clinch Shield** — No. 26 MSG galv steel 1-1/2 in. diam round clinch shields for use with Cafclip fasteners. Round or square clinch shields, 1 in. sq min, for use with No. 10 SWG steel wire stud.

7. **Batts and Blankets*** — Two (2) in. thick mineral wool batts. Attached to beam by impaling over wire fasteners. Two layers required making a total thickness of 4 in. The number of transverse joints along each side or the bottom of the beam shall not exceed three in any 8 ft segment of beam. Additional pieces of batts stuffed between crests of fluted steel deck and beam.

UNITED STATES MINERAL PRODUCTS CO, DBA ISOLATEK INTERNATIONAL — Type CB.

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Last Updated on 2017-10-19

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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