BXUV.I514 - 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

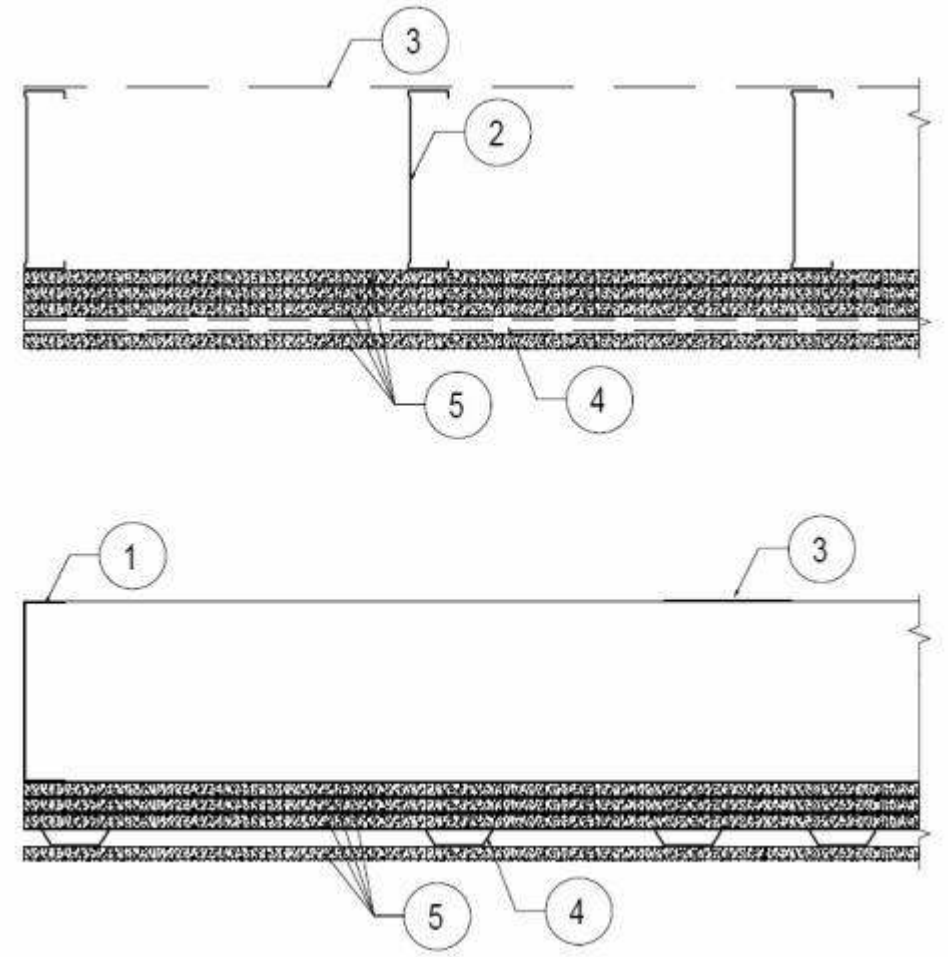
Design No. I514

July 23, 2020

Ceiling Membrane Rating — 2 Hr.

Load Restriction - Limited to the Dead Weight of the Assembly.

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



1. **Perimeter Channels —** C-Shaped runner min. 6 in. deep with min. 2 in. legs and formed from min. No. 20 MSG galv. steel (0.0329 in. thick bare metal thickness). Perimeter channels attached to wall structure with fasteners spaced not greater than 24 in. O.C. at both the top and bottom of the vertical leg.

2. **Steel Studs —** Min. 6 in. wide with min. 1-5/8 in. legs containing folded back flanges and formed from min. No. 20 MSG galv. steel (0.0329 in. thick bare metal thickness). Studs to be cut 1/2 in. to 3/4 in. less than the span between the vertical legs of the perimeter channels. Studs spaced a max. 24 in. O.C. At each end of the stud, the un-faced side shall be secured to the perimeter channel with one 1/2 in. long pan-head steel screw. Studs are used at each end of the horizontal barrier to terminate the assembly at the adjoining wall. These end studs shall be secured to the adjoining wall in the same manner as the perimeter channels (Item 1). Studs installed as described in Items 7 and 8.

3. **Steel Strap —** Min 4 in. wide formed from min. No. 20 MSG galv. steel (0.0329 in. thick bare metal thickness). Secured perpendicular to the studs at the centerline of the span using a 1/2 in. long pan-head steel screw. Strips to overlap one full stud bay at splice locations.

4. **Resilient Channels —** Formed from min 25 MSG galv steel installed perpendicular to steel studs spaced 16 in. OC. Channels overlapped 4 in. at splices and secured to steel framing members with 2-1/4 in. long Types S or S-12 steel screws after first, second and third layers of gypsum board are secured to steel studs. Two channels, spaced 3 in. from each gypsum board butt joint as shown on the illustration above.

4A. **Furring Channels —** (Alternate to Item 4A) — Hat shaped channels, 7/8 in. deep, formed from min 25 MSG galv steel installed perpendicular to steel framing members spaced 16 in. OC. Furring channels overlapped 2-1/2 in. at splices and secured to steel framing members with two 2-1/4 in. long Type S steel screws after first, second and third layers of gypsum board are secured to steel studs. Two channels, spaced 3 in. from each gypsum board butted end joint.

5. **Gypsum Board* —** Four layers of nom 5/8 in. thick, 4 ft wide gypsum board. First three layers installed with long dimension perpendicular to bottom flange of steel studs. Adjacent butt joints staggered approximately 4 ft OC. Overlapping layers installed so that the tapered edges are offset min 12 in. from previous layer. Base layer fastened to bottom flange of steel

studs with 1-1/4 in. long Type S-12 steel screws spaced 12 in. OC. Second layer secured to bottom flange of steel studs with 2 in. long Type S-12 steel screws spaced 12 in. OC. Third layer secured to bottom flange of steel studs with 2-1/2 in Type S-12 steel screws spaced 12 in. OC. Fourth layer secured to resilient or furring channels with 1-1/8 in. long Type S steel screws spaced 12 in. OC. Screws to be spaced 3 in. from butted end joints and 1 in. from tapered end joints.
AMERICAN GYPSUM CO — Type AG-C

UNITED STATES GYPSUM CO — Types C, IP-X2

CERTAINTEED GYPSUM INC — Type C

6. **Finishing System —** (Not Shown) — Vinyl, dry or premixed joint compound, applied in two coats to joints and screw-heads. Nom 2 in. wide paper tape embedded in first layer of compound over all joints. As an alternate, nom 3/32 in. thick veneer plaster may be applied to the entire surface of gypsum board if specified by the manufacturer.

7. **Supporting Structure —** Suitable point of attachment for hanger wire (Item 2).

8. **Hanger Wire —** No. 12 SWG galv steel wire, twist-tied or fastened to supporting structure. Located 24 in. O.C. along steel studs.

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