

**BXUV - Fire Resistance Ratings - ANSI/UL 263**

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

[See General Information for Fire-resistance Ratings - ANSI/UL 263](#)

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Design No. G599

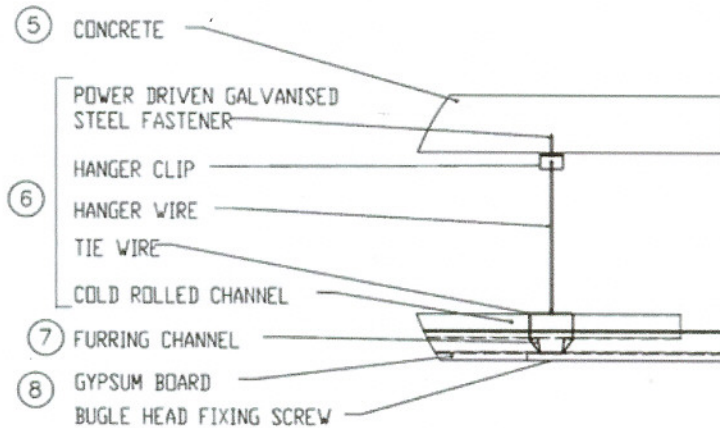
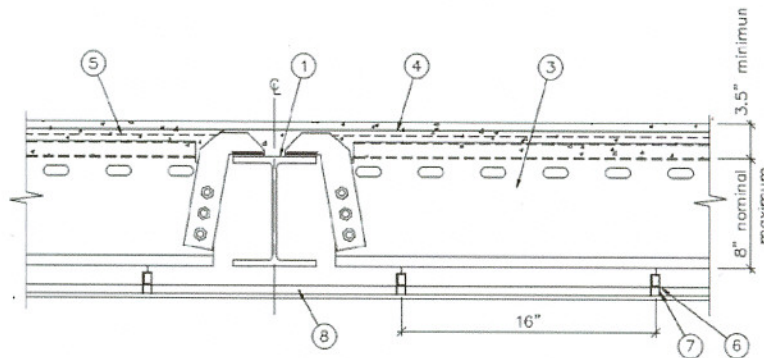
December 23, 2015

Unrestrained Assembly Ratings — 1, 2 and 3 Hr.

Restrained Assembly Ratings - 1, 2 and 3 Hr.

Loading Determined by Allowable Stress Design Method or Load and Resistance Factor Design Method published by the American Institute of Steel Construction, or in accordance with the relevant Limit State Design Provisions of Part 4 of the National Building Code of Canada.

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



**CEILING CROSS SECTION**

- 1. **Steel Beam** — Min size W8x18, Fy 50 ksi.
- 2. **Shear Connector** — (Optional, Not Shown) — Studs, 3/4 in. diameter headed type of equivalent per AISC specifications, welded to top flange of beam.
- 3. **Structural Steel Members\*** — Speedfloor Joist — Composite joist min. 8 in. nominal deep, 16 ga. minimum thickness, spaced 4'-1-1/2" in. OC. Designed as per as per manufacturers instruction in accordance with Allowable Stress Design Method or Load and Resistance Factor Design Method published by the American Institute of Steel Construction.
- SPEEDFLOOR LTD** — Speedfloor Joists, 200, 250, 300, 350, 400
- 4. **Welded Wire Fabric** — Minimum 6 in. x 6 in. W2.9 x W2.9 placed over the joist.
- 5. **Normal Weight** — Normal weight concrete with carbonate or siliceous aggregate, compressive strength to be 3000 psi min. Density 145 +/- 3 psf. Minimum thickness to be 3-1/2 in. Negative steel reinforcement to be provided at beam supports as required by structural analysis.
- 6. **Cold Rolled Channels** — 1-1/2 in. deep with 1/2 in flanges 16 ga steel, spaced maximum 48 inches OC perpendicular to the Speedfloor joist suspended from No. 12 SWG galv. steel wire spaced a maximum 48 in. OC. Steel wire suspended from 0.76 in. thick 3/4 in. wide with 1-1/4 in horizontal leg and 5/8 in. vertical leg ceiling hanger clips, vertical leg of hanger clip with 5/16 in. dia. hole and horizontal leg with 1/4" dia. hole. Ceiling hanger clip fixed to the underside of the concrete with 1-1/4 min. long Low Velocity RAMSET 1510 Power Fasteners shot into the

concrete. Hanger wire inserted through the hole in the ceiling hanger clip and twist tied with a min. 4 loops. Cold Rolled Channel twist tied to the 12 SWG wire with min. 4 loops.

7. **Resilient Channels** — Minimum 25 ga. thick, 7/8 mm deep hat-shaped galvanized steel channels. Channels shall be spaced maximum 16 in. apart and attached to the cold rolled channels with two double strand 18 gauge steel wire. At locations where gypsum board end joints occur, additional resilient channels shall be installed to provide screw attachments for the gypsum board ends. These additional channels shall be positioned so that the distance from the end of the board to the center of the first channel is 3 in. and from the board end to the center of the next channel is 19 in. Joints in channels shall be overlapped 8 in. and shall be located directly below the joist. Channels shall be cut 1/2 in. short of the end supports.

8. **Gypsum Board\*** — Nominal 5/8 in. thick, 48 in. wide gypsum board installed with long dimension perpendicular to resilient channels. Gypsum board shall be attached to resilient channels using 1 in. long No. 6. Type S drywall screws, spaced 8 in. OC in the field of each board. At the end joints, screws shall be located 3 in. from the board edge. At the side joints, screws shall be located 1-1/2 in. and 4 in. from the board end. All end joints shall be completed backed by 3 in. wide strips of gypsum board centrally positioned over the joints.

CGC INC — Type C

UNITED STATES GYPSUM CO — Type C

USG MEXICO S A DE C V — Type C

9. **Joint System** — (Not Shown) — Paper tape embedded in joint compound over joints and covered with 2 layers of compound with edges feathered out. Wallboard screw heads covered with 2 layers of compound.

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[Last Updated](#) on 2015-12-23