

## 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.
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## 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](#)

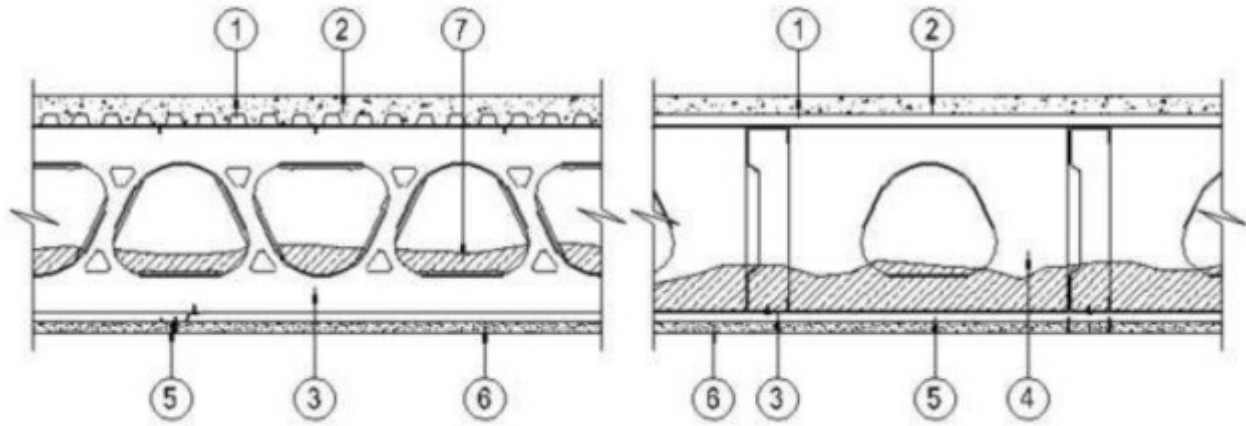
### Design No. G577

September 2, 2024

**Unrestrained Assembly Rating — 2 Hr.**

**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 Deck** — Min 9/16 in. deep, 22 MSG galv corrugated fluted steel deck. Attached to each joist with #10 3/4 in. long screws at each side joint and no more than 10 in. OC between sides.

2. **Floor Topping Mixture\*** — Compressive strength to be 3000 psi min. Minimum thickness to be 1 in. as measured from the top plane of the deck. Refer to manufacturer's instructions accompanying the material for specific mix design. A primer provided by the floor-topping manufacturer shall be applied to the steel deck prior to the installation of the floor topping mixture at a maximum application rate of 300 ft<sup>2</sup>/gallon.

**ARCOSA SPECIALTY MATERIALS** — AccuCrete® Types NexGen, Green, Prime and PrePour, AccuRadiant®, AccuLevel® Types G40, G50 and SD30

**DEPENDABLE LLC** — GSL M3.4, GSL K2.6, GSL-CSD or GSL RH

**FORMULATED MATERIALS LLC** — FR-25, FR-30, SiteMix, and Treadstone Advantage

2A. **Floor Mat Material\*** — (Optional, Not Shown) — Nominal 2 - 9.5 mm thick, loose laid over the crests of the steel deck. Flutes of the steel deck to be filled with **Floor Topping Mixture\*** prior to application of the **Floor Mat Materials\***.

**ARCOSA SPECIALTY MATERIALS** — AccuCrete® Types D13, D-18, D25, DX38, EM.125, EM.125S, EM.250, EM.250S, EM.375, EM.375S, EM.750, and EM.750S.

**FORMULATED MATERIALS LLC** — M1, M2, M3, Elite, Duo, R1, and R2

**KEENE BUILDING PRODUCTS CO INC** — Types Quiet Qurl 55/025, Quiet Qurl 55/025 N, Quiet Qurl 55/025 MT, Quiet Qurl 55/025 N MT, Quiet Qurl 60/040, Quiet Qurl 60/040 N, Quiet Qurl 65/075, Quiet Qurl 65/075 N, Quiet Qurl 52/103 and Quiet Qurl 52/103N

3. **Structural Steel Members\*** — JoistRite channel-shaped joists, min 9-1/4 in. deep with min 2 in. wide flanges and 3/4 in. long stiffening flanges. The web of each joist is provided with 3/4 in. deep lip-reinforced trapezoidal cutouts as shown in the illustration. JoistRite rim track, min 9-3/8 in. deep with min 1-1/2 in. top flange and min 2-5/16 in. bottom flange. The joists and rim tracks are fabricated from min 16 MSG galv steel. Joists spaced max 24 in. OC. Floor joists attached to rim track using channel-shaped steel web stiffeners. At rim track splices bearing on supports, rim tracks are connected using an overlapping section of a 12 in. long splice plate, with four 3/4 in. long self-drilling #10 screws to each rim piece.

**MARINO/WARE, DIV OF WARE INDUSTRIES INC** — Type JR JoistRite floor joists, Type JT JoistRite rim track

4. **Blocking & Bridging** — Installed before construction loads are applied. The blocking consists of JoistRite solid blocking placed between each joist. Blocking attached to the top and bottom joist flanges with one #10 3/4 in. long self-drilling screw at each end tab of blocking. Blocking is fabricated from min 18 MSG galv steel, min 1-15/16 in. flanges, having the same depth as the joists.

4A. **Web Stiffeners** — (Not Shown) — JoistRite web stiffeners, min 3-5/8 in. wide with min 9/16 in. flange and min 1-1/4 in. flange, having the same depth as the joists. Fabricated from min 16 MSG galv steel. Secured to each joist and track with #10 3/4 in. long self-drilling screws.

5. **Resilient Channels** — 1/2 in. deep, formed of min 26 MSG galv steel, spaced 12 in. OC perpendicular to joists. Channel splices overlapped 6 in. beneath steel joists. Channels secured to each joist with one #10 3/4 in. long self-drilling screw. Channels oriented opposite at wallboard butt joints (spaced 6 in. OC) as shown in the above illustration.

5A. **Steel Framing Members\*** — (Optional, Not Shown) — As an alternate to Item 5 — Furring channels and Steel Framing Members as described below:

a. **Furring channels** — Formed of No. 25 MSG galv steel, 2-3/8 in. wide by 7/8 in. deep, spaced 12 in. OC, perpendicular to steel joists (Item 3). Channel secured to joists as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. 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 12 in.

b. **Steel Framing Members\*** — Used to attach furring channels (Item a) to joists (Item 3). Clips spaced 24 in. OC and secured to the bottom chord of joists with min 1-5/8 in. long No. 8 self-drilling, self-tapping, bugle, flat or hex head screw through the center grommet. Furring channels are friction fitted into clips. Additional clips required to hold furring channel that supports the gypsum board butt joints.

**PLITEQ INC** — Type Genie Clip

6. **Gypsum Board\*** — Nom 5/8 in. thick, 48 in. wide gypsum panels installed with long dimension perpendicular to resilient or furring channels. Side joints centered between joists. Gypsum panels secured with 1 in. long Type S bugle-head screws spaced 8 in. OC in both the field and the perimeter, and 1 in. from side edges of the board.

**NATIONAL GYPSUM CO** — Type FSW-C

7. **Batts and Blankets\*** — Glass fiber insulation, min 3-1/2 in. thick, bearing the UL Classification Marking for Surface Burning Characteristics and/or Fire Resistance. Insulation fitted in the concealed space, draped over the resilient channel/gypsum panel ceiling membrane.

See **Batts and Blankets** (BKNV or BZJZ) Categories for names of Classified companies.

8. **Joint System** — (Not Shown) — Vinyl, dry or premixed joint compound, applied in two coats to joints and screw heads; paper tape, 2 in. wide, embedded in first layer of compound over all joints.

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