

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](#)

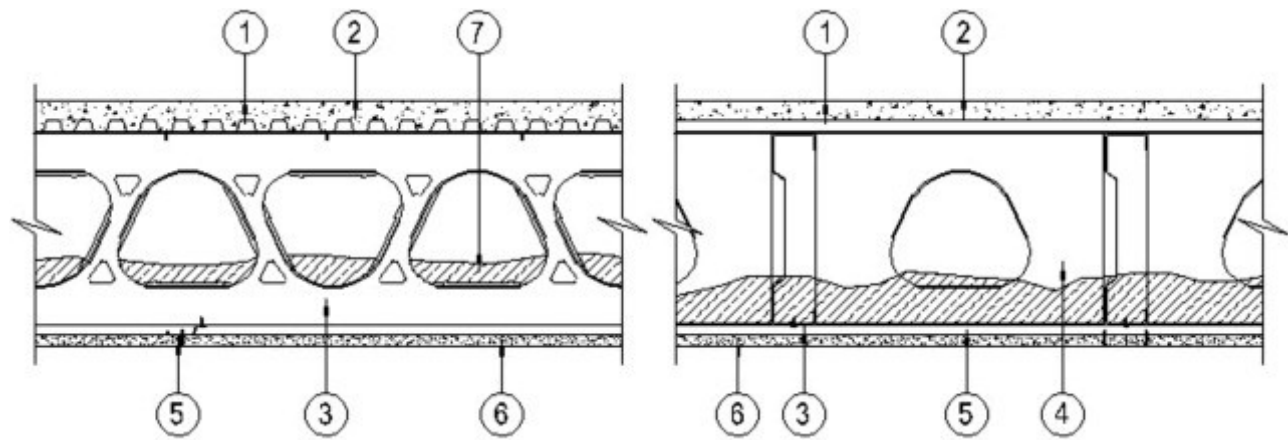
Design No. G563

June 16, 2021

Unrestrained Assembly Rating — 1 or 2 Hr. (See Item 2)

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 2000 psi min. For a 1 hour rating, when used with Acousti-Mat SD, minimum thickness of 1-1/2 in. as measured from the top of the mat. For a 2 hour rating, 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.

MAXXON CORP — Types Maxxon Standard and Maxxon High Strength

2A. **Floor Mat Materials*** — (Optional) - Not Shown - Floor mat material loose laid over the crests of the steel deck. Flutes of the steel deck to be filled with Floor Topping Mixture* (item 2) prior to the application of the Floor Mat Materials*. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.

MAXXON CORP — Type Encapsulated Sound Mat

Floor Mat Reinforcement - (Optional) - Refer to manufacturer's instructions regarding minimum thickness of floor topping for use with floor mat reinforcement.

Metal Lath - (Optional) — 3/8 in. expanded galvanized steel diamond mesh, 3.4 lbs/sq yd loose laid over the floor mat material.

Fiber Glass Reinforcement - (Optional, Not Shown) - 0.015 in. thick PVC coated non-woven fiberglass mesh, 0.368 lbs/sq yd loose laid over the floor mat material.

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.

6. **Gypsum Board*** — Nom 5/8 in. thick, 48 in. wide gypsum panels installed with long dimension perpendicular to resilient 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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Last Updated on 2021-06-16

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