

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](#)

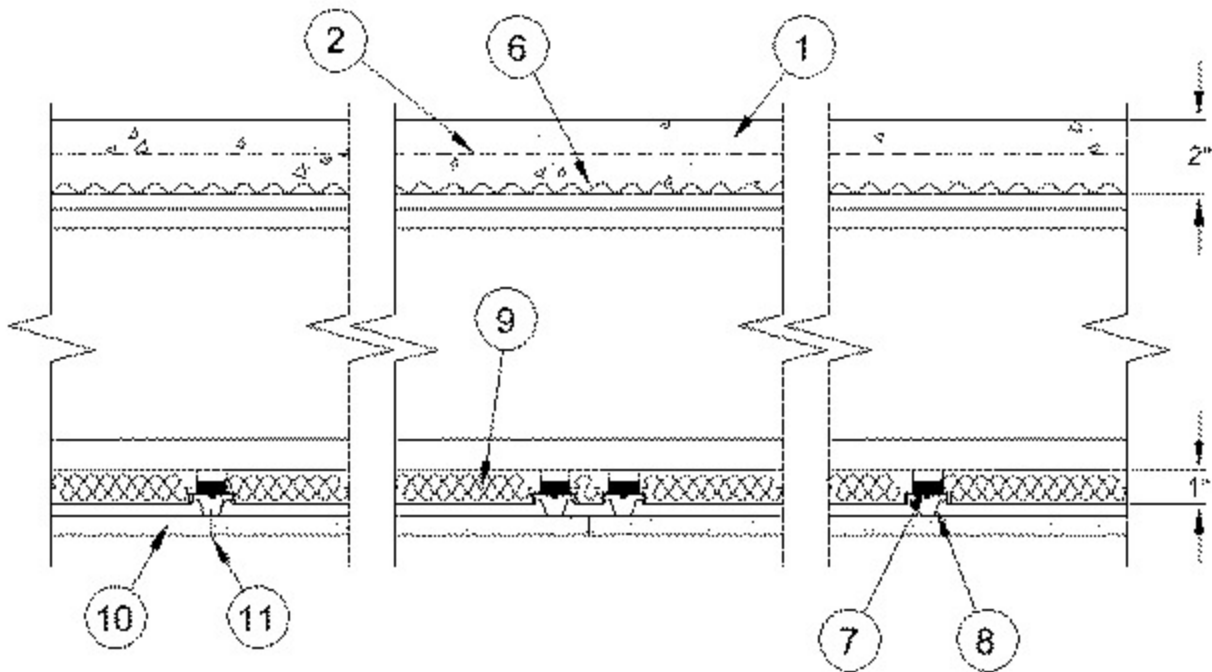
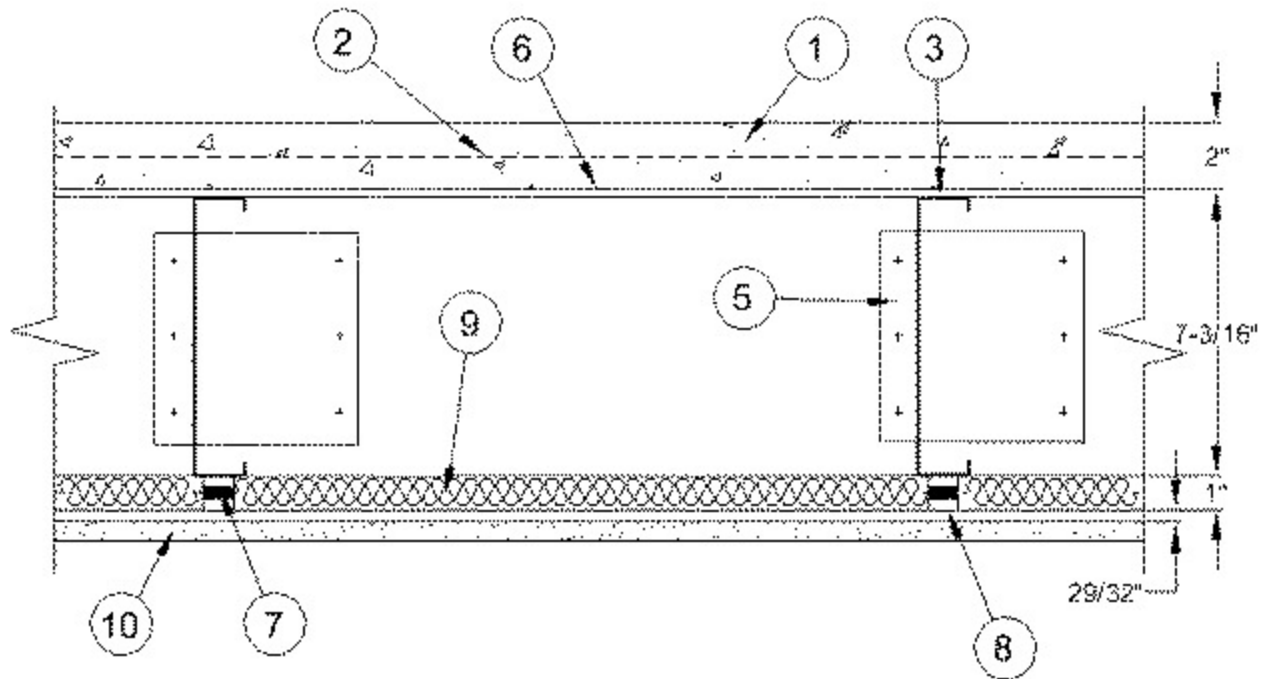
Design No. G552

Restrained Assembly Rating — 2 Hr.

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. **Lightweight Concrete** — Expanded shale, clay or slate aggregate by rotary kiln method, 115 + or - 6 pcf unit weight, 3400 psi minimum compressive strength, 5 to 7 percent entrained air.
2. **Welded Wire Fabric** — 6 X 6-W1.4 X W1.4.
3. **Steel Joist** — Non-Composite Design — Spaced 24 in. OC Channel-shaped, 7-3/16 in. deep with min 1-5/8 in. flanges and 9/16 in. stiffening flanges. Fabricated from min 18 MSG, galv steel. Min yield strength of steel is 33,000 psi with corresponding max working stress of 20,000 psi.
4. **Bridging** — (Not Shown) — Same as steel joist (Item 3). Located 8 ft max OC perpendicular to the joists, 2 by 2 by 6 in. angle clips used to connect web back to web back, 2 by 4 by 6 in. angle clips used to connect web back to web inside. Six 1/2 in. Type S-12 self-drilling, self-tapping screws used with each angle clip.

5. **Angle Clips** — 2 by 2 by 6 in., 0.075 in. thick (No. 14 gauge) clips used to fasten joists to joist headers and bridging to joists with clip located on the web side opposite the flanges. 2 by 4 by 6 in., 0.034 in. thick (No. 20 gauge) clips used to fasten bridging to joists on the flange side of the bridging.

6. **Steel Form Units** — Min. 19/32 in. deep, 30 in. wide corrugated steel deck. Crests 1/2 in. wide, pitch 2-9/16 in., No. 28 MSG (0.018 in. thick) galvanized steel. Overlapped one corrugation at each side and attached to each joist with 5/8 in. long Type S-12 steel screws at each side joint and not more than 12-3/8 in. OC between sides. Concrete thickness measured at crests.

7. **Steel Framing Members*** — As required for support of furring channels. 1-1/2 in. dia x 3/8 in. deep No. 16 galv steel cup washers are placed on top of the clips open side up, then clips secured to the bottom flange of joists with min. 2 in. long x #10 self-drilling, self-tapping screw through the center grommet and washer. Furring channels are friction-fitted into clips. RSIC-1 clip for use with 2-9/16 in. wide furring channels. RSIC-1 (2.75) clip for use with 2-23/32 in. wide furring channels.

PAC INTERNATIONAL L L C — Types RSIC-1, RSIC-1 (2.75)

7A. **Steel Framing Members*** — As an alternate to Items 7. As required for support of furring channels. Clips secured to the bottom flange of joists with min. 1-1/2 in. long x #10 self-drilling, self-tapping screw through the center grommet. Furring channels are friction-fitted into clips. Ends of channels are overlapped 6" and tied together with double strand of No. 18 AWG galvanized steel wire. Additional clips are required to hold the gypsum butt joints as described in Item 10.

STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237R

8. **Furring Channels** — No. 26 MSG galvanized steel 1-1/4 in. wide with two 15/32 in. flanges, (overall width approx. 2-3/16 in. or 2-9/16 in. or 2-23/32 in.) spaced 24 in. OC perpendicular to joists and supported at each joist by isolation clip (Item 7 or 7A). Adjoining lengths of channels overlapped 6 in. and tied together with double strand of No. 18 SWG galvanized steel wire at each end of overlap. Two courses of channels used at each end joint of gypsum wallboard located 1-5/8 in. on each side of each end joint. The two courses of channels tied together 24 in. OC approx. midway between joists with 0.022 in. thick, 3/4 in. wide by 3-1/2 in. long galvanized steel plate attached to each channel with 1/2 in. long Type S-12 pan head steel screw.

9. **Batts and Blankets*** — Nom 1 in. thick mineral wool batts. Installed below joists on top of furring channels (between Steel Framing Members) with butted ends of adjoining batts located over furring channels.

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

10. **Gypsum Board*** — 1/2 in. thick, 4 ft wide, installed with the long dimension perpendicular to the furring channels. End joints of boards staggered or in line, to occur between channels spaced 3-1/4 in. OC. Attached to each channel with wallboard screws spaced 8 in. OC and 1 in. from each edge of board. When **Steel Framing Members** (Item 7A) are used, one layer of nom 1/2 in. thick, 4 ft wide gypsum board is installed with long dimensions perpendicular to furring channels. Gypsum board secured to furring channels with nom 1 in. long Type S bugle-head steel screws spaced 8 in. OC in the field of the board. Gypsum board butted end joints shall be staggered minimum 48 in. and centered over main furring channels. At the gypsum board butt joints, each end of each gypsum board shall be supported by a single length of furring channel equal to the width of the gypsum board plus 3 in. on each end. The two supporting furring channels shall be spaced approximately 3 in. in from end joint. Screw spacing along the gypsum board butt joint and along both additional furring channels shall be 8 in. OC. Additional screws shall be placed in the adjacent section of gypsum board into the aforementioned 3 in. extension of the extra butt joint channels as well as into the main channel that runs between. Butt joint furring channels shall be attached with one RESILMOUNT Sound Isolation Clip at each end of the channel..

AMERICAN GYPSUM CO — Types AG-C, AGX-C.

CERTAINTED GYPSUM INC — Type C, Types LGFC-C, LGFC-C/A.

CGC INC — Type C.

GEORGIA-PACIFIC GYPSUM L L C — Type 5.

NATIONAL GYPSUM CO — Types FSK-C, FSW-C.

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type PG-C.

GEORGIA-PACIFIC GYPSUM L L C — Type TG-C.

THAI GYPSUM PRODUCTS PCL — Type C.

THE SIAM GYPSUM INDUSTRY (SONGKHLA) CO — Type C.

UNITED STATES GYPSUM CO — Type C.

USG MEXICO S A DE C V — Type C.

11. **Screw, Wallboard** — Type S, self-drilling and self-tapping. 1 in. long with bugle head.

12. **Finishing System** — (Not Shown) — Paper tape embedded in compound over joints and covered with additional compound. Exposed screw heads covered with compound. Edges of compound feathered out.

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Last Updated on 2021-04-23

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