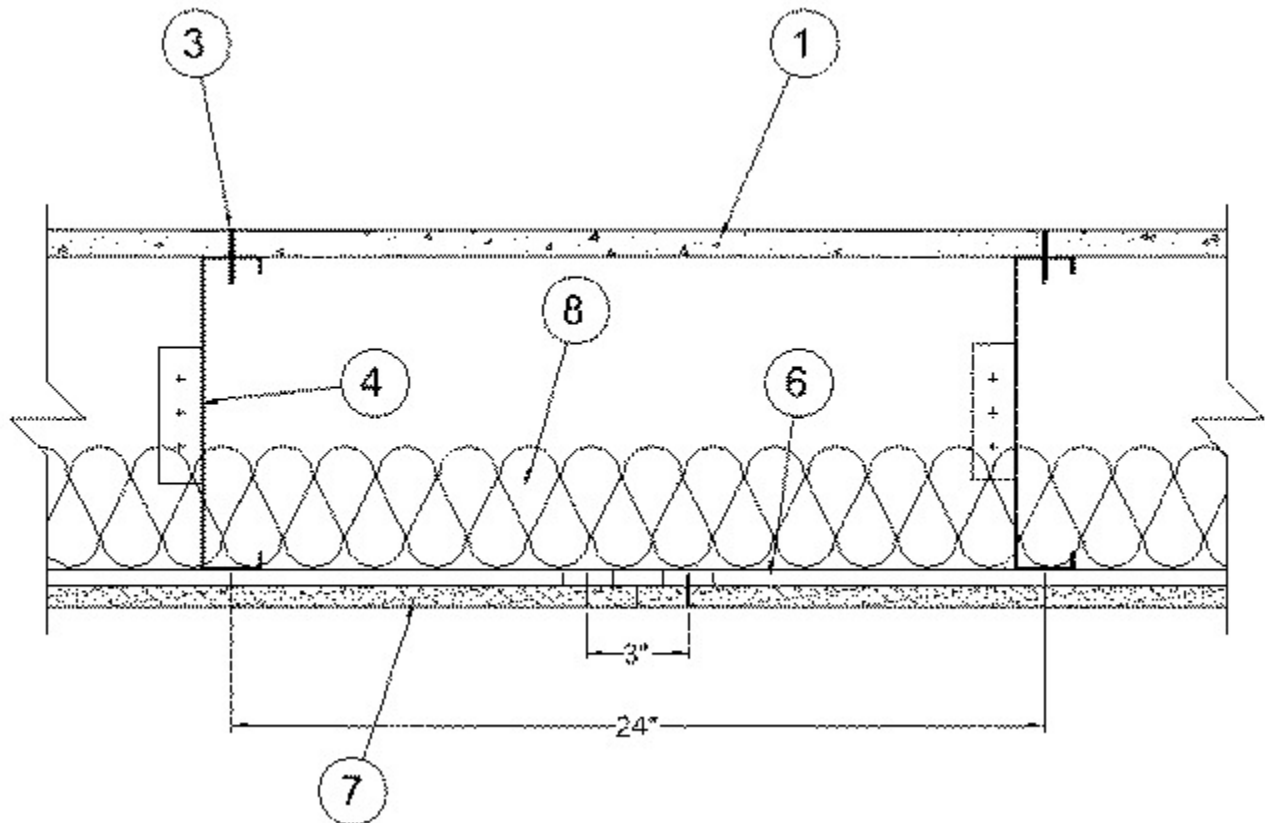


# Fire Resistance Ratings - ANSI/UL 263

Design No. L564  
October 28, 2003

## Unrestrained Assembly Rating - 1 Hr.



1. **Flooring — Structural Cement-Fiber Units\*** — 3/4 in. (19 mm) thick, with long edges tongue and grooved.

**VIROC/PORTUGAL**

**INDUSTRIAS DE MADEIRA E CIMENTO S A**

2. **Adhesive** — Not Shown — "Enerbond" 45 spray foam adhesive applied to butt joints and tongue and grooved edges of flooring.

3. **Flooring Fasteners** — **The Structural Cement-Fiber Units\*** — to be fastened to the steel joists with self-drilling, self-countersinking No. 8 by 1-5/16 in. long screws spaced 12 in. OC in both the field and perimeter and 1 in. from the side edges of the board.

4. **Structural Steel Members\*** — The proprietary joists are channel-shaped, 9-1/4 in. min depth. Joists are fabricated from min No. 16 MSG galv steel. Joists

spaced max 24 in. OC. Joist attached to joist rim with 3, 3/4 in. long self-drilling, #10-16 TEK screws through tab to the outside of the web. At joist rim splices bearing on supports, joists rims are connected using an overlapping section of a 12 in. long splice plate (a joist piece), with 4, 3/4 in. long self-drilling, #10-16 TEK screws to each rim piece.

**DIETRICH INDUSTRIES INC** — Type TDJ or TDW floor joists, TD24 rim joist

5. **Joist Bridging** — Not Shown — Installed immediately after joists are erected and before construction loads are applied. The bridging consisting of No. 16 MSG galv steel, 2-1/2 in. wide by 21-3/4 in. long structural bridging staggered between the steel joists attached to the bottom joist flange with 1, 3/4 in. long self-drilling, #10-16 TEK screw at each end tab of bridging. Solid bridging consisting of cut to length joist sections placed between outer joists and at center joist with 8 ft. OC max spacing. Solid bridging are screw-attached at joist web using 1-1/2 in. by 1-1/2 in. by 7 in. long, No. 16 MSG, min 50 ksi support clip with 2, 3/4 in. long self-drilling, #10-16 TEK screws per leg on one side and the other side with a 4 in. by 1-1/2 in. by 7 in. long No. 16 MSG, min 50 ksi support clip with 2, 3/4 in. long self-drilling, #10-16 TEK screws per long.

6. **Resilient Channels** — 1/2 in. deep, formed of No. 25 MSG galv steel, spaced 12 in. OC perpendicular to joists. Channels oriented opposite at wallboard butt-joints. Channel splices overlapped 4 in. beneath steel joists. Channels secured to each joist with 1/2 in. Type S-12 low profile screw. Channels oriented opposite at wallboard butt joints (spaced 6 in. OC) as shown in the above illustration.

7. **Gypsum Board\*** — One layer of 5/8 in. thick by 48 in. wide sheets installed with long dimension perpendicular to resilient channels. Attached to the resilient channels using 1 in. Type S bugle head drywall screws spaced 8 in. OC in both the field and the perimeter and 1-1/2 in. from side edges of the board.

**CANADIAN GYPSUM COMPANY** — Type C.

**UNITED STATES GYPSUM CO** — Type C.

**USG MEXICO S A DE C V** — Type C.

8. **Batts and Blankets\*** — Mineral wool or glass fiber insulation, min 3-5/8 in. thick, bearing the UL Classification Marking for Surface Burning characteristics, having a flame spread value of 25 or less and a smoke value of 50 or less. Insulation fitting in the concealed space, draped over the resilient channel/gypsum wallboard ceiling membrane.

9. **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.

\*Bearing the UL Classification Mark