



**BXUV.L580  
Fire Resistance Ratings - ANSI/UL 263**

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**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 Listed or Classified 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 as Classified, Listed, or Recognized.

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

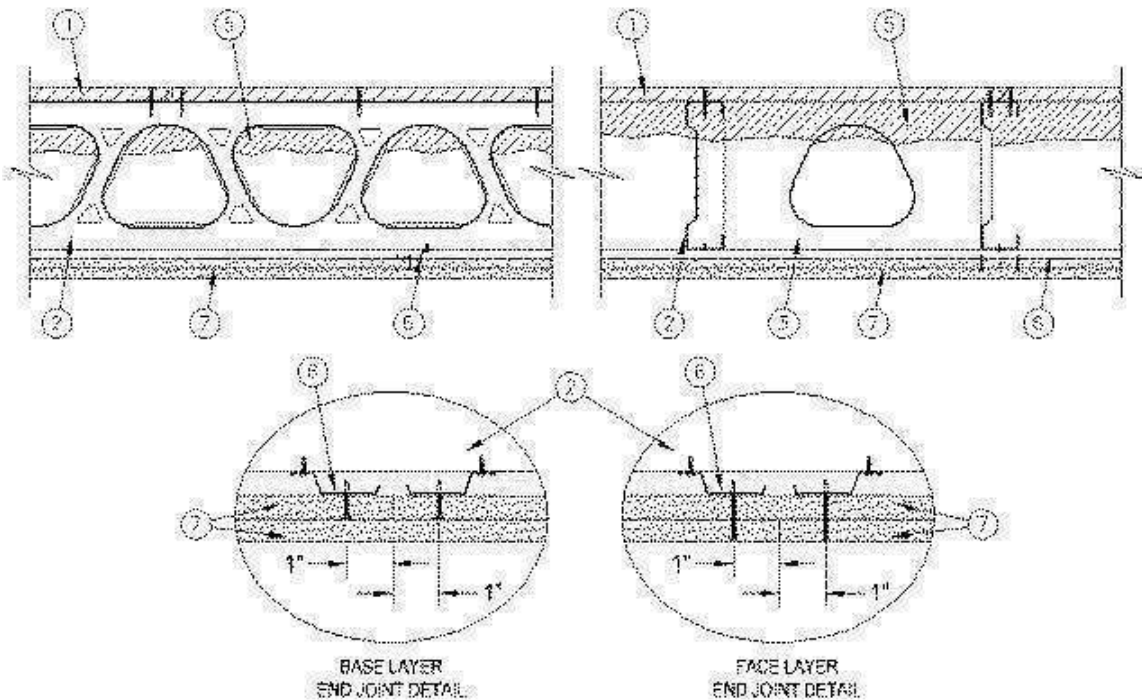
See General Information for Fire Resistance Ratings - ANSI/UL 263

**Design No. L580**

January 22, 2007

**Unrestrained Assembly Ratings - 1 Hr**

**Load Restriction: 70% (See Item 2)**



1. **Flooring** — Min 3/4 in. thick T & G plywood, min grade "Underlayment". Face grain of plywood to be perpendicular to joists with joints staggered. Plywood secured to joists with polyurethane based construction adhesive (optional) along with

1-7/16 in. long No. 10 Phillips wafer head winged plywood screws spaced 12 in. OC in the field and 6 in. OC along edges of board. Screws located 5/8 in from end joints and 1 in from side joints of board. Adhesive may be applied on top of joists prior to placing plywood sheets.

1A. **Alternate Flooring System - Structural Cement-Fiber Units\*** — Minimum 3/4 in. (19 mm) thick, with long edges tongue and grooved. Long dimension of panels to be perpendicular to joists with end joints staggered. Panels secured to steel joists with 1-5/16 in. (33 mm) long No. 8 self-drilling, self-countersinking steel screws spaced 12 in. (305 mm) OC in both the field and perimeter and located 1 in. (25 mm) from the side edges of the board. "Enerbond" 45 spray foam adhesive applied to butt joints and to tongue and grooved edges of flooring during installation. When panels thicker than 3/4 in. are used the minimum fastener length shall be the thickness of the panel plus 9/16 in.

#### **VIROC/PORTUGAL INDUSTRIAS DE MADEIRA**

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2. **Structural Steel Members\*** — JoistRite channel-shaped joists, channel-shaped, min 10 in. deep with min 2 in. wide flanges and 3/4 in. long stiffening flanges. The joists are fabricated from min 16 MSG galv steel. Joists spaced max 16 in. OC. Floor joists attached to rim joist using channel-shaped steel web stiffeners. **Allowable loading must be calculated so as to stress the steel studs to a maximum of 70% of the stress calculated in accordance with the allowable stress design approach outlined in the manufacturer's load tables.**

#### **MARINO\WARE A DIV OF WARE INDUSTRIES**

**INC** — Type JR JoistRite floor joists, Type JT JoistRite track

3. **Blocking & Bridging** — Installed before construction loads are applied. The blocking consists of JoistRite solid blocking placed between joists spaced max 5 ft-4 in. OC perpendicular to the joists and max 4 ft-8 in. OC along the joist length. In addition, bridging consists of 1/2 in. by 1-1/2 in. cold-rolled channel, min No. 16 GA, attached to the bottom of the joist and along the blocking. Attach to each blocking piece with four 5/8 in. long No. 10 x 16 low profile steel screws.

4. **Web Stiffeners** — (not shown) — Min 3-5/8 in. wide, 16 GA, JoistRite web stiffeners. Secured to each joist and track with 1/2 in. long No. 10 x 16 low profile steel screws.

5. **Mineral and Fiber Board\*** — Nom 4 in. thick mineral wool insulation friction-fit to underside of plywood between structural steel members. Any mineral wool insulation bearing the UL Classification Marking for Surface Burning Characteristics having a flame spread index of 25 or less, a smoke developed index of 50 or less and a min density of 4.0 lb/cu ft may be used

See **Mineral and Fiber Board** (BQXR) category in the Building Materials Directory for names of manufacturers

6. **Resilient Channels** — Resilient channels, formed of No. 25 MSG galv steel, 1/2 in. deep, spaced max 16 in. OC perpendicular to joists. Channels secured to each joist with one 5/8 in. long No. 10 x16 low profile steel screw. Two additional rows of channels, spaced 3-1/2 in. OC, oriented opposite each gypsum board end joint as shown in end joint detail.

7. **Gypsum Board\*** — Two layers of 1/2 in. thick by 48 in. wide gypsum board installed with long dimension perpendicular to resilient channels. Base layer secured to resilient channel using 1 in. long Type S bugle head steel screws spaced 12 in. OC in the field and 6 in. OC along the end joints of the board. Screws located 5/8 in. from end joints and 1 in. from long edges. End joints secured to both resilient channels as shown in end joint detail. Face layer attached to resilient channels through upper layer with 1-1/4 in. long Type S bugle head steel screws spaced a max 12 in. OC in the field and 6 in. OC along the end joints of the board. Screws located 5/8 in. from end joint and 1 in. from the long edges. End joints secured to both resilient channels as shown in end joint detail. All joints in face layer boards to be offset from joints in base layer by min 16 in.

**AMERICAN GYPSUM CO** — Types AG-C

**CERTAINTED GYPSUM INC** — ProRoc Type C

**CERTAINTED GYPSUM CANADA INC** — ProRoc Type C

**CANADIAN GYPSUM COMPANY** — Types C, IP-X2, IPC-AR

**GEORGIA-PACIFIC GYPSUM L L C** — Type 5

**LAFARGE NORTH AMERICA INC** — Types LGFC-C, LGFC-C/A

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

**PABCO BUILDING PRODUCTS L L C, DBA**

**PABCO GYPSUM** — Type PG-C

**TEMPLE-INLAND FOREST PRODUCTS CORP** — Type TG-C

**UNITED STATES GYPSUM CO** — Types C, IP-X2, IPC-AR

**USG MEXICO S A DE C V** — Types C, IP-X2, IPC-AR

**8. Finishing System** — (Not Shown) — Vinyl, dry or premixed joint compound, applied in two coats to joints and screw-heads on both first and second layers of gypsum board. Nom 2 in. wide paper tape embedded in first coat of compound over all joints. As an alternate, nom 3/32 in. thick veneer plaster may be applied to the entire surface of gypsum board.

\*Bearing the UL Classification Mark

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