



BXUV.U478 Fire Resistance Ratings - ANSI/UL 263

Page Bottom

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.

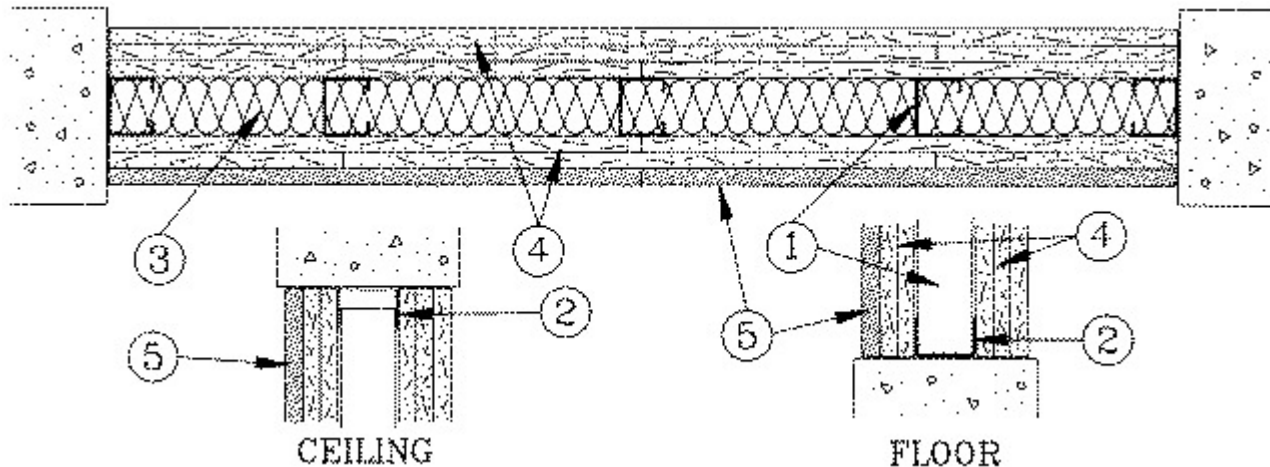
Fire Resistance Ratings - ANSI/UL 263

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

Design No. U478

March 23, 2009

Nonbearing Wall Rating — 3 HR.



1. **Studs** — Channel-shaped, 1-5/8 in. wide by 1-1/4 in. deep, with 5/16 in. folded back return flange legs. Fabricated from No. 25 MSG galv steel. Stud spacing not greater than 24 in. OC. Studs to be cut 1 in. less than assembly height.

1A. **Framing Members - Metal Studs*** — Not shown - In lieu of Item 1 — For use with Item 2A, proprietary channel shaped steel studs, 1-1/4 in. deep by 1-5/8 in. wide fabricated from min 0.0200 in. thick galv steel. Studs 3/8 in. less in lengths than assembly heights.

MARINO\WARE A DIV OF WARE INDUSTRIES

INC — Viper20S™, Viper20D™

2. **Floor and Ceiling Runners** — Channel-spaced runners, 1-5/8 in. wide by 1-1/4 in. deep, fabricated from No. 25 MSG galv steel. Attached to floor and ceiling with fasteners spaced 24 in. OC, max.

2A. **Framing Members - Floor and Ceiling Runner*** — Not shown - In lieu of Item 2 — For use with Item 1A, proprietary channel shaped runners, 1-1/4 in. deep by 1-5/8 in. wide fabricated from min 0.0200 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.

MARINO\WARE A DIV OF WARE INDUSTRIES**INC** — Viper20S™ Track, Viper20D™ Track

3. **Batts and Blankets*** — (Optional) — Mineral wool insulation, partially or completely filling stud cavity.

THERMAFIBER INC — Type SAFB.

3A. **Fiber, Sprayed*** — As an alternate to Batts and Blankets (Item 3) — Spray applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. Nominal dry density of 3.0 lb/ft³. Alternate application method: The fiber is applied with U.S. Greenfiber LLC Type AD100 hot melt adhesive at a nominal ratio of one part adhesive to 6.6 parts fiber to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. Nominal dry density of 2.5 lb/ft³.

U S GREENFIBER L L C — Cocoon2 Stabilized or Cocoon-FRM (Fire Rated Material)

3B. **Fiber, Sprayed*** — As an alternate to Batts and Blankets (Item 3) and Item 3A - Spray applied cellulose insulation material. The fiber is applied with water to interior surfaces in accordance with the application instructions supplied with the product. Applied to completely fill the enclosed cavity. Minimum dry density of 4.3 pounds per cubic ft.

NU-WOOL CO INC — Cellulose Insulation

4. **Gypsum Board*** — 1/2 in. thick, 4 ft wide with square or tapered edges. Inner layers to be applied vertically with joints centered over studs. Outer layer may be applied vertically or horizontally. First layer fastened to each stud with 1 in. long, Type S, self-tapping steel screws. Second layer fastened to each stud through the first layer with 1-5/8 in. long, Type S, self-tapping steel screws. Third layer fastened to each stud through the first and second layers with 2-1/4 in. long, Type S, self-tapping steel screws. First and second layer screws shall be located 4 and 3 in. from top and bottom of wall, respectively, with a max spacing of 48 in. OC vertically.

The third layer screws shall be located 2 in. from top and bottom of wall with a max spacing of 12 in. OC vertically. If each third layer board is installed horizontally, board end shall be centered over and secured to the stud with Type S, self-tapping steel screws spaced 1/2 in. from end joint and 12 in. OC vertically. Also secured to the first and the second layers with 1-1/2 in. long, Type G, self-tapping steel screws located midway between studs and 1 in. from the horizontal joint. Board end joints shall be staggered. Vertical board joints to be staggered from the joints in the adjacent layer and on opposite sides of studs.

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.**CANADIAN GYPSUM COMPANY** — Type C.**NATIONAL GYPSUM CO** — Types FSK-C, FSW-C, FSMR-C.**PABCO BUILDING PRODUCTS L L C, DBA****PABCO GYPSUM** — Type PG-C.

PANEL REY S A — Type PRC

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.

4A. **Gypsum Board*** — (As an alternate to Item 4) — 5/8 in. thick. Installed as described in Item 4, except the third layer Type G screws shall be 1-7/8 in. long.

NATIONAL GYPSUM CO — Type FSMR-C.

5. **Cementitious Backer Units*** — Board 1/2 or 5/8 in. thick, square edge, attached to studs with 2-1/4 in. long, Type S, corrosion resistant wafer head steel screws spaced 6 in. OC, joints covered with glass fiber mesh tape. Alternate board attachment for 20 gauge or heavier studs, 2-1/4 in. long, Type S-12, corrosion resistant steel screws spaced 8 in. OC, joints covered with glass fiber mesh tape.

UNITED STATES GYPSUM CO — Durock Exterior Cement Board or Durock Cement Board.

6. **Joint Tape and Compound** — Vinyl or casein, 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

Last Updated on 2009-03-23

[Questions?](#)

[Notice of Disclaimer](#)

[Page Top](#)

[Copyright © 2009 Underwriters Laboratories Inc.®](#)

The appearance of a company's name or product in this database does not in itself assure that products so identified have been manufactured under UL's Follow-Up Service. Only those products bearing the UL Mark should be considered to be Listed and covered under UL's Follow-Up Service. Always look for the Mark on the product.

UL permits the reproduction of the material contained in the Online Certification Directory subject to the following conditions: 1. The Guide Information, Designs and/or Listings (files) must be presented in their entirety and in a non-misleading manner, without any manipulation of the data (or drawings). 2. The statement "Reprinted from the Online Certifications Directory with permission from Underwriters Laboratories Inc." must appear adjacent to the extracted material. In addition, the reprinted material must include a copyright notice in the following format: "Copyright © 2009 Underwriters Laboratories Inc.®"

An independent organization working for a safer world with integrity, precision and knowledge.

