BXUV.U478 - Fire-resistance Ratings - ANSI/UL 263

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.

Fire-resistance Ratings - ANSI/UL 263

BXUV - Fire Resistance Ratings - ANSI/UL 263 Certified for United States
BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada

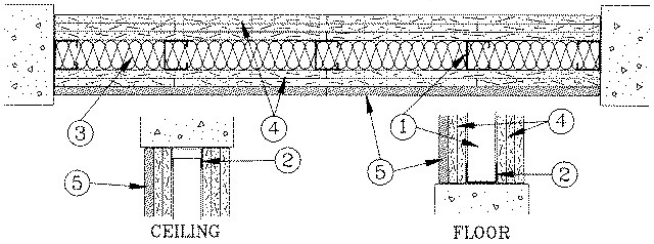
See General Information for Fire-resistance Ratings - ANSI/UL 263 Certified for United States
Design Criteria and Allowable Variances

See General Information for Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada
Design Criteria and Allowable Variances

Design No. **U478**

April 14, 2022

Nonbearing Wall Rating — 3 Hr.
*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**



1. **Studs —** Channel-shaped, min 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* — Steel Studs —** Not Shown — In lieu of Item 1 — For use with Item 2A, proprietary channel shaped steel studs, 1-1/4 in. deep by min 1-5/8 in. wide fabricated from min 0.018 in. thick galv steel. Studs cut 1 in. less in length than assembly height. Stud spacing not greater than 24 in. OC.
CALIFORNIA EXPANDED METAL PRODUCTS CO — Viper20™

MARINO/WARE, DIV OF WARE INDUSTRIES INC — Viper20™

IMPERIAL MANUFACTURING GROUP INC — Viper20™

1B. **Framing Members* — Steel Studs —** Not Shown — In lieu of Item 1 — For use with Item 2B, proprietary channel shaped steel studs, 1-1/4 in. deep by 1-5/8 in. wide fabricated from min 0.018 in. thick galv steel. Studs cut 1 in. less in length than assembly height.
CLARKDIETRICH BUILDING SYSTEMS — CD ProSTUD

DMFCWBS L L C — ProSTUD

MBA METAL FRAMING — ProSTUD

RAM SALES L L C — Ram ProTRAK

STEEL STRUCTURAL PRODUCTS L L C — Tri-S ProSTUD

1C. **Framing Members* — Steel Studs —** Not Shown — In lieu of Item 1 — For use with Item 2C, proprietary channel shaped steel studs, 1-1/4 in. deep by min 1-5/8 in. wide fabricated from min 0.018 in. thick galv steel. Studs cut 1 in. less in length than assembly height. Stud spacing not greater than 24 in. OC.
MARINO/WARE, DIV OF WARE INDUSTRIES INC — Viper20™

1D. **Framing Members* — Steel Studs —** Not Shown — In lieu of Item 1 — For use with Item 2D, proprietary channel shaped steel studs, 1-1/4 in. deep by 1-5/8 in. wide fabricated from min 0.018 in. thick galv steel. Studs cut 1 in. less in length than assembly height.
TELLING INDUSTRIES L L C — TRUE-STUD™

1E. **Framing Members* — Steel Studs —** As an alternate to Item 1 — For use with Item 2A (3-5/8 in. wide track), channel shaped studs, fabricated from min 25 MSG corrosion-protected steel, 1-1/4 in. wide by 3-5/8 in. deep, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less than assembly height.
MARINO/WARE, DIV OF WARE INDUSTRIES INC — StudRite™

1F. **Framing Members* — Steel Studs —** Not Shown — In lieu of Item 1 — For use with Item 2E, proprietary channel shaped steel studs, 1-1/4 in. deep by 3-1/2 in. wide fabricated from min 0.018 in. thick galv steel. Studs cut 1 in. less in length than assembly height.
RESCUE METAL FRAMING, L L C — AlphaSTUD

2. **Floor and Ceiling Runners —** Channel-spaced runners, min 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 min 1-5/8 in. wide fabricated from min 0.018 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.
CALIFORNIA EXPANDED METAL PRODUCTS CO — Viper20™ Track

MARINO/WARE, DIV OF WARE INDUSTRIES INC — Viper20™ Track

IMPERIAL MANUFACTURING GROUP INC — Viper20™ Track

2B. **Framing Members* — Floor and Ceiling Runners —** Not Shown — In lieu of Item 2 — For use with Item 1B, channel shaped runners, 1-1/4 in. deep by 1-5/8 in. wide fabricated from min 0.018 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.
CLARKDIETRICH BUILDING SYSTEMS — CD ProTRAK

DMFCWBS L L C — ProTRAK

MBA METAL FRAMING — ProTRAK

RAM SALES L L C — Ram ProSTUD

STEEL STRUCTURAL PRODUCTS L L C — Tri-S ProTRAK

2C. **Framing Members* — Floor and Ceiling Runner —** Not Shown — In lieu of Item 2 — For use with Item 1C, proprietary channel shaped runners, 1-1/4 in. deep by min 1-5/8 in. wide fabricated from min 0.018 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.
MARINO/WARE, DIV OF WARE INDUSTRIES INC — Viper20™ Track

2D. **Framing Members* — Floor and Ceiling Runners —** Not Shown — In lieu of Item 2 — For use with Item 1D, channel shaped runners, 1-1/4 in. deep by 1-5/8 in. wide fabricated from min 0.018 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.
TELLING INDUSTRIES L L C — TRUE-TRACK™

2E. **Framing Members* — Floor and Ceiling Runners —** Not Shown — In lieu of Item 2 — For use with Item 1F, channel shaped runners, 1-1/4 in. deep by 3-1/2 in. wide fabricated from min 0.018 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.
RESCUE METAL FRAMING, L L C — AlphaTRAK

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) — (100% Borate Formulation) — 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 with a nominal dry density of 2.7 lb/ft^3. Alternate Application Method: The fiber is applied without water or adhesive at a nominal dry density of 3.5 lb/ft^3, in accordance with the application instructions supplied with the product.
U S GREENFIBER L L C — INS735, INS745, INS750LD for use with wet or dry application. INS765LD and INS773LD are to be used for dry application only.

3B. **Fiber, Sprayed* —** As an alternate to **Batts and Blankets** (Item 3) - 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

3C. **Fiber, Sprayed* —** As an alternate to Batts and Blankets (Item 3) — Spray applied cellulose fiber. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. The minimum dry density shall be 4.30 lbs/ft^3.
INTERNATIONAL CELLULOSE CORP — Celbar-RL

3D. **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. To facilitate the installation of the material, any thin, woven or non-woven netting may be attached by any means possible to the outer face the studs. The material shall reach equilibrium moisture content before the installation of materials on either face of the studs. The minimum dry density shall be 5.79 lbs/ft ^{3}.
APPLEGATE HOLDINGS L L C — Applegate Advanced Stabilized 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.

CABOT MANUFACTURING ULC — Type C.

CERTAINTEED GYPSUM INC — Type C.

CGC INC — Types C, IP-X2, IPC-AR.

CERTAINTEED GYPSUM INC — Type LGFC-C/A.

GEORGIA-PACIFIC GYPSUM L L C — Types 5, DAPC, TG-C.

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

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

PANEL REY S A — Type PRC

SAINT-GOBAIN GYPROC MIDDLE EAST FZE — Type Gyproc FireStop, Gyproc FireStop MR, Gyproc FireStop M2TECH, Gyproc FireStop ACTIV'Air, Gyproc FireStop MR ACTIV'Air, Gyproc FireStop M2TECH ACTIV'Air

THAI GYPSUM PRODUCTS PCL — Type C.

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

USG BORAL DRYWALL SFZ LLC — Type C

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.
CGC INC — Type ULIX.

NATIONAL GYPSUM CO — Type FSMR-C.

UNITED STATES GYPSUM CO — Type ULIX

4B. **Gypsum Board* —** (As an alternate to Item 4) — 5/8 in. thick. Installed as described in Item 4. Screw lengths of 1st and 2nd layers increased min. 1/8 and 1/4 in. respectively. Third third layer Type G screws min 1-7/8 in. long.

PANEL REY S A — Type PRX2

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 — Type DCB

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.

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**

Last Updated on 2022-04-14