UL Product iQ™

BXUV.U477 - Fire-resistance Ratings - ANSI/UL 263

PANEL REY®
Drywall Solutions

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

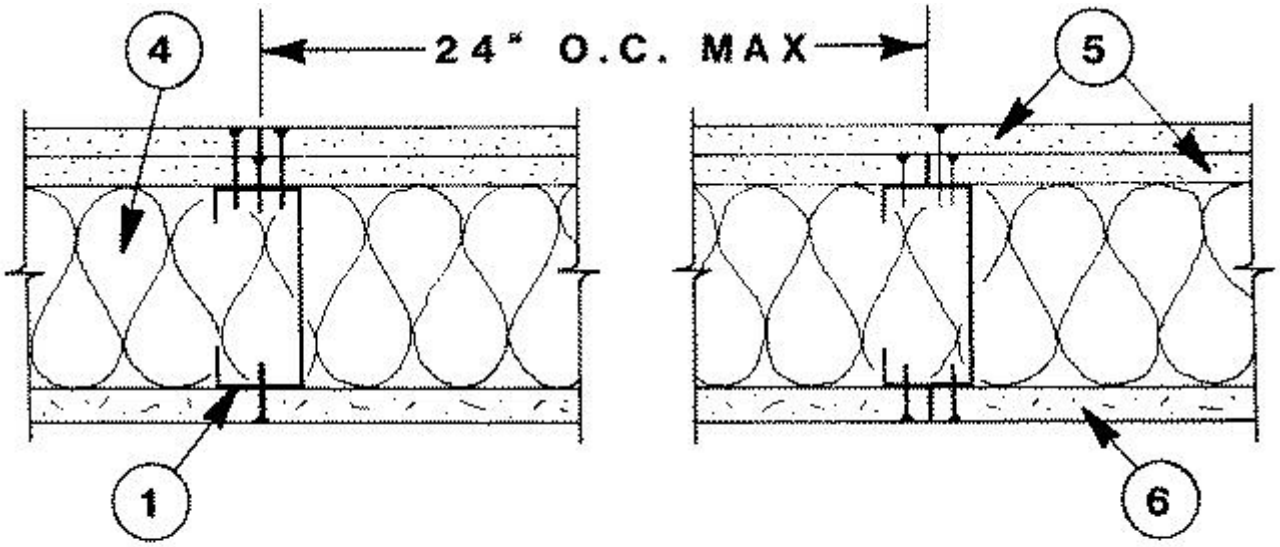
Design No. U477

March 12, 2020

Assembly Rating — 2 Hr

Bearing Wall

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



HORIZONTAL SECTION

(Exposed To Fire On Interior Or Exterior Side)

1. **Steel Studs —** Min 3-5/8 in. wide by 1-5/8 in. deep min. No. 20 MSG (0.0329 in., min bare thickness) steel or min No. 20 MSG (0.036 in. thick) galv steel members. Studs shall be designed in accordance with the current edition of the Specification for the Design of Cold-Formed Steel Structural Members by the American Iron and Steel Institute (AISI).
All design details enhancing the structural integrity of the wall assembly, including the axial design load of the studs shall be as specified by the steel stud designer and/or producer and shall meet the requirements of all applicable local code agencies. The max stud spacing shall not exceed 24 in. OC. Studs attached to floor and ceiling tracks with 1/2 in. long Type S-12 steel screws on both sides of studs or welded or bolted connections designed in accordance with the AISI specifications.

2. **Steel Floor and Ceiling Tracks —** (Not Shown) — Top and bottom tracks of wall assemblies shall consist of channel shaped, min 3-5/8 in. wide by 1-5/8 in. flanges min. No. 20 MSG (0.0329 in., min bare thickness) steel or min No. 20 MSG (0.036 in. thick) galv steel members. Attached to floor and ceiling with fasteners spaced max 24 in. OC.

3. **Diagonal Bracing —** (Not Shown) — Nom 2 in. wide by No. 18 gauge steel strap placed diagonally across the wall and welded to each stud.

4. **Mineral Wool Insulation —** Nom 3-1/2 in. thick batts with a nom density of 6 pcf, batts placed to fill the cavity of the wall.

4A. **Fiber, Sprayed* —** As an alternate to Mineral Wool Insulation (Item 4) — (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 and INS750LD for use with wet or dry application. INS765LD and INS773LD are to be used for dry application only.

4B. **Fiber, Sprayed* —** As an alternate to Item 4 and 4A — 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 4.58 lb/ft^3.
NU-WOOL CO INC — Cellulose Insulation

4C. **Fiber, Sprayed* —** As an alternate to Batts and Blankets (Item 4) - 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

5. **Gypsum Board* — Any 5/8 in. thick UL Classified Gypsum Board that is eligible for use in Design Nos. L501, G512 or U305.** Nom. 5/8 in. thick (min) gypsum board 4 ft wide with square or tapered edges. Gypsum board applied vertically in two layers, inner layer attached to studs with No. 8 by 1-5/8 in. long Type S Hi-Low bugle head steel drywall screws spaced 12 in. OC at joint edges and in the field. Outer layer attached with No. 7 by 1-7/8 in. long Type S-12 bugle head steel drywall screws spaced 8 in. OC at the joint edges and in the field. Outer layer joints to be staggered 24 in. from inner layer joints.
AMERICAN GYPSUM CO (View Classification) — CKNX.R14196

BEIJING NEW BUILDING MATERIALS PUBLIC LTD CO (View Classification) — CKNX.R19374

CABOT MANUFACTURING ULC (View Classification) — CKNX.R25370

CERTAINTEED GYPSUM INC (View Classification) — CKNX.R3660

CGC INC (View Classification) — CKNX.R19751

CERTAINTEED GYPSUM INC (View Classification) — CKNX.R18482

GEORGIA-PACIFIC GYPSUM L L C (View Classification) — CKNX.R2717

LOADMASTER SYSTEMS INC (View Classification) — CKNX.R11809

NATIONAL GYPSUM CO (View Classification) — CKNX.R3501

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM (View Classification) — CKNX.R7094

PANEL REY S A (View Classification) — CKNX.R21796

SIAM GYPSUM INDUSTRY (SARABURI) CO LTD (View Classification) — CKNX.R19262

THAI GYPSUM PRODUCTS PCL (View Classification) — CKNX.R27517

UNITED STATES GYPSUM CO (View Classification) — CKNX.R1319

USG MEXICO S A DE C V (View Classification) — CKNX.R16089

6. **Mineral And Fiber Boards* —** Min 0.591 in. (15 mm) thick square edge boards applied vertically in a single layer and attached to studs with No. 8 by 1-5/8 in. long Type S Hi-Low bugle head steel drywall screws spaced 12 in. OC at joints and in field.
PROMAT UK LTD — ProMat-H

7. **Joint Tape And Compound —** (Not Shown) — Gypsum based, dry or premixed joint compound applied in two coats to joints and screw heads of outer layer of gypsum wallboard and mineral and fiber board. Perforated paper tape, 2 in. wide embedded in first layer of compound over all joints of outer layer of gypsum wallboard and mineral and fiber boards.

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