UL Product iQ™

BXUV.U487 - 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

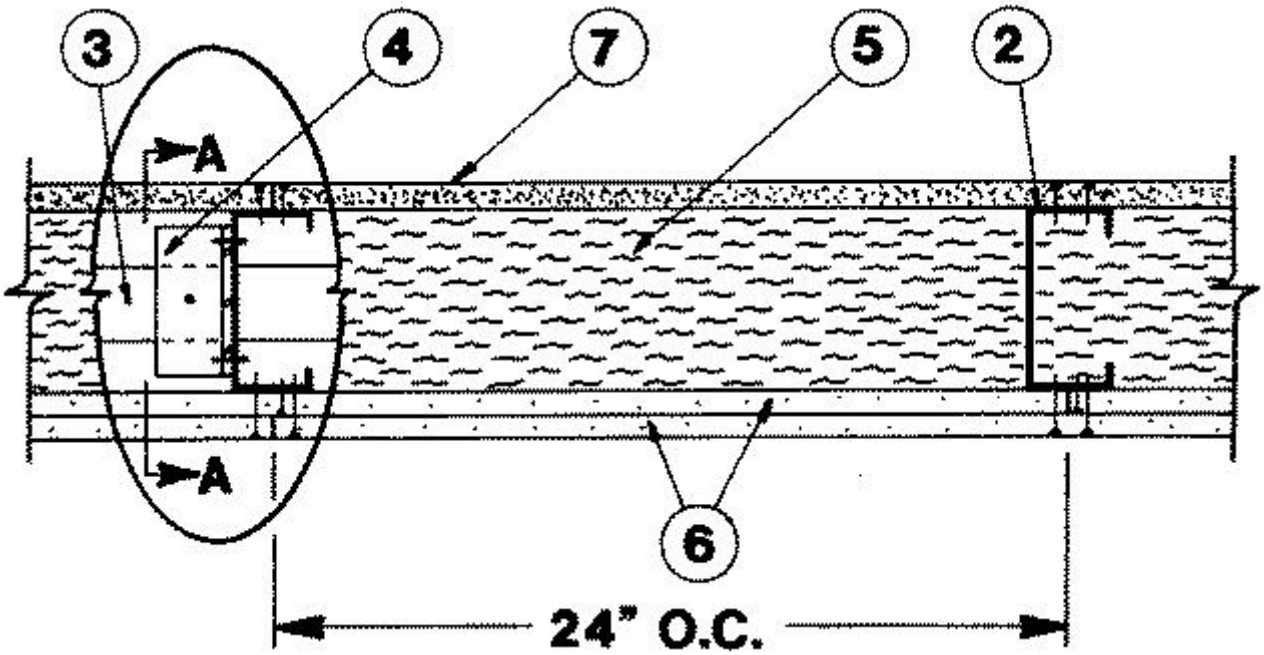
Design No. U487

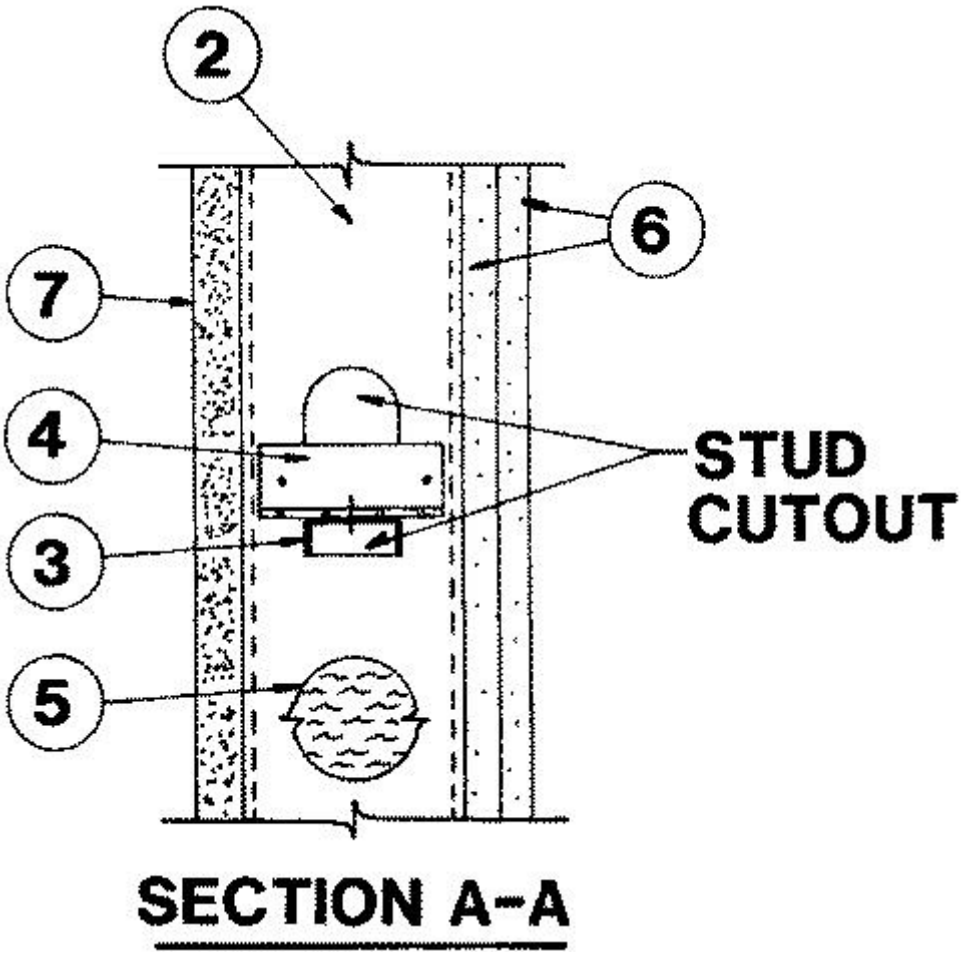
August 07, 2020

Bearing Wall Rating — 1 Hr.

This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7

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





SECTION A-A

1. **Floor and Ceiling Runners —** (Not shown) — Channel-shaped runners, 3-5/8 in. wide by 1-5/8 in. deep, fabricated from No. 20 MSG (0.0329 in., min bare metal thickness) galv steel. Attached to floor and ceiling with fasteners.

2. **Studs —** Channel-shaped, 3-5/8 in. wide by 1-5/8 in. deep with 9/16 in. folded back return flange legs, fabricated from min No. 20 MSG (0.0329 in., min bare metal thickness) galv steel. 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. 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 designer and/or producer and shall meet the requirements of all applicable local code agencies. Studs spaced 24 in. O. C. and secured to floor and ceiling runners with No. 8 by 1/2 in. long Type S-12 steel screws (one screw at

each end on each side). Max load on studs not to exceed 70 percent of the max allowable axial load. Studs supplied with 2-1/4 by 1-1/2 in. cutouts punched in the web, spaced 48 in. O. C. to allow passage of lateral bracing (Item 3). Max height of studs is 10 ft.

3. **Lateral Bracing —** Channel-shaped, 1-1/2 in. wide by 9/16 in. deep, fabricated from No. 16 MSG galv steel. Secured to each steel stud (Item 2) with three No. 8 by 1/2 in. long wafer head steel screws and one clip angle (Item 4). One screw secured to clip angle and two screws secured to steel stud.

4. **Clip Angles —** 2 by 2 in. steel angles, 3-1/4 in. wide, fabricated from No. 20 MSG galv steel.

5. **Batts and Blankets —** Mineral wool batts, 3 in. thick, supplied in 24 by 48 in. sheets, friction fitted into stud cavities between lateral bracing. Mineral wool batts to have a nom density of 6.0 lb per cu ft.

6. **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, 4 ft wide by 10 ft long installed vertically. Base layer secured to steel studs and floor and ceiling runners with No. 10 by 1-1/4 in. long Type S-12 steel screws spaced 12 in. O. C. Face layer secured with No. 6 by 1-7/8 in. long Type S-12 steel screws spaced 12 in. O. C. and staggered 6 in. from base layer screws. Vertical joints of face layer offset 24 in. from base layer vertical 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

THE SIAM GYPSUM INDUSTRY (SONGKHLA) CO (View Classification) — CKNX.R40305

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

USG BORAL DRYWALL SFZ LLC (View Classification) — CKNX.R38438

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

6A. **Gypsum Board* —** (As an alternate to Item 6 through 6A) — Nominal 5/8 in. thick, 4 ft wide panels, applied vertically and secured as described in Item 6.
PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Types QuietRock ES.

6B. **Wall and Partition Facings and Accessories* —** (As an alternate to Items 6 through 6A) — Nominal 5/8 in. thick, 4 ft wide panels, applied vertically and secured as described in Item 6.
PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock 527.

6C. **Gypsum Board* —** (As an alternate to 5/8 in. Type FSW in Item 6) - Nom. 5/16 in. thick gypsum panels applied vertically. Two layers of 5/16 in. for every single layer of 5/8 in. gypsum board described in Item 6. Horizontal joints on the same side need not be staggered. Inner layer of each double 5/16 in. layer attached with fasteners, as described in item 6, spaced 24 in. OC. Outer layer of each double 5/16 in. layer attached per Item 6.
NATIONAL GYPSUM CO — Type FSW

7. **Mineral and Fiber Boards* —** Nom 17 mm thick, 4 ft wide by 10 ft long, secured to steel studs and floor and ceiling runners with No. 10 by 1-1/2 in. long ribbed reamer tek screws spaced 12 in. O. C. Vertical joints offset 24 in. from vertical joints of base layer gypsum wallboard.
PLYCEM CONSTRUSISTEMAS EL SALVADOR S A DE C V — Types Fibrolit 100, Panelit, Plycem, Plycem-Fibrolit.

PLYCEM CONSTRUSISTEMAS HONDURAS S A DE C V — Types Fibrolit 100, Panelit , Plycem, Plycem-Fibrolit.

THE PLYCEM COMPANY INC — Types Fibrolit 100, Panelit , Plycem, Plycem-Fibrolit.

8. **Joint Tape and Compound —** (Not shown) — Vinyl-based powder or premixed joint compound and 2 in. wide paper tape. Compound applied in two coats to all screw heads and vertical joints of mineral and fiber boards and gypsum wallboard. Paper tape embedded in first layer of compound over face layer gypsum wallboard.

* 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 2020-08-07