BXUV.U309
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

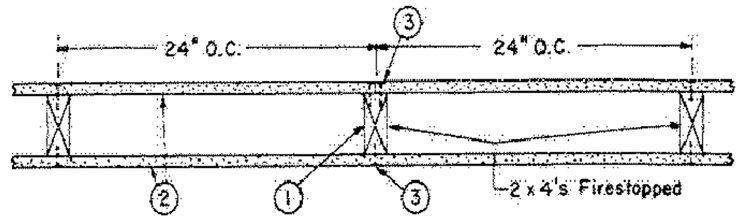
Design No. U309

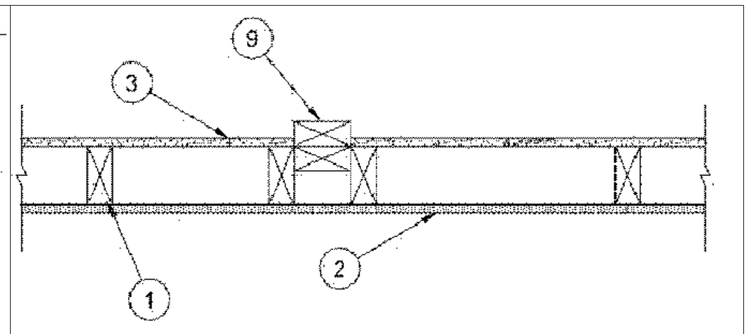
December 23, 2008

Bearing Wall Rating — 1 HR.

Finish Rating — See Items 2, 2A and 2B

Load Restricted for Canadian Applications — See Guide BXUV7





1. **Wood Studs** — Nom 2 by 4 in., spaced 24 in. OC effectively firestopped.

2. **Gypsum Board*** — 5/8 in. thick, 4 ft wide, applied either horizontally or vertically , nailed to studs and bearing plates with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 1/4 in. diam heads spaced 7 in. OC. Finish Rating 27 Min. When used in widths other than 48 in., gypsum board to be installed horizontally.

When Steel Framing Members* (Item 5) are used, wallboard attached to furring channels with 1 in. long Type S bugle-head steel screws spaced 12 in. OC.

When Item 6, resilient channels are used, 5/8 in. thick, 4 ft wide applied vertically. Screw attached furring channels with 1 in. long, self-drilling, self-tapping Type S or S-12 steel screws spaced 8 in. OC, vertical joints located midway between studs.

AMERICAN GYPSUM CO — Types AGX-1, AG-C

BEIJING NEW BUILDING MATERIALS PUBLIC LTD CO — Type DBX-1

CERTAINTEED GYPSUM INC — Types EGRG or ProRoc Type C

CERTAINTEED GYPSUM CANADA INC — ProRoc Type C

GEORGIA-PACIFIC GYPSUM L L C — Types 5, 9, C, DAP, DD, DA, DAPC , DGG, DS, GPFS6

LAFARGE NORTH AMERICA INC — Types LGFC6, LGFC-C, LGFC6A, LGFC2, LGFC2A, LGFC-C/A

NATIONAL GYPSUM CO — Types FSK-C, FSW, FSW-3, FSW-5, FSW-C, FSW-G, FSMR-C, FSW-6 (finish rating 20 min)

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type C, PG-9, PG-11 or PG-C

PANEL REY S A — Type PRX

SIAM GYPSUM INDUSTRY (SARABURI) CO LTD — Type EX-1.

TEMPLE-INLAND FOREST PRODUCTS CORP — Type X, Veneer Plaster Base - Type X, Water Rated - Type X, Sheathing - Type X, Soffit - Type X, TG-C

2A. **Wall and Partition Facings and Accessories*** — (As an alternate to Item 2, not shown) - Nominal 5/8 in. thick, 4 ft wide panels, applied vertically to studs and bearing plates on one side of the assembly with 1-5/8 in. long Type S screws

spaced 12 in. OC at perimeter of panels and 8 in. OC in the field. Horizontal joints of vertically applied panels need not be backed by studs. Panel joints covered with paper tape and two layers of joint compound. Screwheads covered with two layers of joint compound. Batts and Blankets placed in stud cavity as described in Item 4E. Not evaluated for use with Steel Framing Members, Furring Channels or Fiber, Sprayed.

QUIET SOLUTION INC — Type QuietRock QR-530 (finish rating 23 min).

2B. **Gypsum Board*** — (As an alternate to Item 2) — 5/8 in. thick gypsum panels, with square edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last two screws 1 and 4 in. from edge of board or nailed to studs and bearing plates with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 1/4 in. diam heads spaced 7 in. OC.. When used in widths of other than 48 in., gypsum boards are to be installed horizontally.

TEMPLE-INLAND FOREST PRODUCTS CORP — GreenGlass Type X (finish rating 23 min).

3. **Joints and Nailheads** — Wallboard joints covered with paper tape and joint compound. Nailheads covered with joint compound. Gypsum plaster not more than 1/8 in. thick may be applied over the wallboard in addition to the specified joint treatment.

4. **Batts and Blankets*** — (Not Shown) — Optional glass fiber insulation.

CERTAINTEED CORP

JOHNS MANVILLE INTERNATIONAL INC

OWENS CORNING

4A. **Fiber, Sprayed*** — As an alternate to Batts and Blankets (Item 4) — 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/ft^3. 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/ft^3.

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

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

4C. **Batts and Blankets*** — Required for use with resilient channels, Item 6, 3 in. thick mineral wool batts, placed to fill interior of wall, attached to the 4 in. face of the studs with staples placed 24 in. OC.

THERMAFIBER INC — Type SAFB

4D. **Glass Fiber Insulation** — (As an alternate to Item 4C) — 3 in. thick glass fiber batts bearing the UL Classification Marking as to Surface Burning and/or Fire Resistance, placed to fill the interior of the wall, attached to the 4 in. face of the studs with staples placed 24 in. OC. See **Batts and Blankets** (BKNV or BZJZ) Catagories for names of Classified companies.

4E. **Batts and Blankets*** — (Required for use with Wall and Partition Facings and Accessories, Item 2A) — Glass fiber insulation, nom 3-1/2 in. thick, min. density of 0.80 pcf, with a flame spread of 25 or less and a smoke developed of 50 or less, friction-fitted to completely fill the stud cavities. See Batts and Blankets Category (BKNV) for names of manufacturers.

5 **Steel Framing Members (Optional, Not Shown)*** — Furring channels and Steel Framing Members as described below:

a. **Furring Channels** — Formed of No. 25 MSG galv steel. 2-3/8 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Wallboard attached to furring channels as described in Item 2.

b. **Steel Framing Members*** — used to attach furring channels (Item a) to studs (Item 1) . Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. Furring channels are friction fitted into clips.

PAC INTERNATIONAL INC — Type RSIC-1.

6. **Furring Channel** — Optional - Not Shown - For use on one side of the wall - Resilient channels, 25 MSG galv steel, spaced vertically 24 in. OC, flange portion screw attached to one side of studs with 1-1/4 in. long diamond shaped point, double lead Phillips head steel screws. When resilient channels are used, insulation, Items 4C or 4D is required.

6A. **Steel Framing Members*** — Optional - Not Shown - Used as an alternate method to attach resilient channels (Item

6) to one side of studs only. Clips attached at each intersection of the resilient channel and the wood studs (Item 1). Resilient channels are friction fitted into clips, and then clips are secured to the wood stud with min. 1-3/4 in. long diamond shaped point, double lead Phillips head steel screws through the center hole of the clip and the resilient channel flange.

KEENE BUILDING PRODUCTS CO INC — Type RC Assurance.

7. **Wall and Partition Facings and Accessories*** — (Optional, Not shown) — Nominal 1/2 in. thick, 4 ft wide panels, for optional use as an additional layer on one or both sides of the assembly. Panels attached in accordance with manufacturer's recommendations. When the QR-510 panel is installed between the wood framing and the UL Classified gypsum board, the required UL Classified gypsum board layer(s) is/are to be installed as indicated as to fastener type and spacing, except that the required fastener length shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board.

QUIET SOLUTION INC — Type QuietRock QR-510.

8. **Cementitious Backer Units*** — (Optional Item Not Shown - For Use On Face Of 1 Hr With All Standard Items Required) - 1/2 in., 5/8 in., 3/4 in. or 1 in. thick, min. 32 in. wide.- Applied vertically or horizontally with vertical joints centered over studs. Fastened to studs and runners with cement board screws of adequate length to penetrate stud by a minimum of 3/8 in. for steel framing members, and a minimum of 3/4 in. for wood framing members spaced a max of 8 in. OC. When 4 ft. wide boards are used, horizontal joints need not be backed by framing.

NATIONAL GYPSUM CO — Type PermaBase

9. **Non-Bearing Wall Partition Intersection** — (Optional) Two nominal 2 by 4 in. stud or nominal 2 by 6 in. stud nailed together with two 3in. long 10d nails spaced a max. 16 in. OC. vertically and fastened to one side of the minimum 2 by 4 in. stud with 3 in. long 10d nails spaced a max 16 in. OC. vertically. Intersection between partition wood studs to be flush with the 2 by 4 in. studs. The wall partition wood studs are to be framed by with a second 2 by 4 in. wood stud fastened with 3 in. long 10d nails spaced a max. 16 in. OC. vertically. Maximum one non-bearing wall partition intersection per stud cavity. Non-bearing wall partition stud depth shall be at a minimum equal to the depth of the bearing wall.

*Bearing the UL Classification Mark

Last Updated on 2008-12-23

Questions? Notice of Disclaimer Page Top

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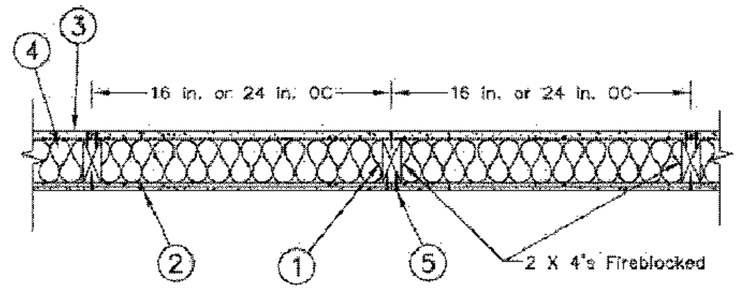
Fire Resistance Ratings - ANSI/UL 263

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

Design No. U386

March 06, 2008

Nonbearing Wall Rating — 1 hr



Configuration A

1. **Wood Studs** — Nom 2 by 4 in., spaced 24 in. OC maximum, effectively firestopped at the top and bottom of wall.

2. **Wall and Partition Facings and Accessories*** — Nominal 5/8 in. thick, 4 ft wide panels, applied vertically to studs and bearing plates with 1-5/8 in. long, No.6, Type S, coarse threaded screws spaced at 8 in. OC along the perimeter of the panels and 12 in. OC in the field. Vertical joints centered over studs and staggered one stud cavity on opposite sides of stud. Horizontal joints of vertically applied panels to be staggered 4 ft on opposite sides of the wall. Horizontal joints of vertically applied panels to be supported by studs.

QUIET SOLUTION INC — QuietRock 525, QuietRock 528, QuietRock 530

3. **Gypsum Wallboard*** — Nominal 5/8 in. thick, 4 ft wide, applied vertically to studs and bearing plates with 1-5/8 in. long, No. 6, Type S, coarse threaded screws, at 8 in. OC along the perimeter of the panels and 12 in. OC in the field. Vertical joints centered over studs and staggered one stud cavity on opposite sides of stud. Horizontal joints of vertically applied panels to be staggered 4 ft on opposite sides of the wall. Horizontal joints of vertically applied panels to be backed with nom 2 by 4 in. wood backing.

UNITED STATES GYPSUM CO — Type SCX

1. **Wood Studs** — Nom 2 by 4 in., spaced 24 in. OC maximum, effectively firestopped at the top and bottom of wall.

2. **Wall and Partition Facings and Accessories*** — Nominal 5/8 in. thick, 4 ft wide panels, applied vertically to studs and bearing plates with 1-5/8 in. long, No.6, Type S, coarse threaded screws spaced at 8 in. OC along the perimeter of the panels and 12 in. OC in the field. Vertical joints centered over studs and staggered one stud cavity on opposite sides of stud. Horizontal joints of vertically applied panels to be staggered 4 ft on opposite sides of the wall. Horizontal joints of vertically applied panels to be supported by studs.

QUIET SOLUTION INC — QuietRock 525, QuietRock 528, QuietRock 530

3. **Gypsum Wallboard*** — Nominal 5/8 in. thick, 4 ft wide, applied vertically to studs and bearing plates with 1-5/8 in. long, No. 6, Type S, coarse threaded screws, at 8 in. OC along the perimeter of the panels and 12 in. OC in the field. Vertical joints centered over studs and staggered one stud cavity on opposite sides of stud. Horizontal joints of vertically applied panels to be staggered 4 ft on opposite sides of the wall. Horizontal joints of vertically applied panels to be backed with nom 2 by 4 in. wood backing.

UNITED STATES GYPSUM CO — Type SCX

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FIRE RESIST. RATING NOTES
WAREHOUSE/OFFICE
APN 177-02-201-013
1519 HELM DRIVE
LAS VEGAS, NEVADA 89119

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JOB No. 2008-17
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DRAWN: AKN 2/09
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SHEET
A2.3
OF 11 SHEETS