



Design No. W419
Design No. W419
BXUV.W419
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 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.
-

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

BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada

[See General Information for Fire-resistance Ratings - ANSI/UL 263](#)

[See General Information for Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada](#)

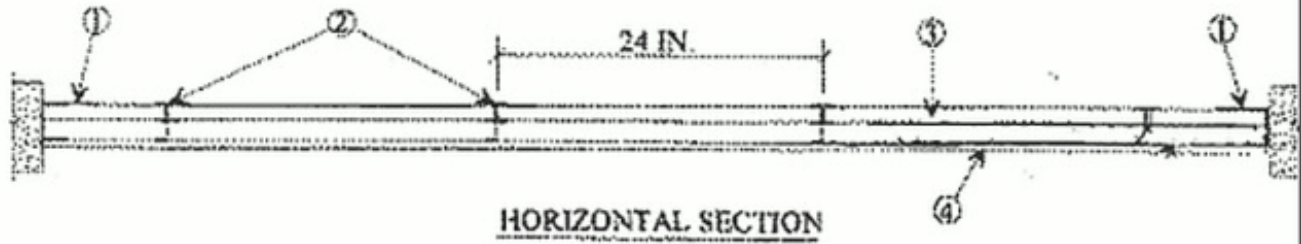
Design No. W419

May 27, 2015

Nonbearing Wall Rating – 1, 2, 3, or 4 Hr.

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

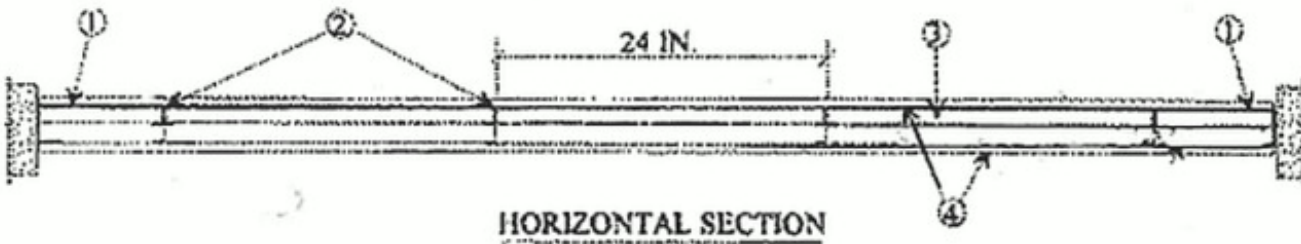
System A - 1 Hr.



System B - 2 Hr.



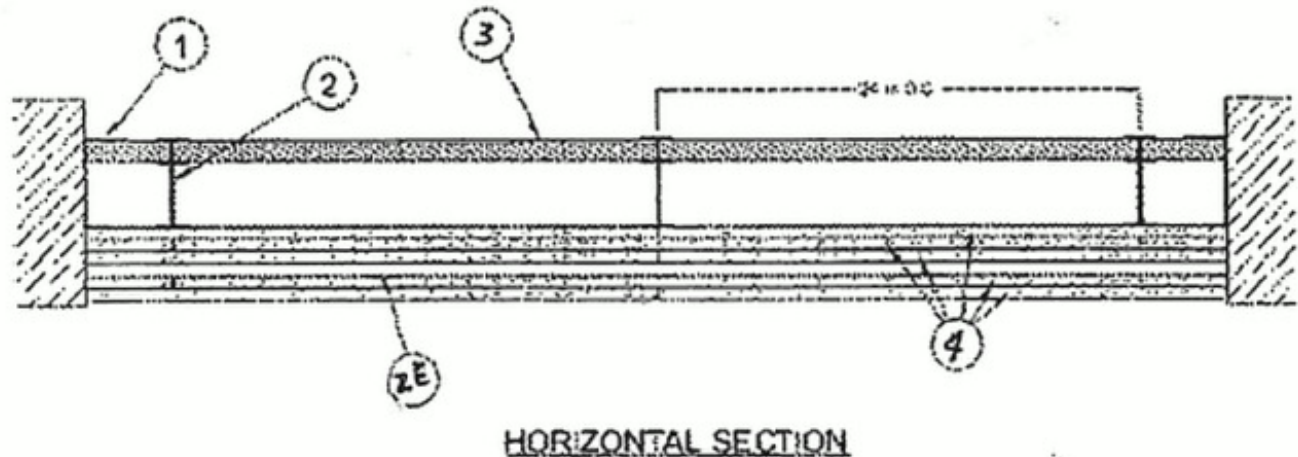
System C - 2 Hr.



System D - 3 Hr.



System E – 4 Hr.



1. **Channel Track** — "J" -shaped channel, 2-1/2 in. deep (min. 4 in. deep when System E is used) with unequal legs of 1 in. and 2 in., fabricated from No. 25 MSG galv steel. Channel positioned with short leg toward finished side of wall. Channel attached to structural supports with steel fasteners located not greater than 2 in. from ends and not greater than 24 in. OC.

2. **Steel Studs** — "I" -shaped studs, min 2-1/2 in. deep by 1-1/2 in. wide, fabricated from min 25 MSG galv steel. Cut to lengths 1/2 in. less than floor to ceiling height and spaced 24 in. OC.

2A. **Steel Studs** — (Not Shown) — "C-H" -shaped studs, min 2-1/2 in. deep (min. 4 in. deep when System E is used) by 1-1/2 in. wide, fabricated from min 25 MSG galv steel. Cut to lengths 1/2 in. less than floor to ceiling height and spaced 24 in. OC.

2B. **Steel Studs** — (Not Shown) — "C-T" -shaped studs, min 2-1/2 in. deep (min. 4 in. deep when System E is used) by 1-1/2 in. wide, fabricated from min 25 MSG galv steel. Cut to lengths 1/2 in. less than floor to ceiling height and spaced 24 in. OC.

2C. **Furring Channels** — (Optional, not shown) — For use with single or double layer systems. Resilient furring channels fabricated from min. 25 MSG corrosion protected steel, installed horizontally, and spaced vertically a max. 24 in. OC. Flange portion of channel attached to each intersecting stud on side of stud opposite the 1 in. liner panels with 1/2 in. long Type S or S-12 pan-head steel screws. When furring channels are used, gypsum board to be installed vertically.

2D. **Steel Framing Members*** — (Optional, not shown) — For use with single or double layer systems. Furring channels and Steel Framing Members as described below. Not to be used with cementitious backer units (Item 7):

a. **Furring Channels** — Formed of No. 25 MSG galv steel. 2-3/8 in. wide by 7/8 in. deep, spaced max. 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Gypsum board installed vertically only and attached to furring channels as described in Item 3.

b. **Steel Framing Members*** — Used to attach furring channels (Item 2Da) to studs (Item 2, 2A, or 2B). Clips spaced max. 24 in. OC., and secured to studs with No. 8 x 1-1/2 in. minimum self-drilling, S-12 steel screw through the center grommet. Furring channels are friction fitted into clips.

PAC INTERNATIONAL INC — Types RSIC-1

2E. **Furring Channels** — For use with System E. "Hat" shaped, min. 22 MSG galv steel furring channels attached directly over the three inner layers of wallboard to each stud with 2-1/4 in. long Type S bugle head steel screws. Screws alternate from top flange to bottom flange at each stud intersection. Furring channels spaced vertically max 16 in. OC.

3. **Gypsum Board*** — 1 in. thick gypsum wallboard liner panels, supplied in nom 24 in. widths. Panels cut 1 in. less in length than floor to ceiling heights. Vertical edges inserted in "I" studs. Free edge of end panels attached to long leg of channel track with 1-5/8 in. long Type S self-drilling, self-tapping bugle head steel screws spaced not greater than 24 in. OC. For System E, screws spaced not greater than 12 in. OC.

NATIONAL GYPSUM CO — Types FSW, FSW-B, FSW-7.

System A - 1 Hr.

4. **Gypsum Board*** — 5/8 in. thick, 4 ft wide, applied horizontally or vertically and attached to studs with 1 in. long Type S steel screws spaced 12 in. OC along the edges and in the field of the boards. When Furring Channels (Item 2C) are used, gypsum board attached vertically to furring channels with 1 in. long Type S steel screws spaced 12 in. OC.

NATIONAL GYPSUM CO — Types eXP-C, FSK, FSK-C, FSL, FSMR-C, FSW, FSW-3, FSW-5, FSW-C, FSW-6, and FSW-8.

4A. **Gypsum Board*** — 5/8 in. thick, 4 ft wide, applied vertically and attached to studs with 1 in. long Type S steel screws spaced 12 in. OC along the edges and in the field of the boards. When Furring Channels (Item 2C) are used, gypsum board attached vertically to furring channels with 1 in. long Type S steel screws spaced 12 in. OC.

NATIONAL GYPSUM CO — Types FSW-3, FSMR-C.

4B. **Gypsum Board*** — (As an alternate to Items 4 through 4A) — Installed as described in Item 4. 5/8 in. thick, 4 ft. wide, paper surfaced, applied vertically and fastened to the studs with 1 in. long Type S steel screws spaced 8 in. OC.

NATIONAL GYPSUM CO — SoundBreak XP Type X Gypsum Board

4C. **Gypsum Board*** — (As an alternate to 5/8 in. Type FSW in Item 4) - 2 layers nom. 5/16 in. thick gypsum panels applied vertically or horizontally. Horizontal joints on the same side need not be staggered. Inner layer attached with fasteners, as described in item 4, spaced 24 in. OC. Outer layer attached per Item 4.

NATIONAL GYPSUM CO — Type FSW

System B - 2 Hr.

4. **Gypsum Board*** — 1/2 in. or 5/8 in. thick, 4 ft wide wallboard applied vertically in two layers. Inner or base layer attached to studs with 1 in. long Type S self-drilling, self-tapping bugle head steel screws spaced 24 in. OC along the edges and in the field of the boards. Outer or face layer attached to studs and channel track with 1-5/8 in. long Type S self-drilling, self-tapping bugle head steel screws spaced 12 in. along the edges and in the field of the boards, staggered from screws in inner layer. When Furring Channels (Item 2C) are used, inner or base layer attached to furring channels with 1 in. long Type S self-drilling, self-tapping bugle head steel screws. Outer or face layer attached to furring channels with 1-5/8 in. long Type S self-drilling, self-tapping bugle head steel screws spaced 12 in. OC and staggered 12 in. from base layer screws. Joints between inner and outer layers staggered. Outer layer joints covered with paper tape and joint compound. Exposed screw heads covered with joint compound.

NATIONAL GYPSUM CO — 1/2 in. thick, Types eXP-C, FSK-C, FSW-C, FSMR-C, 5/8 in. thick Types eXP-C, FSMR-C, FSK, FSK-C, FSL, FSW-C, FSW, FSW-3, FSW-5, FSW-6, and FSW-8.

4A. **Gypsum Board*** — (As an alternate to 5/8 in. Type FSW in Item 4) - Nom. 5/16 in. thick gypsum panels applied vertically or horizontally. Two layers of 5/16 in. for every single layer of 5/8 in. gypsum board described in Item 4. 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 4, spaced 24 in. OC. Outer layer of each double 5/16 in. layer attached per Item 4.

NATIONAL GYPSUM CO — Type FSW

4B. **Gypsum Board*** — (As an alternate to Items 4 and 4A) — Nominal 5/8 in. thick, 4 ft wide panels, applied vertically only and secured as described in Item 4.

NATIONAL GYPSUM CO — SoundBreak XP Type X Gypsum Board

System C - 2 Hr.

4. **Gypsum Board*** — 1/2 in. or 5/8 in. thick, 4 ft wide applied either horizontally or vertically and attached to studs and runners with 1 in. long Type S steel screws spaced 12 in. OC. When Furring Channels (Item 2C) are used, gypsum board attached vertically to furring channels with 1 in. long Type S steel screws spaced 12 in. OC. Outer layer joints covered with paper tape and joint compound. Exposed screw heads covered with joint compound.

NATIONAL GYPSUM CO — 1/2 in. thick Types eXP-C, FSK-C, FSW-C, FSMR-C, 5/8 in. thick Types eXP-C, FSMR-C, FSK, FSK-C, FSL, FSW-C, FSW, FSW-3, FSW-5, FSW-6, and FSW-8.

4A. **Gypsum Board*** — (As an alternate to Item 4) — Nominal 5/8 in. thick, 4 ft wide panels, applied vertically only and

secured as described in Item 4.

NATIONAL GYPSUM CO — SoundBreak XP Type X Gypsum Board

System D - 3 Hr.

4. **Gypsum Board*** — 5/8 in. thick, 4 ft wide wallboard applied vertically in three layers. Vertical joints centered over steel studs (Item 2, 2A, or 2B) and staggered min 24 in. First layer secured to studs with 1 in. long Type S self-drilling, self-tapping bugle-head steel screws spaced 24 in. OC at the perimeter and in the field. Second layer secured to studs with 1-5/8 in. long Type S self-drilling, self-tapping bugle-head steel screws spaced 12 in. OC at the perimeter and in the field. Joints in second layer shall be secured to first layer of gypsum board with 1-1/2 in. long Type G screws spaced 12 in. OC vertically, 2 in. from each side of the joint. Third layer secured to studs with 2-1/4 in. long Type S self-drilling, self-tapping bugle-head steel screws spaced 12 in. OC at the perimeter and in the field starting with a 6 in. stagger so as not to hit previous layers' screws. Joints in third layer also secured to inner layers with 1-1/2 in. long Type G screws spaced 12 in. OC vertically, 2 in. from each side of the joint.

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

System E - 4 Hr.

4. **Gypsum Board*** — 5/8 in. thick, 4 ft wide wallboard applied vertically in five layers. Vertical joints centered over steel studs (Item 2) and staggered min 24 in. First layer secured to studs with 1-1/8 in. long Type S self-drilling, self-tapping bugle-head steel screws spaced 12 in. OC at the perimeter and in the field. Second layer secured to studs with 1-5/8 in. long Type S self-drilling, self-tapping bugle-head steel screws spaced 12 in. OC at the perimeter and in the field. Horizontal butt joints in second layer shall be secured to first layer of gypsum board with 1-1/2 in. long Type G screws spaced 8 in. OC on both sides of the joint and in joint corners. Third layer secured to studs with 2-1/4 in. long Type S self-drilling, self-tapping bugle-head steel screws spaced 12 in. OC at the perimeter and in the field. Third layer also secured to inner layers with 1-1/2 in. long Type G screws spaced 12 in. OC vertically and centered between the Type S screws in the studs. Horizontal butt joints in third layer shall be secured to inner layers of gypsum board with 1-1/2 in. long Type G screws spaced 8 in. OC on both sides of the joint and in joint corners. Fourth layer secured to the furring channels (Item 3) with 1-1/8 in. long Type S self-drilling, self-tapping bugle-head steel screws spaced 12 in. OC. Horizontal butt joints in fourth layer shall be centered over furring channels (Item 3) and secured to furring channels with 1-1/8 in. long Type S self-drilling, self-tapping bugle-head steel screws spaced 8 in. OC on both sides of the joint. Fifth layer secured to furring channels with 1-5/8 in. long Type S self-drilling, self-tapping bugle-head steel screws spaced 12 in. OC. Fifth layer also secured to fourth layer with 1-1/2 in. long Type G screws spaced 16 in. OC along the vertical joints and centered between the Type S screws in the furring channels. Horizontal butt joints in fifth layer shall be centered over furring channels (Item 3) and secured to furring channels with 1-5/8 in. long Type S self-drilling, self-tapping bugle-head steel screws spaced 8 in. OC on both sides of the joint. Screws and horizontal butt joints staggered.

NATIONAL GYPSUM CO — Type eXP-C, FSW-C, FSK-C

5. **Joint Tape and Compound** — (Not Shown) — Joints on outer layer of gypsum board (Item 4) covered with paper tape and joint compound. Paper tape and joint compound may be omitted when gypsum panels are supplied with square edges. Exposed screw heads covered with joint compound.

6. **Batts and Blankets*** — (Optional, Not Shown) — Mineral wool or glass fiber batts partially or completely filling stud cavity. Any mineral wool or glass fiber batt bearing the UL Classification Marking as to Fire Resistance. See Batts and blankets (BZJZ) Category For Names of Classified Companies.

6A. **Fiber, Sprayed*** — As an alternate to Batts and Blankets (Item 5) — (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/ft³. Alternate Application Method: The fiber is applied without water or adhesive at a nominal dry density of 3.5 lb/ft³, in accordance with the application instructions supplied with the product.

U S GREENFIBER L L C — INS735 & INS745 for use with wet or dry application. INS765LD and INS770LD are to be used for dry application only.

6B. **Fiber, Sprayed*** — As an alternate to Batts and Blankets (Item 5) and Item 5A - 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

6C. **Fiber, Sprayed*** — As an alternate to Batts and Blankets (Item 5) - 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/ft³.

INTERNATIONAL CELLULOSE CORP — Celbar-RL

*** 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 2015-05-27

[Questions?](#)

[Print this page](#)

[Terms of Use](#)

[Page Top](#)

© 2015 UL LLC

When the UL Leaf Mark is on the product, or when the word "Environment" is included in the UL Mark, please search the [UL Environment database](#) for additional information regarding this product's certification.

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 Certified 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, Assemblies, Constructions, Designs, Systems, and/or Certifications (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 UL" must appear adjacent to the extracted material. In addition, the reprinted material must include a copyright notice in the following format: "© 2015 UL LLC".