BXUV.W454 - 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.

BXUV - Fire-resistance Ratings - ANSI/UL 263

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

Design No. W454

May 15, 2018

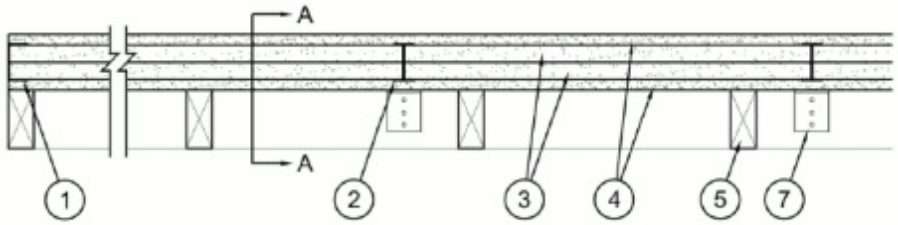
Nonbearing Wall Rating — 3 Hr (Separation Wall, See Items 1,2 and 3)

Bearing Wall - 3 Hr (Protected Wall, See Items 5 and 5A)

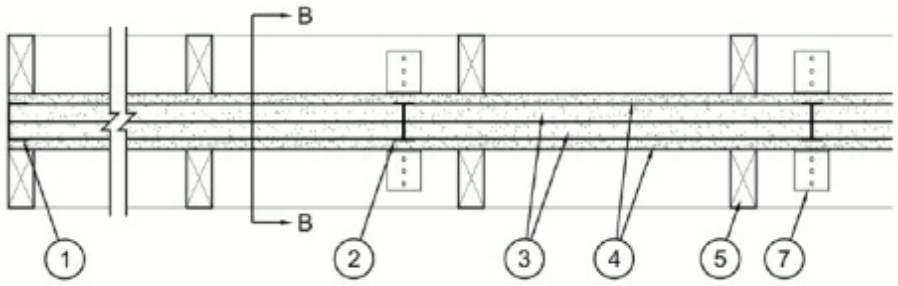
Nonbearing Wall Rating - 3 Hr. (Protected Wall, See Item 5B)

Finish Rating — 180 Min

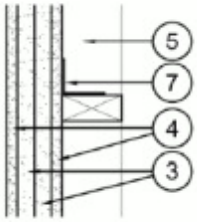
*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**



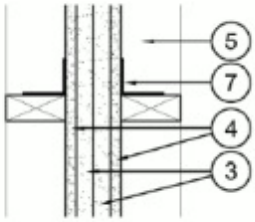
CONFIGURATION A
EXPOSED TO FIRE FROM AREA SEPARATION WALL SIDE ONLY



CONFIGURATION B



SECTION A-A



SECTION B-B

SEPARATION WALL: (Non-bearing, Max Height - 70 ft):

1. **Steel Track —** Not Shown - Floor, sidewall or top wall track. Nom 2 in. wide channel shaped with nom 1 in. long legs, formed from No. 25 MSG galv steel, secured with suitable fasteners spaced 24 in. OC.

2. **Steel Studs —** "H" shaped studs formed from No. 25 MSG galv steel having an overall depth of approximately 2 in. and flange width 1-3/8 in.

3. **Gypsum Board* —** Two layers of 1 in. thick gypsum board liner panels, supplied in nom 24 in. widths. Vertical edges of panels friction fit into "H" shaped studs.
NATIONAL GYPSUM CO — Types FSW, FSW-7

4. **Gypsum Board* —** 5/8 in. thick gypsum panels with beveled, square or tapered edges. Gypsum panels applied horizontally or vertically with vertical joints centered over studs. Secured to Studs (Item 2) with 1 in. long Type S screws, spaced 16 in. OC. Horizontal edge joints and horizontal but joints on opposite sides of studs need not be staggered.
NATIONAL GYPSUM CO — Types FSW-C, FSK-C, eXP-C, and FSW-G

PROTECTED WALL: (Bearing or Nonbearing Wall, as indicated in Item 5. When Bearing, Load Restricted for Canadian Applications — See Guide BXUV7):

5. **Wood Studs —** For Bearing or Nonbearing Wall Rating — Nom 2 by 4 in. max spacing 24 in. OC. Studs cross braced at mid-height where necessary for clip attachment. No separation required between wood framing and fire separation wall. Finish rating evaluated for wood studs only.

5A. **Steel Studs —** (As an alternate to Item 5, not shown) — For Bearing Wall Rating — Corrosion protected steel studs, min No. 20 MSG (0.0329 in., min bare metal thickness) steel or min 3- 1/2 in. wide, min No. 20 GSG (0.036 in. thick) galv steel or No. 20 MSG (0.033 in. thick) primed steel, cold formed, 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 stud designer and/or producer, and shall meet the requirements of all applicable local code agencies. The max stud spacing of wall assemblies 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 by welded or bolted connections designed in accordance with the AISI specifications. Top and bottom tracks shall consist of steel members, min No. 20 MSG (0.0329 in., min bare metal thickness) steel or min No. 20 GSG (0.036 in. thick) galv steel or No. 20 MSG (0.033 in. thick) primed steel, that provide a sound structural connection between steel studs, and to adjacent assemblies such as a floor, ceiling, and/or other walls. Attached to floor and ceiling assemblies with steel fasteners spaced not greater than 24 in. O.C. Studs cross-braced with stud framing at midheight where necessary for clip attachment. Finish rating has not been evaluated for Steel Studs.

5B. **Steel Studs —** (As an alternate to Items 5 and 5A, for use in Configuration B only, not shown) — For Nonbearing Wall Rating — Channel shaped, fabricated from min 25 MSG corrosion-protected steel, min 3-1/2 in. wide, min 1-1/4 in. flanges and 1/4 in. return, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less than assembly height. Top and bottom tracks shall be channel shaped, fabricated from min 25 MSG corrosion-protected steel, min width to accommodate stud size, with min 1 in. long legs, attached to floor and ceiling with fasteners 24 in. OC max. Studs cross-braced with stud framing at midheight where necessary for clip attachment. Finish rating has not been evaluated for Steel Studs.

6. **Gypsum Board — Optional (not shown) - Classified or Unclassified —** Applied horizontally or vertically. Fastened to studs with nails or screws of sufficient length, spaced 12 in. OC. Joints and fastener heads are not required to be treated. Vertical joints located over studs.

7. **Aluminum Clips —** Aluminum angle, 0.049 in. thick, 2 in. wide with 2 in. and 2-1/2 in. legs. Clips secured with Type S screws 1 in. long to "H" studs and with 1-1/4 in. long screws to wood framing through holes provided in clip. Clips spaced a maximum of 5ft OC vertically.

8. **Batts and Blankets - (Optional, not shown) —** Glass fiber or mineral wool insulation, placed to completely fill the wood stud cavities.

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Last Updated on 2018-05-15