BXUV.V337 - 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.

Fire-resistance Ratings - ANSI/UL 263

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. **V337**

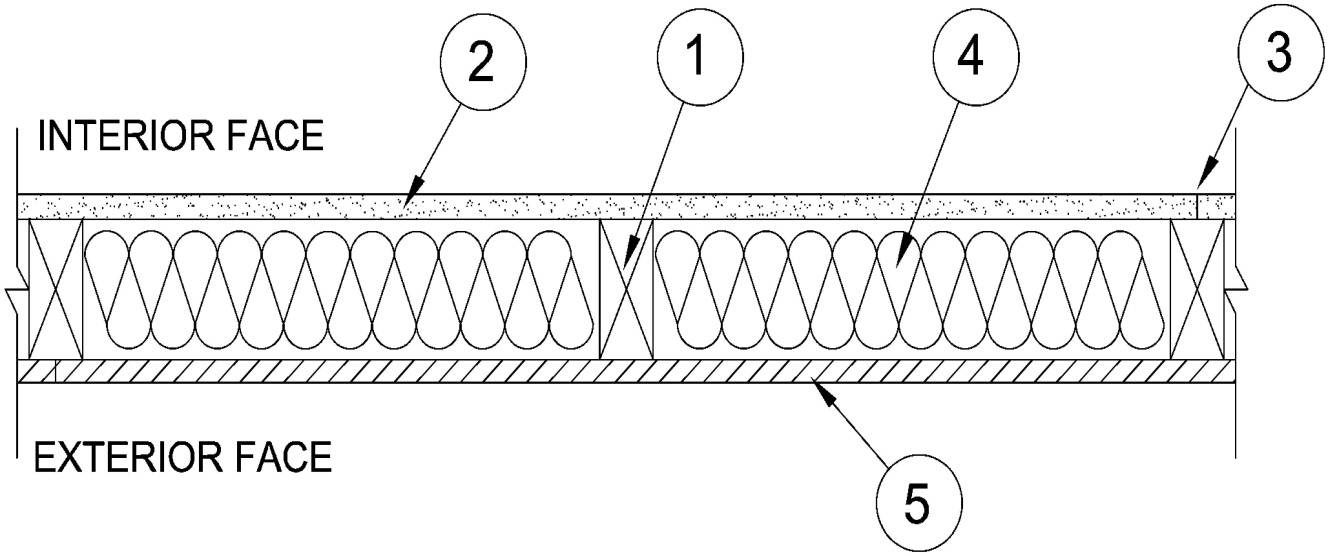
February 11, 2022

Bearing Wall Rating — 1 Hr and 2 Hr (See Assemblies Below)

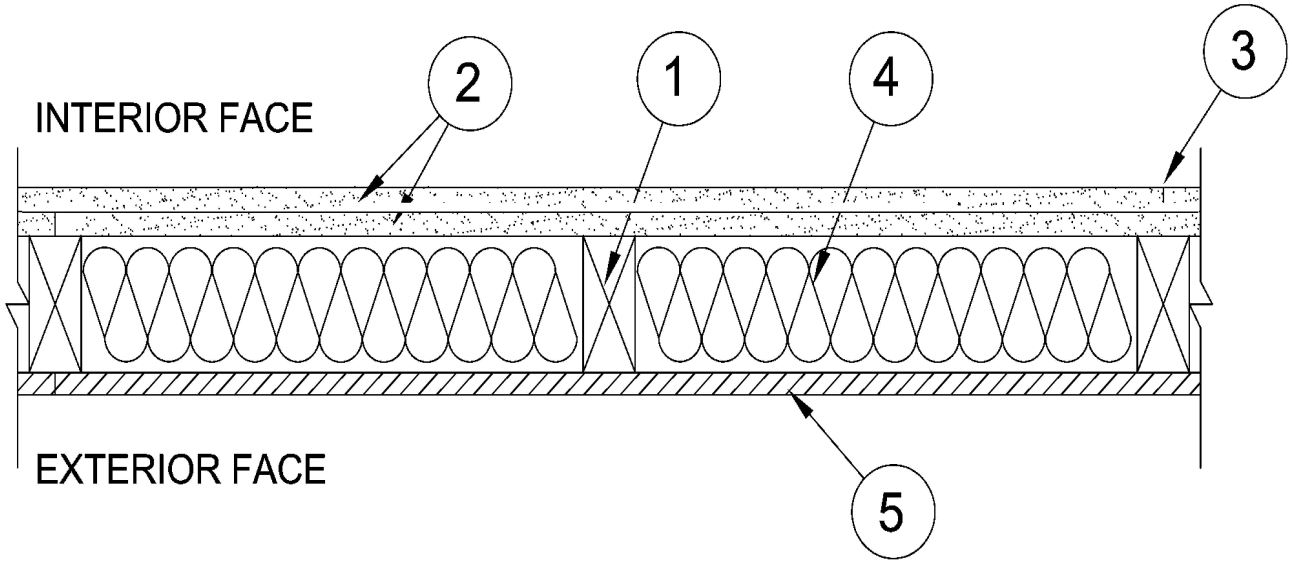
Loaded Per 2012 NDS Supplement, ASD Method, Wall Braced by Sheathing, 73% of Design Load Applied to Wall
This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such 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.**

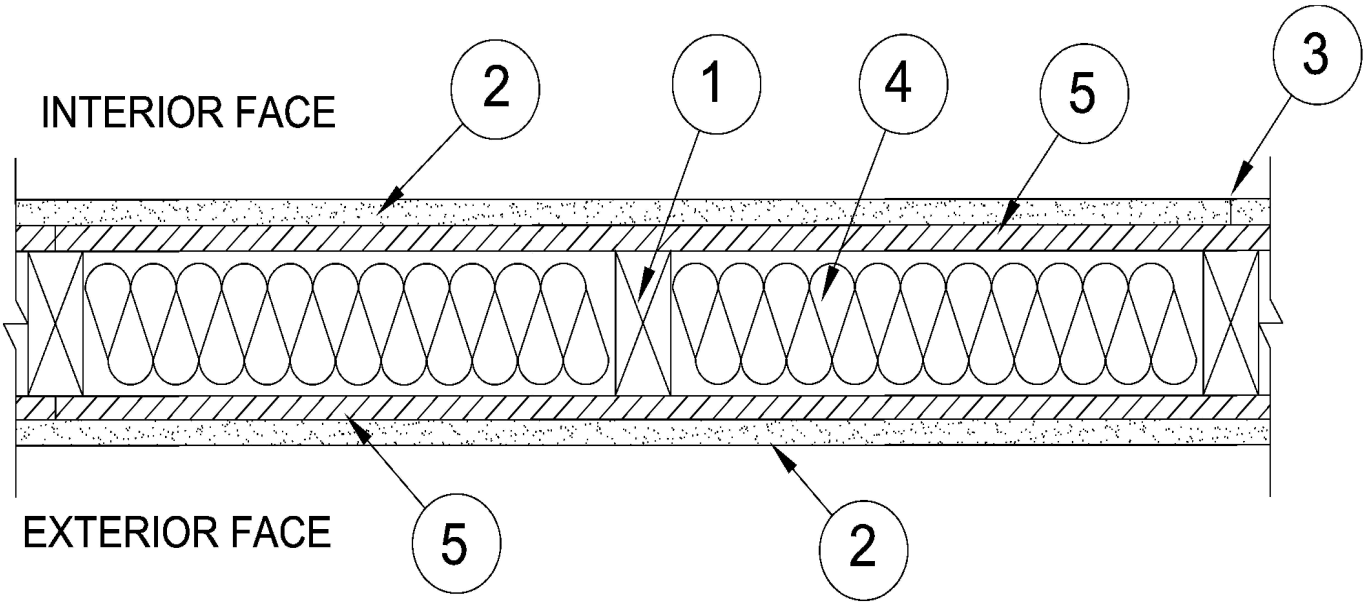
CONSTRUCTION No. 1:1-HOUR FIRE FROM EITHER FACE



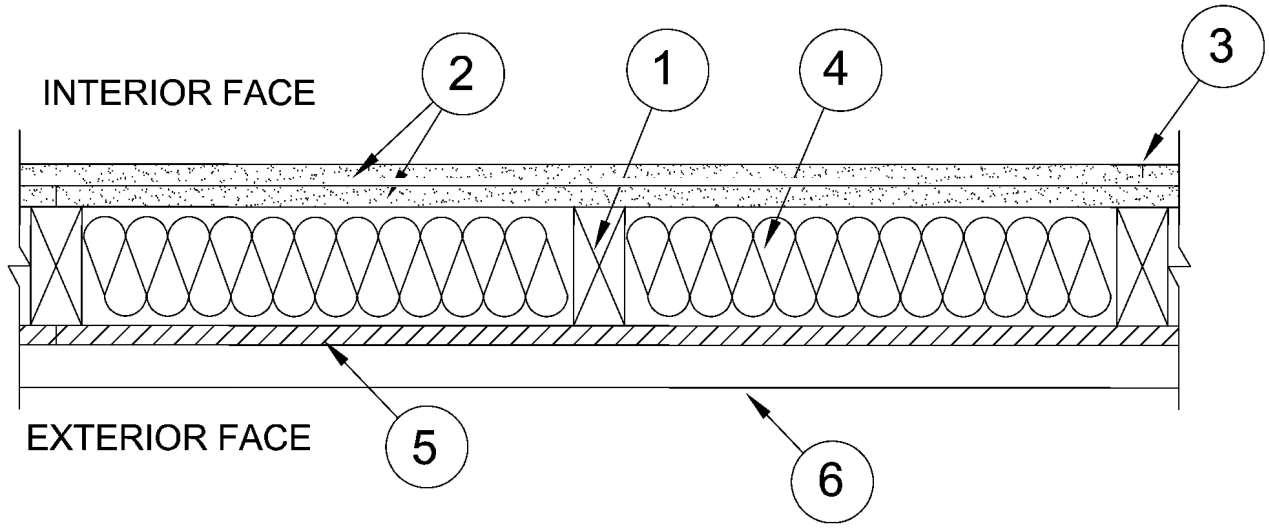
CONSTRUCTION No. 2: 1-HOUR EXTERIOR; 2-HOUR INTERIOR



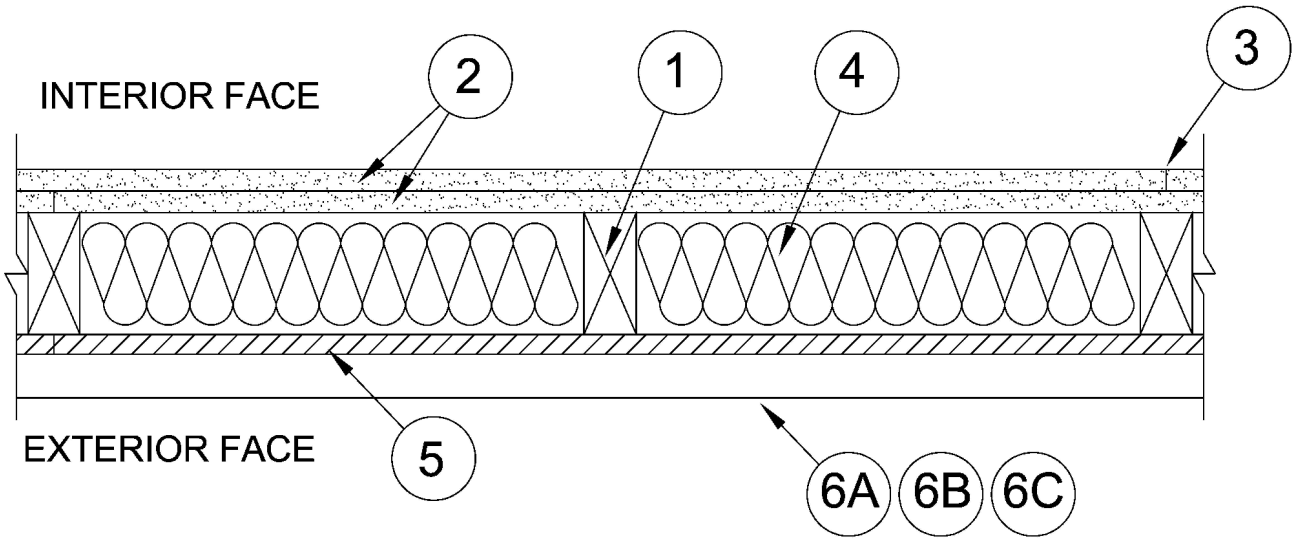
CONSTRUCTION No. 3: 2-HOUR FIRE FROM EITHER FACE



CONSTRUCTION No. 4: 2-HOUR FIRE FROM EITHER FACE



CONSTRUCTION No. 5: 2-HOUR FIRE FROM EITHER FACE



CONSTRUCTIONS No. 1, 2 and 3: 1 and 2 Hr Ratings (See Item 2)

1. **Wood Studs —** Nom 2 by 6 in., spaced 16 in. max. OC or 24 in. max. OC (must use item 6 in addition to item 6A or 6B) with double 2 by 6 top and single 2 by 6 in, bottom plates. Studs effectively firestopped.

1A. **Steel Studs —**(Not shown - In lieu of item 1**) -** Min 3-1/2 in. wide, No. 20 MSG (0.0329 in., min bare metal thickness) corrosion protected cold formed steel, or No. 20 MSG (0.036 in.) thick galvanized steel, or No. 20 MSG (0.033 in. thick) primed steel studs 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 16 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.

1B. **Steel Floor and Ceiling Tracks —** (Not Shown, for use with Item 1A) — Top and bottom tracks of wall assemblies shall consist of steel members, min No. 20 MSG and min. 3-1/2 in. deep. Attached to floor and ceiling assemblies with steel fasteners spaced not greater than 16 in. O.C.

1C. **Lateral Support Members —** (Not Shown, for use with Item 1A) — Where required for lateral support of steel studs, support may be provided by means of steel straps, channels or other similar means as specified in the design of a particular steel stud wall system.

2. **Gypsum Board* —** Any 5/8 in. thick, 4 ft. wide, Gypsum Board UL Classified for Fire Resistance (CKNX) eligible for use in Design Nos. U305 and L501 or G512. Two layers, required for 2 Hr. rating, applied vertically. Base layer nailed to wood studs and bearing plates 6 in. OC. with 6d cup-head drywall nails, 1-7/8 in. long. The face layer, with joints staggered from base layer, nailed to the studs

and bearing plates over the base layer, 8 in. OC. with 8d cup-head drywall nails, 2-3/8 in. long. Type W screws of the same length, head diameter, as the nails and at the spacing described for nails may be used instead of nails. Vertical joints centered over studs and staggered min. 1 stud cavity from the vertical joints of the building units (Item #5). For 1 Hr. rating, one layer applied as specified for base layer.

CERTAINTEED GYPSUM INC — Type X-1

3. **Joints and Fastener Heads —** Gypsum board joints covered with tape and joint compound. Fastener heads covered with joint compound.

4. **Batts and Blankets* —** Faced or unfaced mineral fiber insulation, 5-1/2 in. thick, nominal 2.73 pcf, friction fit in the wall cavity between stud, plates.
See **Batts and Blankets*** (BZJZ) category for names of Classified manufacturers.

5. **Building Units* —** Min. 7/16 in. thick nailed to the wood framing with 1-7/8 in. long, 6d nails, spaced 6 in. OC. on the perimeter and 12 in. OC. in the field. Vertical joints centered on studs. Horizontal joints backed with nom. 2 by 4 wood blocking. When steel framing is substituted for wood framing, 1-1/4 in. long Type S steel screws are used in lieu of nails. Horizontal joints backed by steel framing.

LOUISIANA-PACIFIC CORP — Type Blazeguard 2-Side

LOUISIANA-PACIFIC CORP — Type LP FlameBlock 2-Side

CONSTRUCTION No. 4: 2 Hr Rating (Items 1 through 5 are the same as above.)

6. **Gypsum Board* —** Any 5/8 in. thick, 4 ft. wide, Gypsum Board UL Classified for Fire Resistance (CKNX) eligible for use in Design Nos. U305 and L501 or G512 applied vertically. Single layer nailed to wood studs and bearing plates 6 in. OC with 1-7/8 in. long 6d cement coated nails. Vertical joints centered over studs and staggered min. 1 stud cavity from the vertical joints of the building units (Item #5). The joints and nail heads shall not be treated with joint compound.

CONSTRUCTION No. 5: 2 Hr Rating (Items 1 through 5 are the same as above.)

6A. **Cementitious Stucco —** (As an alternate to Item 6 only when studs are spaced max. 16 in. OC. When wood studs are spaced 24 in. OC, item 6A must be used in addition to item 6) - Min. 3/4 inch, measured to the face of the lath, 3 coat, Portland Cement based stucco, in accordance with ASTM C 926, the Standard Specification for Application of Portland Cement-Based Plaster, and over self-furring metal lath per ASTM C 1063, the Standard Specification for Installation of Lathing and Furring for Portland Cement-Based Plaster, fastened to studs through the Building Units (Item. 5).

6B. **Brick —** (As an alternate to items 6 or 6A when wood stud spacing is max. 16 in. OC. When wood studs are spaced 24 in. OC, Item 6 must be used in addition to Item 6B) - Brick veneer, minimum thickness of 2.3 inches meeting the requirements of local code agencies. Brick veneer attached to the studs with corrugated metal wall ties attached to each stud with 8d cement coated nails, not more than each sixth course of bricks and max 32 in. OC horizontally. Minimum 1 inch air space provided between brick veneer and sheathing. For steel studs, Type S steel screws are used in lieu of nails with a minimum penetration length through the steel stud of 3/8 in.

ALTERNATE CONSTRUCTION – 2 Hr Rating from Exterior Side

6C. **Brick —** (As an alternate to items 6, 6A and 6B for any stud spacing) — Brick veneer, minimum thickness of 3.4 inches, meeting the requirements of local code agencies. Brick veneer attached to the studs with corrugated metal wall ties attached to each stud with 8d cement coated nails, every sixth course of bricks and max 32 in. OC horizontally. One inch air space provided between brick veneer and sheathing. For steel studs, Type S steel screws are used in lieu of nails with a minimum penetration length through the steel stud of 3/8 in.

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Last Updated on 2022-03-02
