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[Quick Guide](#) [OD Home](#) [Contact Us](#) [ULC.ca](#)

BXUVC.W324 **Fire Resistance Ratings**

[Page Bottom](#)

Fire Resistance Ratings

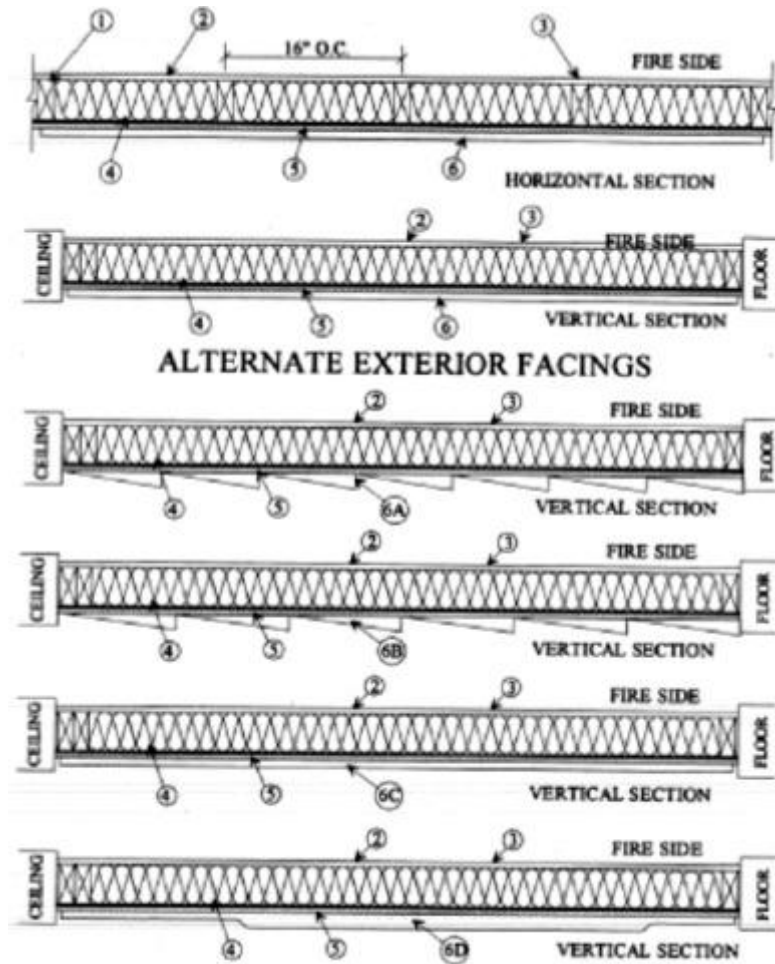
[See General Information for Fire Resistance Ratings](#)

Design No. W324
November 10, 2010

Assembly Rating — 2 h

(EXPOSED TO FIRE ON INTERIOR FACE ONLY)

**Load Restricted — Assembly evaluated in accordance with Working Stress Design methods,
for use under Limit States Design methods; refer to information under Guide [BXUVC](#).**



Horizontal Section

Bearing Wall

Finish Rating - 55 min (for wood-stud framing)

1. **Wood Studs** — 38 mm by 89 mm, spaced 400 mm OC in with two 38 mm by 89 mm top and one 38 mm by 89 mm bottom plates. Studs cross-braced at mid-height and effectively fire stopped.

1A. **Steel Studs** — (Not Shown) In lieu of Item 1. Corrosion protected steel studs, min. 89 mm deep, 0.879 mm thick (20 MSG), galvanized steel, cold formed, shall be designed in accordance with the current edition of the North American Specification for the Design of Cold-Formed Steel Structural Members (CSA S136-01). 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, (See Load Restriction specified above). The max stud spacing of wall assemblies shall not exceed 400 mm OC. Studs attached to

floor and ceiling tracks with 13 mm long Type S-12 steel screws on both sides of studs or by welded or bolted connection.

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 89 mm deep, 0.879 mm thick, (20 MSG). Attached to floor and ceiling assemblies with steel fasteners spaced not greater than 600 mm OC.

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 — ULC labeled wallboard, 15.9 mm thick, 1220 mm wide, applied vertically, two layers applied vertically. Base layer nailed to wood studs and bearing plates 150 mm OC. with 6d cement coated nails, 48 mm long, 2.3 mm shank diam. and 6 mm diam. head. The face layer, with joints staggered from base layer, nailed to the studs and bearing plates over the base layer, 200 mm OC. with 8d cement coated nails, 60 mm long, 2.87 mm shank diam. 7.14 mm diam. head. For securement to steel studs and track, 25 mm long Type S or S-12 steel screws to be used to install the base layer and 41 mm long Type S or S-12 steel screws to be used to install the face layer. Spacings of screws that same as described for nails.

3. Joints and Nailheads — Wallboard joints covered with tape and joint compound. Nail heads covered with joint compound.

4. Batts and Blankets — ULC labeled, unfaced mineral fiber insulation, 89 mm thick, nom 48 kg/m³, pressure fit in the wall cavity between stud, plates, and cross bracing.

• **5. Building Units** — (BZXXC) Building units, applied in 1 layer, nailed to the wood framing with 48 mm long, 6d nails, spaced 150 mm OC. on the perimeter and 300 mm OC. in the field. When steel studs are used min. 48 mm long steel screws installed 150 mm OC on the perimeter and 300 mm OC in the field.

BARRIER TECHNOLOGY CORP — Type Blazeguard 2-Side

LOUISIANA-PACIFIC CORP — Type LP FlameBlock 2-Side

6. Exterior Facings — Installed in accordance with the manufacturer's Installation Instructions.

6A. Vinyl Siding — (Optional) - Any UL or ULC classified exterior plastic siding (molded plastic), fastened to the building units with nails or screws, at the locations specified by the manufacturer.

OR

6B. Particle Board Siding — (Optional) - Any UL or ULC classified oriented strand board, wafer board, or hard board exterior building sidings including patterned panels.

OR

6C. T-1-11 Plywood — (Optional) - American Plywood Association rated siding series 303 including textures, bough sawn, MDO, brushed, channel grooved, and lap siding.

OR

6D. Cementitious Stucco — (Optional) - Portland cement or synthetic stucco systems with self furring metal lath or adhesive base coat. Thickness from 9.5 mm in. to 19 mm depending on system.

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[Page Top](#)

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