

XHBN.HW-D-0557 - Joint Systems

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.

XHBN - Joint Systems XHBN7 - Joint Systems Certified for Canada

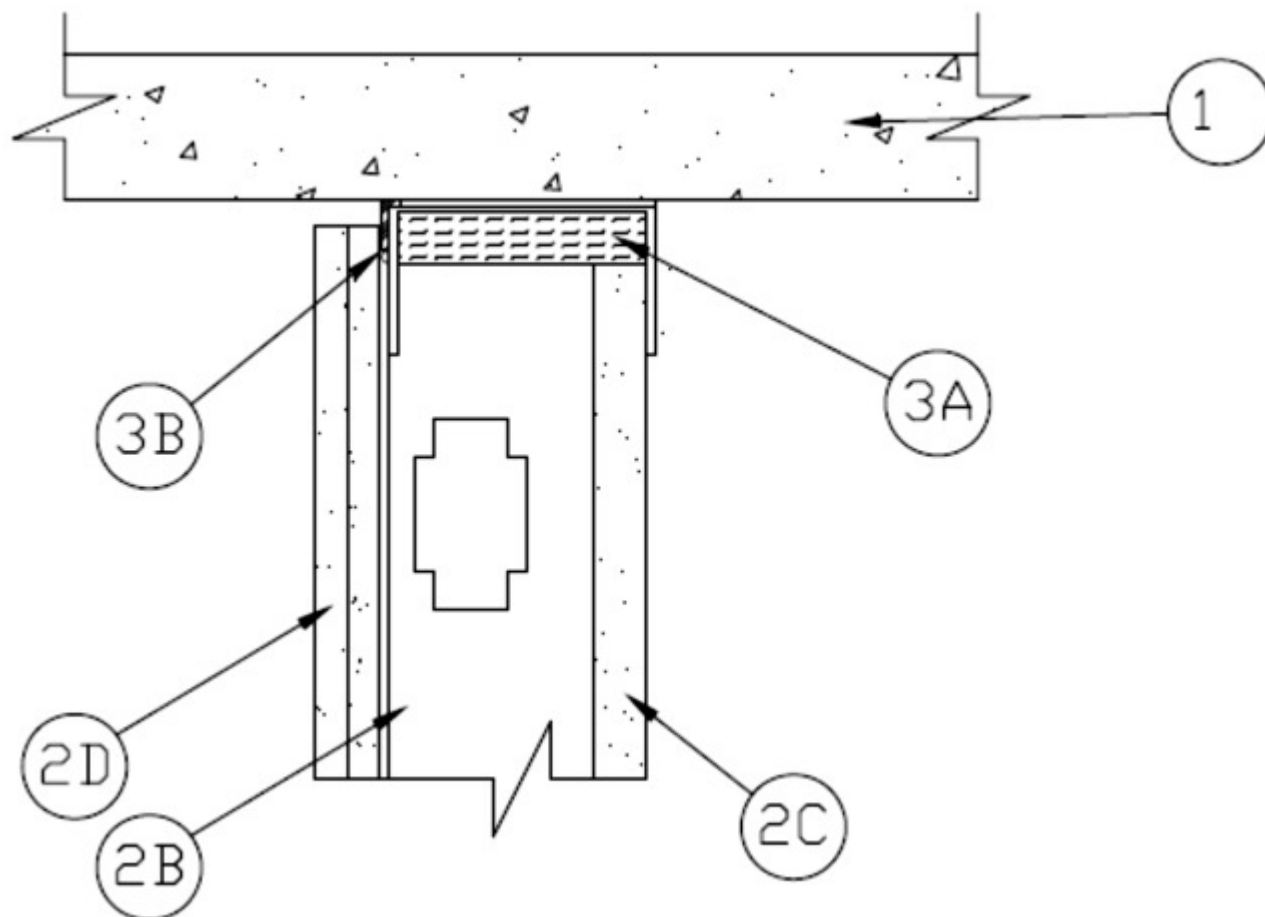
See General Information for Joint Systems

See General Information for Joint Systems Certified for Canada

System No. HW-D-0557

March 11, 2014

ANSI/UL2079	CAN/ULC S115
Assembly Ratings — 2 Hr	F Ratings — 1 and 2 Hr (See Item 2)
Nominal Joint Width — 1/2 5/8 In. (See Item 3)	FT Ratings — 1 and 2 Hr (See Item 2)
Class II or III Movement Capabilities — 100% Compression or Extension	FH Ratings — 1 and 2 Hr (See Item 2)
L Rating at Ambient — 2.1 CFM/Lin Ft	FTH Ratings — 1 and 2 Hr (See Item 2)
L Rating at 400°F — 1.33 CFM/Lin Ft	Nominal Joint Width — 13, 16 mm. (see Item 3)
	Class II or III Movement Capabilities — 100% Compression or Extension
	L Rating at Ambient — 2.1 CFM/Lin Ft
	L Rating at 400°F — 1.33 CFM/Lin Ft



1. Floor Assembly — Concrete — Min 2-1/2 in. (64 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete.

2. Shaft Wall Assembly — The 2 hr fire rated gypsum board/stud shaft wall assembly shall be constructed of the materials and in the manner described in the individual U400 or V400 Series Wall and Partition Design in the UL Fire Resistance Directory and shall include the following construction features:

A. **Steel Floor and Ceiling Runners** — J-runner, sized to accommodate steel studs (Item 2B), fabricated from min 24 ga galv steel. Runners attached to floor with steel fasteners located not greater than 2 in. (51 mm) from ends and not greater than 24 in. (610 mm) OC. The ceiling runners are provided with a fill, void or cavity material and are described in Item 3B. Legs are to be min 1/4 in. (6 mm) longer than the max joint width.

B. **Studs** — "C-T", "I", or "C-H" shaped steel studs to be min 2 1/2 in. (64 mm) wide and formed of min 24 ga galv steel. Studs cut 1 to 1-1/4 in (25 to 32 mm) less in length than assembly height with bottom nesting in and secured to floor runner. Steel studs secured to slotted leg of ceiling runner on finished side of wall with No. 8 by 1/2 (13 mm) long wafer head steel screws at mid-height of exposed slot. Studs spaced max 24 in. (610 mm) OC.

C. **Gypsum Board*** — 1 in. (25 mm) thick by 24 in. (610 mm) wide gypsum board liner panels. Panels cut 1 in. (25 mm) less in length than floor to ceiling height. Vertical edges inserted into "T" shaped section of "C-T" studs, into holding tabs of "I" studs or into "H"-shaped section of "C-H" studs.

D. **Gypsum Board*** — Gypsum board 1/2 or 5/8 in. (13 or 16 mm) thick, applied on finished side of wall as specified in the individual Wall and Partition Design. Boards to be cut max 5/8 in. (16 mm) less in length than the floor to ceiling height. The screws attaching the gypsum board layers to the "C-T", "I", or "C-H" studs shall be located 4 to 5 in. (102 to 127 mm) down from ceiling surface.

The hourly fire rating of the joint system is equal to the hourly fire rating of the wall.

3. Joint System — Max separation between bottom of floor and top of gypsum board (at time of installation) is 1/2 or 5/8 in. (13 or 16 mm). The joint system is designed to accommodate a max 100 percent compression or extension

from its installed width.

A. **Forming Material*** — Min 2 in. thick min 4 pcf (64 kg/m³) mineral wool batt insulation cut to friction fit 33% compression in width and installed into ceiling runner between leg of track and gypsum liner board.

B. **Fill, Void or Cavity Material*** — Nom 20 ga U-shaped track having 3 in. (76 mm) legs with a nom 1-1/4 in. (32 mm) wide intumescent strip affixed to the top of the leg overlapping onto top surface a min of 1/4 in. (6 mm) facing the finished side of wall. Gypsum board to overlap a min of 3/8 in. (10 mm) over the intumescent strip. Track to be secured to bottom side of floor assembly with steel masonry or powder actuated fasteners spaced max 24 in. (610 mm) OC.

CALIFORNIA EXPANDED METAL PRODUCTS CO — FAS SHAFT Track

C. **Fill, Void or Cavity Material* — Sealant** — (optional) -Sealant may be used to seal any gaps between ceiling runners or item 3A.1 and the concrete slab.

UNITED STATES GYPSUM CO — Type AS

*** 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 2014-03-11

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