

XHBN.WW-D-0104 - 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

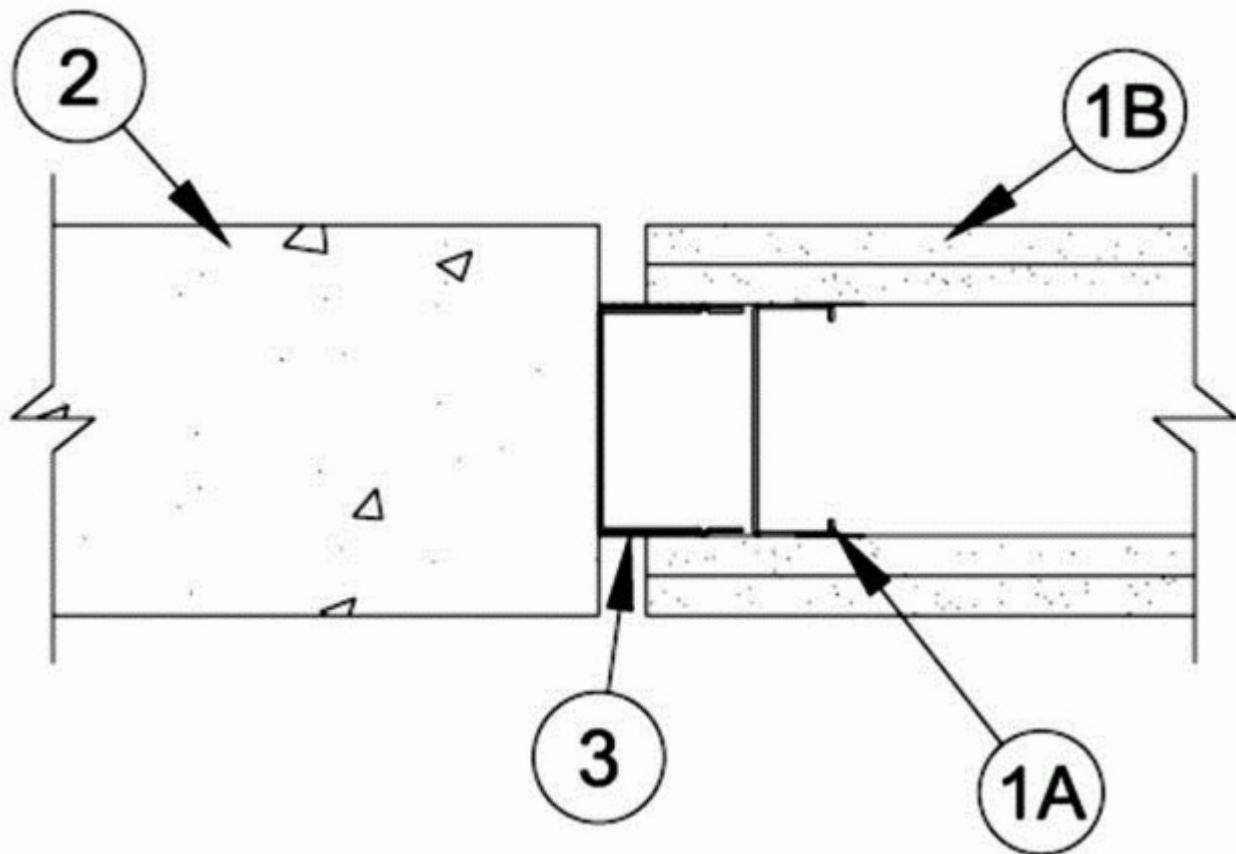
See General Information for Joint Systems

See General Information for Joint Systems Certified for Canada

System No. WW-D-0104

October 28, 2019

ANSI/UL2079	CAN/ULC S115
Assembly Ratings — 1 and 2 Hr (See Item 2)	F Ratings — 1 and 2 Hr (See Item 2)
Nominal Joint Width — 1/4 In. or 1/2 In.	FT Ratings — 1 and 2 Hr (See Item 2)
Class II or III Movement Capabilities — 100% or 50% Compression or Extension	FH Ratings — 1 and 2 Hr (See Item 2)
L Rating at Ambient — Less Than 1 CFM/Lin Ft	FTH Ratings — 1 and 2 Hr (See Item 2)
L Rating at 400°F — Less Than 1 CFM/Lin Ft	Nominal Joint Width — 6 mm
	Class II or III Movement Capabilities — 100% Compression or Extension
	L Rating at Ambient — Less Than 1.55 L/s/m
	L Rating at 203°C — Less Than 1.55 L/s/m



1. Wall Assembly — The 1 or 2 hr fire-rated gypsum board/steel stud 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. **Studs** — Steel studs to be min 3-1/2 in. (89 mm) wide by 1-1/4 in. (32 mm) deep corrosion protected min 25 MSG steel channels. Stud spacing not to exceed 24 in. (610 mm) OC with first stud located max 3-1/4 in. (83 mm) from concrete wall assembly (Item 2).

A1. **Framing Members - Steel Studs*** — In lieu of Item A - Proprietary channel shaped studs, 3-5/8 in. (92 mm) wide spaced a max of 24 in. (610 mm) OC. For direct attachment of gypsum board only.

CALIFORNIA EXPANDED METAL PRODUCTS CO — ViperStud™

B. **Gypsum Board*** — Gypsum board sheets installed to a min total thickness of 5/8 in. (16 mm) or 1-1/4 in. (32 mm) on each side of wall for 1 and 2 hr fire rated assemblies, respectively. A nominal 1/4 in. (6 mm) gap shall be maintained between the edges of the gypsum board and the concrete wall assembly (Item 2). The screws attaching the gypsum board to the first stud shall be located 4 in. (102 mm) from face of concrete wall assembly. Gypsum board not attached to side runner. The hourly fire rating of the joint system is equal to the hourly rating of the gypsum wall assembly.

The hourly rating of the joint system is dependent on the hourly fire rating of the wall assembly in which it is installed.

2. Wall Assembly — Min 4-3/4 in. (121 mm) thick steel- reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) structural concrete. Wall may also be constructed of any UL Classified **Concrete Blocks***.

See **Concrete Blocks** (CAZT) category in the Fire Resistance Directory for names of manufacturers.

3. Joint System — **Max separation between masonry wall and gypsum board (at time of installation of joint system) is 1/4 in. (6 mm) or 1/2 in. (12mm). The joint system is designed to accommodate a max 100 percent compression or extension from its installed width. When 3B.4 is used the joint will accommodate 50% compression and 0% extension.**

The joint system consists of the following:

A. **Fill, Void or Cavity Material*** — Min 20 ga U-shaped track having 3 in. (76 mm) legs and a nom 1-1/4 in. (32 mm) wide intumescent strip affixed to the top of both legs. Gypsum board to overlap a min of 1/2 in. (13 mm) over the

intumescent strip. Track attached to concrete wall (Item 2) with steel fasteners max 24 in. (610 mm) OC.

CALIFORNIA EXPANDED METAL PRODUCTS CO — FAS Track DL

A1. Fill, Void or Cavity Material* — As an Alternate to Item 3A - Min 20 ga steel channel track with 1-1/4 in () deep legs, having a 1/2 in. intumescent strip affixed to the back web of the track along the outer edge on both sides. Track attached to concrete wall with steel fasteners or welds spaced max 24 in. (610 mm) OC.

CALIFORNIA EXPANDED METAL PRODUCTS CO — FAS Track BT 1000

MARINO/WARE, DIV OF WARE INDUSTRIES INC — FAS Track BT 1000

A2. Fill, Void or Cavity Material* — As an option to item 3A1 a min 25 ga composite steel angle with a strip of intumescent affixed on the inside 1-1/4 in (32 mm) leg. Steel angle is friction between the vertical runners and the structural concrete on both sides of the wall.

CALIFORNIA EXPANDED METAL PRODUCTS CO — DDA-1 (Deflection Drift Angle)

A3. Fill, Void or Cavity Material* — (Not Shown) — As an alternate to 3A, 3A1 and 3A2, For 1/2 in. (13 mm) gap, Nom., 1 in. (25.4 mm) open cell foam plug having a nom 5/16 in. (8 mm) intumescent tape applied to the top surface of the foam profile. The foam is sized for 1 or 2 hour walls and shall be placed in the joint between the edges of the gypsum board between the wall assemblies.

CALIFORNIA EXPANDED METAL PRODUCTS CO — HOT ROD Type-X

MARINO/WARE, DIV OF WARE INDUSTRIES INC — HOT ROD Type-X

A4. Fill, Void or Cavity Material* — (Not Shown) - As an alternate to HOTROD (Item 3A3) at the 1/4 in. (6 mm) gap between the edge of the drywall and the opposing assembly shall be filled with vinyl deflection bead with 5/16 in. (8 mm) intumescent strip applied to horizontal leg that runs above the edge of the drywall. The horizontal leg is sized at 5/8 in. (16 mm) for 1-hour walls and 1-1/4 in. (32 mm) for 2-hour walls. Joint compound may be applied over perforated flange and drywall.

CALIFORNIA EXPANDED METAL PRODUCTS CO — FIRE BEAD (Fire Rated Deflection Bead)

MARINO/WARE, DIV OF WARE INDUSTRIES INC — FIRE BEAD

TRIM-TEX INC — Trim Tex-Fire Bead (Fire Rated Deflection Bead)

B. Fill, Void or Cavity Material* — (Optional, Not Shown) - Non 7/8 in. (22 mm)"Denver Foam" open cell backer rod can be placed in the joint above the top edge of the drywall between the concrete slab. A layer of tape and joint compound can then be applied over the open cell backer rod.

*** 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 2019-10-28

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.

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