



XHBN.BW-S-0041 - 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

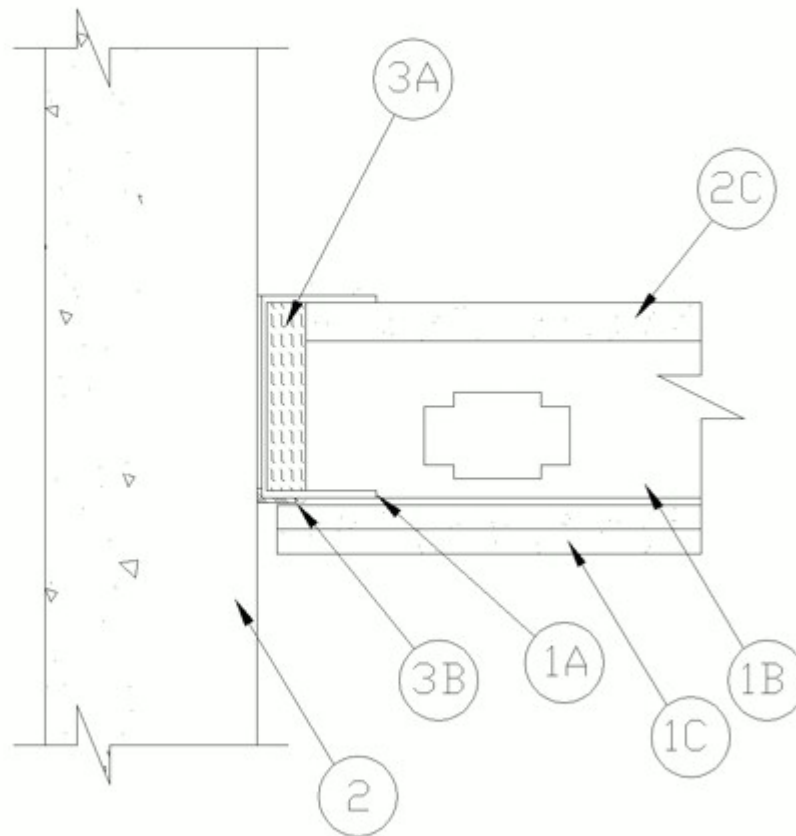
See General Information for Joint Systems

See General Information for Joint Systems Certified for Canada

System No. BW-S-0041

October 02, 2017

ANSI/UL2079	CAN/ULC S115
Assembly Rating —2 Hr	F Rating —2 Hr
Nominal Joint Width — 1/2 In.	FT Rating — 2 Hr
L Rating at Ambient — Less Than 1 CFM/Lin Ft	FH Rating —2 Hr
L Rating at 400°F — Less Than 1 CFM/Lin Ft	FTH Rating —2 Hr
	Nominal Joint Width — 13 mm
	L Rating at Ambient — Less Than 1 CFM/Lin Ft
	L Rating at 400°F — Less Than 1 CFM/Lin Ft



1. **Shaft Wall Assembly** — The 2 hr fire rated gypsum board/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. **Steel Runners** — Runner U-shaped, sized to accommodate steel studs (Item 1B), fabricated from 24 ga galv steel. Ceiling runner positioned with slotted leg toward floor. Runners attached to floor with steel fasteners located not greater than 2 in. from ends and not greater than 24 in OC. The floor runners are provided with a fill, void or cavity material and are described in Item 3.

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. Stud spacing not to exceed 24 in. (610 mm) OC with first stud located max 3-1/4 in. (83 mm) from concrete floor assembly (Item 2).

C. **Gypsum Board*** — 1 in. (25 mm) thick gypsum liner panels and 1/2 in., 5/8 in. or 3/4 in. (13, 16 or 19 mm) thick gypsum panels installed as specified in the individual U400 or V400 Series shaft wall designs in the UL Fire Resistance Directory.

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

2. **Floor Assembly** — Min 4-1/2 in. (114 mm) thick steel- reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) structural concrete. Floor may also be constructed of any min 6 in. (152 mm) thick UL Classified hollow-core **Precast Concrete Units***.

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

3. **Joint System** — **Max width of joint (at time of installation) is 1/2 in. (13 mm).** The joint system consists of the following:

A. **Forming Material*** — Min 2 in. thick min 4 pcf (64 kg/m³) mineral wool batt insulation cut to the width of the floor runner and compressed 25 percent in thickness, installed into floor runner between leg of track and gypsum liner board.

B. **Fill, Void or Cavity Material*** — Nom 20 ga J-shaped track having a one 1-1/2 in. (38 mm) solid leg and one 2-1/2 in. (64 mm) leg nom 1/2 in. (13 mm) wide intumescent strip affixed to the top outer web along the outside corner facing the finish side of the wall. Track to be attached to the concrete wall with steel masonry or powder actuated fasteners spaced at a max of 24 in. (610 mm) OC.

CALIFORNIA EXPANDED METAL PRODUCTS CO — Fire Rated J-Track

UNITED STATES GYPSUM CO — USG Sheetrock® Brand Firecode® J-Runner

B1. **Fill, Void or Cavity Material*** — As an option to Item 3B 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 facing the finish side of the wall.

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

*** 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 2017-10-02

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.

UL permits the reproduction of the material contained in the Online Certification Directory subject to the following conditions: 1. The Guide Information, Assemblies, Constructions, Designs, Systems, and/or Certifications (files) must be presented in their entirety and in a non-misleading manner, without any manipulation of the data (or drawings). 2. The statement "Reprinted from the Online Certifications Directory with permission from UL" must appear adjacent to the extracted material. In addition, the reprinted material must include a copyright notice in the following format: "© 2020 UL LLC"