UL Product iQ™

XHBN.HW-D-0826 - 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

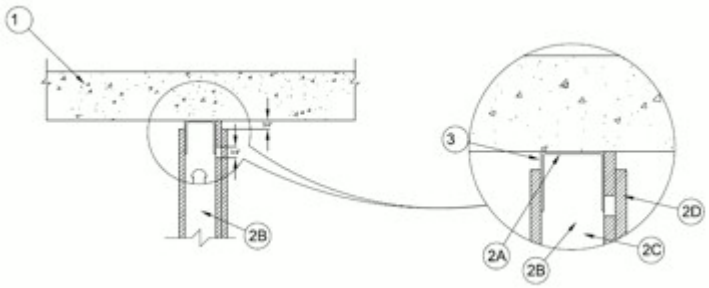
See General Information for Joint Systems Certified for Canada

System No. HW-D-0826

June 17, 2019

ANSI/ UL 2079	CAN/ULC S115
Assembly Rating- 1 Hr	F Ratings - 1 Hr
Nominal Joint Width - 3/8 or 3/4 In. (See Item 3)	FT Ratings - 1 Hr
Class II or III Movement Capabilities - 100% compression or extension for 3/8" (10mm). 100% compression for 3/4" (19mm).	FH Ratings - 1 Hr
L Rating at Ambient - Less Than 1 CFM/Lin Ft (Less Than 1.55 L/s/m)	FTH Ratings - 1 Hr
L Rating at 400°F (204°C)- Less Than 1 CFM/Lin Ft (Less Than 1.55 L/s/m)	Nominal Joint Width - 19 mm
	Class II or III Movement Capabilities -100% compression or extension for 3/8". 100% compression for 3/4"
	L Rating at Ambient - Less Than 1 CFM/Lin Ft (Less Than 1.55 L/s/m)

	L Rating at 400°F - Less Than 1 CFM/Lin Ft (Less Than 1.55 L/s/m)



1. **Floor Assembly —** Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m^3) structural concrete.

2. **Wall Assembly —** The 1 h fire-rated gypsum board /steel stud wall assembly shall be constructed of the materials and in the manner specified 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. **Light Gauge Framing — Tab Track Ceiling Runner —** As an alternate to the ceiling runner in Item 2A, tabbed ceiling runner to consist of a U-shaped galv steel channel with legs with a series of 1 in (26mm) long slits starting from the open end of the track leg extending vertically up the leg. Ceiling runner secured to concrete floor slab with steel masonry anchors spaced max 24 in. (610 mm) OC.
CALIFORNIA EXPANDED METAL PRODUCTS CO — TAB Track

B. **Studs —** Steel studs to be min 2-1/2 in. (64 mm) wide. Studs cut 1/2 to 3/4 in. (6 to 19 mm) less in length than assembly height with bottom nesting in and resting on floor runner and with top nesting in ceiling runner without attachment. When slotted ceiling runner (Item 2A1) is used, steel studs secured to slotted ceiling runner with No. 8 by 1/2 in. (13 mm) long wafer head steel screws at midheight of slot on each side of wall. Stud spacing not to exceed 24 in. (610 mm) OC. When vertical deflection ceiling runner (Item 2A2) is used, steel studs secured to slotted vertical deflection clips, through the bushings, with steel screws at midheight of each slot. Stud spacing not to exceed 24 in. (610 mm) OC.

C. **Batts and Blankets*(not shown) —** Glass fiber or mineral wool batt insulation placed to fill stud cavity. Glass fiber insulation to have a min density of 0.9 pcf (14 kg/m^3) and a min R-11 thermal insulation rating. Mineral wool batt insulation to have a min density of 3 pcf (48 kg/m^3).
See **Batts and Blankets (BKNV)** Category in the Building Materials Directory and **Batts and Blankets (BZJZ)** Category in the Fire Resistance Directory for names of Classified Companies.

D. **Gypsum Board* —** Gypsum board installed to a min total thickness 5/8 or 1-1/4 in. (16 or 32 mm) where one layer of gypsum board is on one side of the wall and two layers of gypsum on the opposing side of the wall. The opposing side is constructed with the first layer extending up to a the joint gap below a 2 in wide drywall rip. The rip is attached to the track leg prior to the securement of the second layer. The second layer is secured as the first layer continuing up past the rip to maintain the gap below the floor celling. Wall to be constructed as specified in the individual U400 or V400 Series Design in the UL Fire Resistance Directory, except that a max 3/4 in. (19 mm) gap shall be maintained between the top of gypsum board and bottom of concrete floor as well as the gap between gypsum and the gypsum rip. The screws attaching the gypsum board to the studs shall be spaced max 16 in on center on both layers.

3. **Joint System —** Max separation between bottom of floor and top of gypsum board (at time of installation) is 3/4 in. (19 mm). The joint system is designed to accommodate 100 percent compression and extension at 3/8 in (10mm) or 100 percent compression only from its installed width at 3/4 in (19mm).

A. **Fill, Void or Cavity Material* —** The nominal 5/8 in. by 1-1/4 in. angle shall be formed of vinyl with foil tape applied to the track side of the profile of the vinyl piece and a nominal 5/16 in. wide intumescent strip affixed along the inside of the leg. Vinyl angle is friction fit between the top web of the ceiling runner and the concrete deck.
CALIFORNIA EXPANDED METAL PRODUCTS CO — DDA-2 (Deflection Drift Angle)

B. **Fill, Void or Cavity Material* (not shown) — Sealant —** (Optional) Sealant may be used to seal any gaps between ceiling runners or item 3A 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 2019-06-17