UL Product iQ™

XHBN.WW-S-0061 - 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

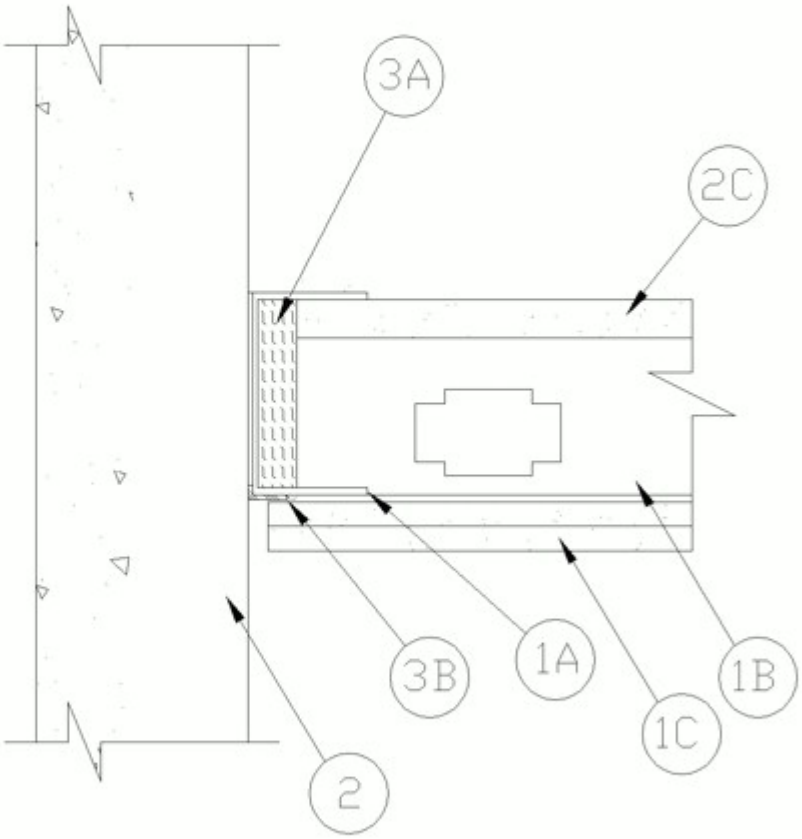
See General Information for Joint Systems

See General Information for Joint Systems Certified for Canada

System No. WW-S-0061

October 31, 2019

ANSI/UL2079	CAN/ULC S115
Assembly Rating —2 Hr (See Item 1)	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 finished side of wall. Runners attached to floor with steel fasteners located not greater than 2 in. from ends and not greater than 24 in OC. The ceiling 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 wall 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. **Wall Assembly —** Min 4-1/2 in. (114 mm) thick steel- reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m^3) structural concrete. Wall may also be constructed of any UL Classified **Concrete Blocks*** with a minimum thickness of 6 in. (152 mm).

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. (51 mm) thick min 4 pcf (64 kg/m^3) mineral wool batt insulation cut to the width of the ceiling runner and compressed 25 percent in thickness, installed into ceiling runner between leg of track and gypsum liner board.

B. **Fill, Void or Cavity Material* —** Nom 20 ga J-shaped track having a 3 in. and a 2 in. leg (83 and 51 mm) legs with a nom 1/2 in. (13 mm) wide intumescent strip affixed to the top of the leg overlapping on to top surface a min of 1/4 in. (6 mm) facing the finished side of wall. Track to be secured to wall assembly with steel masonry or powder actuated fasteners spaced at a max of 24 in. (610 mm) OC.
CALIFORNIA EXPANDED METAL PRODUCTS CO — FAS SHAFT Track 500

B1. **Fill, Void or Cavity Material* —** As an Alternate to Item 3B 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

MARINO/WARE, DIV OF WARE INDUSTRIES INC — Fire Rated J-Track

B2. **Fill, Void or Cavity Material* —** As an option to Item 3B1 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)

B3. **Fill, Void or Cavity Material* —** (Not Shown) - as an alternate to 3B between the edge of the drywall and the opposing wall assembly shall be filled with vinyl deflection bead with 5/16 in. (8 mm) intumescent strip and foam applied to horizontal leg that runs above the edge of the drywall. The perforated leg may be attached to the surface of the drywall with 1/2 in. (13 mm) staples every 6-8 in. (152-203 mm).
CALIFORNIA EXPANDED METAL PRODUCTS CO — HOTROD XL

MARINO/WARE, DIV OF WARE INDUSTRIES INC — HOTROD XL

B4. **Fill, Void or Cavity Material* —** (Not Shown) - as an alternate to 3B nominal 1 in. (25.4 mm) open cell foam plug having a nominal 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 above the top edge of the drywall between the concrete wall. A layer of tape and joint compound can then be applied over the HOTROD Type X assembly.
CALIFORNIA EXPANDED METAL PRODUCTS CO — HOTROD Type-X

B5. **Fill, Void or Cavity Material* —** (Not Shown) - as an alternate to 3B nominal 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 above the top edge of the drywall between the opposing wall assembly.
CALIFORNIA EXPANDED METAL PRODUCTS CO — HOTROD Type-X

* 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 2019-10-31