

## XHBN.HW-D-0083 - 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

[See General Information for Joint Systems](#)

## System No. HW-D-0083

September 01, 2016

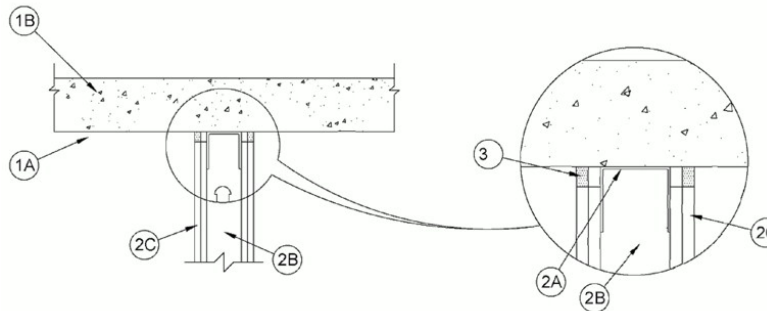
## Assembly Rating — 1 and 2 Hr (See Items 2 and 3)

Nominal Joint Width — 3/4 In.

L Rating At Ambient — Less Than 1 CFM/Lin Ft

L Rating At 400°F — Less Than 1 CFM/Lin Ft

Class II Movement Capabilities — 17 % Compression or Extension



1. **Floor Assembly** — Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m<sup>3</sup>) structural concrete. Floor may also be constructed of any 6 in. (152 mm) thick UL Classified hollow-core **Precast Concrete Units\***. See **Precast Concrete Units** category in the Fire Resistance Directory for names of manufacturers.

2. **Wall Assembly** — The 1 or 2 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. **Steel Floor and Ceiling Runners** — Floor and ceiling runners of wall assembly shall consist of min No. 25 gauge galv steel channels sized to accommodate steel studs (Item 2B). Flange height of ceiling runner shall be min 1/4 in. (6 mm) greater than max extended joint width. Ceiling runner secured to concrete floor slab with steel masonry anchors, steel fasteners spaced 24 in. (610 mm) OC.

A1. **Light Gauge Framing\* - Slotted Ceiling Runner** — As an alternate to the ceiling runner in Item 2A, slotted ceiling runner to consist of galv steel channel with slotted flanges sized to accommodate steel studs (Item 2B). Slotted ceiling runner secured to concrete floor slab with steel masonry anchors or steel fasteners spaced max 24 in. (610 mm) OC.

**BRADY CONSTRUCTION INNOVATIONS INC, DBA SLIPTRACK SYSTEMS** — SLP-TRK

**CALIFORNIA EXPANDED METAL PRODUCTS CO** — CST

**CLARKDIETRICH BUILDING SYSTEMS** — Type SLT, SLT-H

**MARINO/WARE, DIV OF WARE INDUSTRIES INC** — Type SLT

**METAL-LITE INC** — The System

**RAM SALES L L C** — RAM Slotted Track

**SCAFCO STEEL STUD MANUFACTURING CO**

**TELLING INDUSTRIES L L C** — True-Action Deflection Track

A2. **Light Gauge Framing\* - Vertical deflection Ceiling Runner** — As an alternate to the ceiling runners in Items 2A and 2A1, vertical deflection ceiling runner to consist of galv steel channel with slotted vertical deflection clips mechanically fastened within runner. Slotted ceiling runner secured to concrete floor slab for permanent fastening of steel studs. Flanges sized to accommodate steel studs (Item 2B). Vertical deflection ceiling runner secured to concrete floor slab with steel fasteners or steel masonry anchors spaced max 24 in. (610 mm) OC.

**THE STEEL NETWORK INC** — VertTrack VTD250, VTD362, VTD400, VTD600 and VTD800

A3. **Light Gauge Framing\* - Notched Ceiling Runner** — As an alternate to the ceiling runners in Items 2A through 2A3, notched ceiling runners to consist of C-shaped galv steel channel with notched return flanges sized to accommodate steel studs (Item 2B). Notched ceiling runner secured to concrete floor slab with steel masonry anchors or steel fasteners spaced max 24 in. (610 mm) OC.

**OLMAR SUPPLY INC** — Type SCR

B. **Studs** — Steel studs to be min 2-1/2 in. (64 mm) wide. Studs cut 1/2 to 3/4 in. (13 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. **Gypsum Board\*** — For 1 hr assembly, one layer of 5/8 in. (16 mm) thick gypsum board is required in the individual Wall and Partition Design. For 2 hr assembly, two layers of 5/8 in. (16 mm) thick gypsum board is required in the individual Wall and Partition Design. For both hourly ratings, a nominal 3/4 in. (19 mm) gap shall be maintained between the top of gypsum board and the bottom of surface of the concrete floor. The screws attaching the gypsum board to studs at the top of the wall shall be located 1 in. (25 mm) below the bottom edge of the ceiling runner. The hourly fire rating of the joint system is dependent on the hourly rating of the wall.

3. **Fill, Void or Cavity Material\* - Sealant** — Max separation between the bottom of floor and top of wall is 3/4 in. (19 mm). The joint system is designed to accommodate a max 17 percent compression or extension from its installed width. Min 5/8 in. (16 mm) or 1-1/4 in. (32 mm) thickness of fill material for 1 and 2 hr rated wall assemblies, respectively, installed on each side of the wall between the top of the gypsum board and the bottom of the concrete floor, flush with the surface of the wall.

**HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC** — CP606 Flexible Firestop Sealant

\* 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 2016-09-01

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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