

XHBN.HW-D-0485 - 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

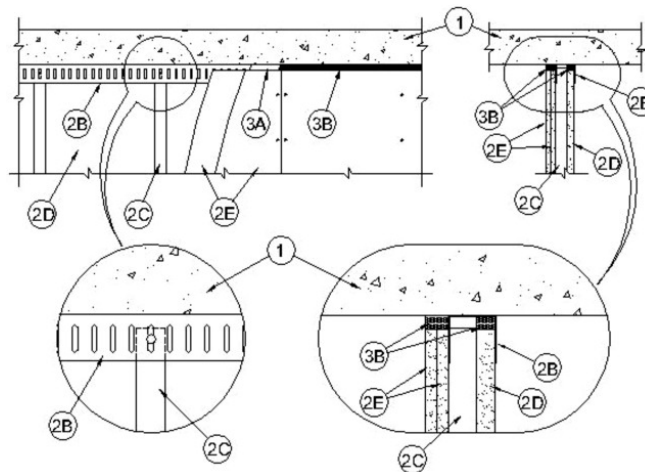
[See General Information for Joint Systems](#)

[See General Information for Joint Systems Certified for Canada](#)

System No. HW-D-0485

September 01, 2016

ANSI/UL2079	CAN/ULC S115
Assembly Rating — 1 and 2 Hr	F Rating — 1 and 2 Hr (See Item 1)
Nominal Joint Width - 3/4 in.	FT Rating — 1 and 2 Hr (See Item 1)
Class II Movement Capabilities — 12.5 % Compression or Extension or 25% Compression	FH Rating — 1 and 2 Hr (See Item 1)
L Rating At Ambient — Less Than 1 CFM/in ft	FTH Rating — 1 and 2 Hr (See Item 1)
L Rating At 400 F — Less Than 1 CFM/in ft	Nominal Joint Width - 19 mm
	Class II Movement Capabilities — 12.5 % Compression or Extension or 25% Compression
	L Rating At Ambient — Less Than 1 CFM/in ft
	L Rating At 400 F — Less Than 1 CFM/in ft



1. Floor Assembly — Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) structural concrete. Floor may also be constructed of any UL Classified hollow-core **Precast Concrete Units***.
See **Precast Concrete Units** (CFTV) in Fire Resistance Directory for names of manufacturers.

2. Shaft Wall Assembly — The 1 or 2 hr fire rated shaft 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. Floor and Wall Runners — (Not Shown) - "J"-shaped runner, min 2-1/2 in. (64 mm) wide with unequal legs of 1 in. (25 mm) and 2 in. (51 mm), fabricated from min 24 MSG galv steel. Runners positioned with short leg toward finished side of wall. Runners attached to walls and floor with steel fasteners spaced max 24 in. (610 mm) OC. As an alternate to the "J"-shaped runner, a min 2-1/2 in. (64 mm) wide by 1 or 1-1/4 in. (25 or 32 mm) deep channel formed from min 24 MSG galv steel may be used for the floor runner.

B. Steel Floor And Ceiling Runners — Floor and ceiling runners of wall assembly shall consist of galv steel channels sized to accommodate steel "C-H" studs. Flange height of ceiling runner shall be min 1/2 in. (13 mm) greater than nom joint width. Ceiling runner secured with steel masonry anchors spaced max 24 in. (610 mm) OC.

B1. Light Gauge Framing* - Slotted Ceiling Track — As an option to Item 2B, slotted ceiling track shall consist of galv steel channels with slotted flanges. Slotted ceiling track sized to accommodate steel "C-H" studs (Items 2C). Attached to concrete at ceiling with 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

C. Steel Studs — "C-H"-shaped steel studs to be min 2-1/2 in. (64 mm) wide and formed of min 24 MSG galv steel. 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 or slotted ceiling track. Studs spaced 24 in. (610 mm) OC. After installation of gypsum board liner panels (Item 2D), studs secured to flange of floor runner on finished side of wall only with No. 6 by 1/2 in. (13 mm) long self-drilling, self-tapping steel screws. Studs secured to flange of slotted ceiling track on finished side of wall only with No. 8 by 1/2 in. (13 mm) long self-drilling, self-tapping wafer head steel screws at slot midheight.

D. Gypsum Board* — 1 in. (25 mm) thick by 24 in. (610 mm) wide gypsum board liner panels. Panels cut 1 in. (25 mm) less in length than floor to ceiling height. Vertical edges inserted in "H"-shaped section of "C-H" studs. Free edge of end panels attached to long leg of "J" runner (Item 2A) with 1-5/8 in. (41 mm) long Type S steel screws spaced max 12 in. (305 mm) OC.

E. Gypsum Board* — Gypsum board sheets, 1/2 or 5/8 in. (13 or 16 mm) thick, applied vertically or horizontally in one or two layers on finished side of wall as specified in the individual U400 or V400-Series Wall and Partition Design. A max 1 in. (25 mm) gap shall be maintained between the top of the gypsum board and the bottom surface of the concrete floor. The screws attaching the gypsum board layers to the C-H studs shall be located 1 in. (25 mm) below the bottom of the slotted ceiling track (Item 2C). No gypsum board attachment screws are to penetrate the slotted ceiling track.

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

3. Joint System — Max separation between bottom of floor and top of liner panel (Item 2D) and between bottom of floor and top of gypsum board sheets (Item 2E) at time of installation of joint system is 3/4 in. (19 mm). The joint system is designed to accommodate a maximum 25 percent compression only from its installed width. The joint system consists of bond breaker tape and sealant, as follows:

A. Bond Breaker Tape — Polyethylene tape supplied in rolls. Tape applied to flanges of slotted ceiling track (Item 2D) to prevent bonding of the sealant at points other than the top and bottom of the linear gap. Bond breaker tape is optional.

B. Fill, Void or Cavity Material* - Sealant — Min 1 in. (25 mm) depth of sealant to be installed to fill linear gap between top of gypsum board liner panel (Item 2D) and top inside surface of slotted ceiling track (Item 2B) prior to installation of gypsum board sheets on finished side of wall. For 1 Hr walls, min 5/8 in. (16 mm) depth of sealant to be installed to fill linear gap between top of gypsum board sheet (Item 2E) and bottom of concrete floor. For 2 Hr walls, min 1 in. (25 mm) depth of sealant to be installed to fill linear gap between top of gypsum board sheets (Item 2E) and bottom of concrete floor.
SPECIFIED TECHNOLOGIES INC — SpecSeal LC150 Sealant, SpecSeal LE600 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.

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: "© 2022 UL LLC"