

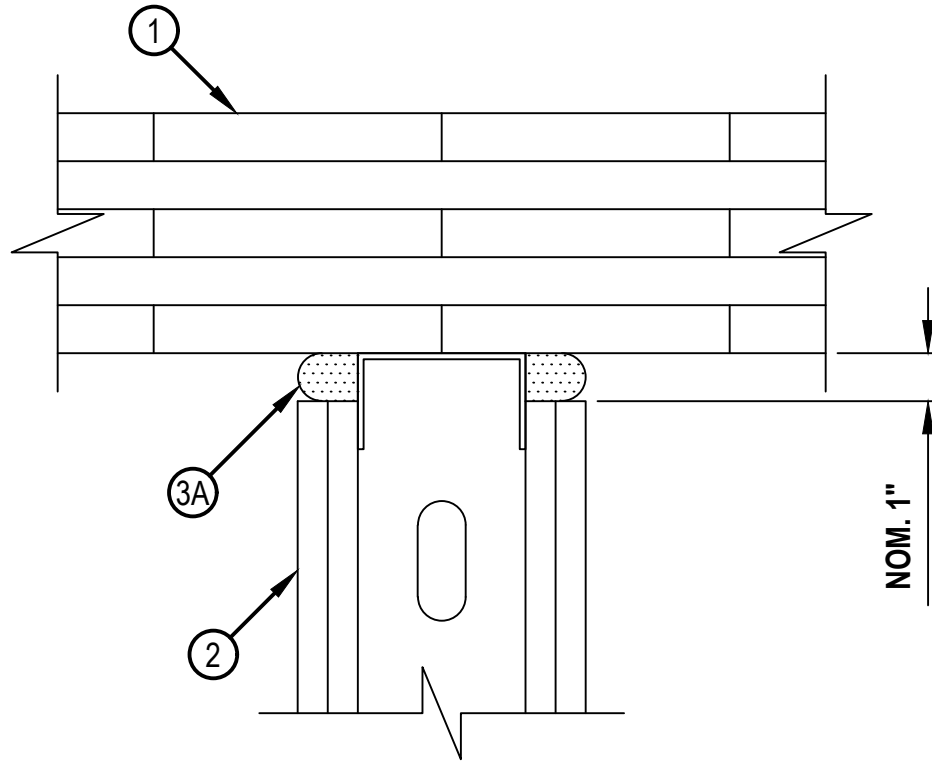


Classified by  
Underwriters Laboratories, Inc.  
to UL 2079 and CAN/ULC-S115

# System No. HW-D-0969

HWD 0969

ANSI/UL2079	CAN/ULC S115
Assembly Ratings - 1 and 2 Hr (See Item 2)	F Ratings - 1 and 2 Hr (See Item 2)
Nominal Joint Width - 1 In.	FT Ratings - 1 and 2 Hr (See Item 2)
Class II Movement Capabilities - 50% Compression or 25% Extension or 40% Compression only or Unrestricted (See Item 3)	FH Ratings - 1 and 2 Hr (See Item 2)
L Rating at Ambient - Less Than 1 CFM/Lin FT	FTH Ratings - 1 and 2 Hr (See Item 2)
L Rating at 400 F - Less Than 1 CFM/Lin FT	Nominal Joint Width – 25 mm
	Class II Movement Capabilities - 50% Compression or 25% Extension or 40% Compression only (See Item 3)
	L Rating at Ambient - Less Than 1.55 L/s/m
	L Rating at 204°C - Less Than 1.55 L/s/m



**CROSS-SECTIONAL VIEW**

1. Floor Assembly —Mass Timber Floor — Min 5-1/8in. (130 mm) thick, 5 ply cross laminated timber (CLT) panel, labeled Grade CV3 in accordance with ANSI/APA PRG 320 as required by Chapter 6 of International Building Code (IBC) for Type IVA, IVB or IVC construction. The required hourly rating of the CLT floor shall be determined in accordance with Chapter 16 of the National Design Specification (NDS). Additional information regarding the use of CLT as permitted in the IBC is located in the XHEZ Guide Information. The indicated or calculated fire resistance rating of the assembly (Type IV A, B or C) to meet or exceed the assembly rating of the firestop system. The grains of the bottom ply on the CLT panel may be oriented perpendicular, parallel, or at any angle to the wall assembly.



**Hilti Firestop Systems**

Reproduced by HILTI, Inc. Courtesy of  
Underwriters Laboratories, Inc.  
December 5, 2023

2. Wall Assembly —The 1 or 2 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described in the individual U400, V400 or W400 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 with min No. 10 by 1-1/2 in. (38 mm) long 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 valleys lower surface of floor with min No. 10 by 1-1/2 in. (38 mm) long steel fasteners spaced max 24 in. (610 mm) OC.

CEMCO, LLC — CST

CLARKDIETRICH BUILDING SYSTEMS — Types SLT, SLT-H

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

METAL-LITE INC — The System

SCAFCO STEEL STUD MANUFACTURING CO — Slotted Track

TELLING INDUSTRIES L L C — True-Action Deflection Track

RAM SALES L L C — RAM Slotted 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 clips provided with step bushings for permanent fastening of steel studs. Flanges sized to accommodate steel studs (Item 2B). Vertical deflection ceiling runner secured to lower surface of floor with steel fasteners spaced max 24 in. (610 mm) OC.

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

B. Studs —Steel studs to be min 3-1/2 in. (89 mm) wide. Studs cut 1 in. (25 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 vertical deflection ceiling runner (Item 2A1) is used, steel studs secured to slotted vertical deflection clips, through bushings, with steel screws at mid-height of each slot. When slotted ceiling runner (Item 2A3) is used, steel studs secured to slotted ceiling runner with No. 8 by 1/2 in. (13 mm) long wafer head steel screws at mid-height of slot on each side of wall. Stud spacing not to exceed 24 in. (610 mm) OC.

C. Gypsum Board\* —Gypsum board sheets installed to a min total thickness of 5/8 in. (16 mm) and 1-1/4 in. (32 mm) on each side of wall for 1 and 2 hr fire rated assemblies, respectively. Wall to be constructed as specified in the individual Wall and Partition Design in the UL Fire Resistance Directory, except that a nom 1 in. (25 mm) gap shall be maintained between the top of the gypsum board and the bottom surface of the floor or roof. The top row of screws shall be installed into the steel studs 1 to 5 in. (25 to 127 mm) below the bottom edge of the ceiling runner flange.

The hourly fire rating of the joint system is dependent on the hourly fire rating of the wall assembly in which it is installed.

3. Joint System —When max separation between the bottom of steel floor unit and top of wall is 1 in. (25.4 mm), the joint system is designed to accommodate a max 50 percent compression or 25 percent extension from its installed width. When max separation between the bottom of floor and top of wall is 1-1/4 in. (38 mm), the joint system is designed to accommodate a max 40% compression only from its installed width. As an alternative to the movement percentages above, the joint system may move freely without restriction to the percentage of movement within the range of a minimum 1/2" to maximum 1-1/4" joint width. The joint system consists of the following:

A. Fill, Void or Cavity Material\* —Top Track Seal — Factory supplied foam seal installed over the ceiling runner (Item 2A) prior to attachment to underside of the mass timber floor in accordance with the installation instructions

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CFS-TTS MD OS or CFS-TTS MD 600 Firestop Top Track Seal

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

