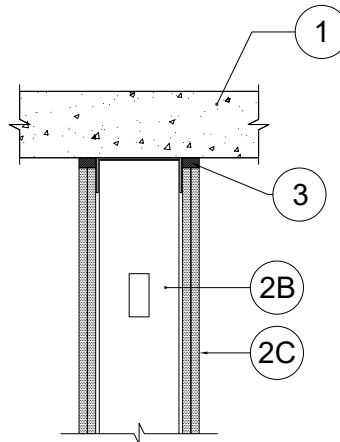


# SYSTEM NO. HW-D-0624

CAN/ULC S115  
Assembly Ratings - 1 and 2 Hr

Nominal Joint Width - See Chart, Section 3  
Class II or III Movement Capabilities - See Chart, Section 3

L Rating at Ambient - Less Than 1.55 L/s/m  
L Rating at 203°C - Less Than 1.55 L/s/m



1. **Floor Assembly** — Min 4 1/2 in. (114 mm) thick steel 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 min 6 in. thick UL Classified hollow-core **Precast Concrete Units\***.

See **Precast Concrete Units** (CFTV) category in the Fire Resistance Directory for names manufacturers.

**The hourly fire rating of the floor assembly shall be equal or greater than the hourly fire rating of the wall assembly.**

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 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 runners of wall assembly shall consist of min No. 25 ga galv steel channels sized to accommodate steel studs (Item 2B). Floor runner to be provided with min 1-1/4 in. (32mm) legs. Ceiling runners are provided with a fill, void or cavity material and are described in Item 3A.
  - B. **Studs** — Steel studs to be min 2-1/2 in. 64 mm) wide. Studs cut 1/4 to 3/4 in. (6 to 19 mm) less in length than assembly height with bottom nesting in and secured to floor runner. Steel studs nested in non-slotted ceiling run without attachment or secured to slotted ceiling runner with No. 8 by 1/2 in. (13 mm) long wafer head steel screws at mid-height of exposed slot.
  - B1. **Framing Members - Steel Studs\*** — In lieu of Item B - Proprietary channel shaped studs, 2-1/2 in. (64mm) wide spaced a max of 24 in. (610 mm) OC. Studs to be cut 1/4 to 3/4 in. (6 to 19 mm) less than the assembly height with bottom nesting in and secured to floor runner. For direct attachment of gypsum board only. Steel studs nested in non-slotted ceiling runner without attachment or secured to slotted ceiling runner with No. 8 by 1/2 in. (13 mm) long wafer head steel screws at mid-height of exposed slot.

**CALIFORNIA EXPANDED METAL PRODUCTS CO** — ViperStud™  
**MARINO/WARE, DIV OF WARE INDUSTRIES INC** — ViperStud™

- C. **Gypsum Board\*** — Gypsum board sheets installed to a min total 5/8 in. (16 mm) or 1-1/4 in. (32 mm) thickness on each side of wall for 1 and 2 hr fire rated assemblies, respectively. Wall to be constructed as specified in the individual U400 or V400 Series Design in the UL Fire Resistance Directory except that a max 1/4 in. (6 mm) gap shall be maintained between the top of the gypsum board and the bottom of the floor assembly. The screws attaching the gypsum board to the studs along the top of the wall shall be located 4 to 5 in. (102 to 127 mm) down from deck at time of installation. No gypsum board attachment screws shall be driven into the ceiling runner.

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

# SYSTEM NO. HW-D-0624

CAN/ULC S155  
Assembly Ratings - 1 and 2 Hr

Nominal Joint Width - See Chart, Section 3  
Class II or III Movement Capabilities - See Chart, Section 3

L Rating at Ambient - Less Than 1.55 L/s/m  
L Rating at 203°C - Less Than 1.55 L/s/m

3. Joint System — Max separation between bottom of floor and top of gypsum board (at time of installation) is 3/8" in. (10 mm) or 3/4 in. The joint system is designed to accommodate a max 100 or 80 percent compression and 100 or 33 percent extension from its installed width. When 3A2, 3A4 or 3B is used to fill in the nominal gap, the maximum installed joint width is 3/4 in. (19 mm) and the movement is 80% compression and 33% extension. When 3A3 is used to fill nominal gap, the maximum installed width is 1/2 in. (13 mm) and movement is 75% compression and 25% extension. When 3A5 is used to fill the nominal gap, the max width is 1/2" (13 mm) and the movement is 50% compression 0% extension. add When 3A6 is used, the maximum installed joint width is 3/8 in. (9.5 mm) and the movement is 50% compression only.

Item	Product	Max Gap	Movement
3A	FAS Track 1000 or FAS Track 1000DL with Item 3D (CEMCO, MARINO/WARE)	3/8"	80% Comp 30% Ext
3A1	TAB FAS Track with Item 3D (CEMCO)	3/4"	80% Comp 30% Ext
3A2	HOTROD Type-X (CEMCO)	1/2"	80% Comp 30% Ext
3A3	HOTROD Type-X (CEMCO)	1/2"	75% Comp 25% Ext
3A4	HOTROD Type-XL (CEMCO, MARINO/WARE, TRIM-TEX)	3/4"	80% Comp 30% Ext
3A5	FIRE BEAD (CEMCO, MARINO/WARE, TRIM-TEX)	1/2"	50% Comp 0% Ext
3A6	Super Seal-X (CEMCO, MARINO/WARE, TRIM-TEX)	3/8"	50% Comp 0% Ext
3B	(Optional, not shown) 7/8" "Denver Foam" open cell backer rod with layer of tape and joint compound	3/4"	80% Comp 30% Ext

- B. **Fill, Void or Cavity Material\*** — (Optional, not shown) — Non 7/8 in. (22 mm) "Denver Foam" open cell backer rod can be placed in the joint above the top edge of the drywall between the concrete slab. A layer of tape and joint compound shall then be applied over the open cell backer rod.

- B1. **Fill, Void or Cavity Material\*** — (Optional, not shown) — When items 3A or 3A1 are used a 1/2" gap between the edge of the drywall and the concrete deck shall be filled with a vinyl deflection bead can be install in the gap and cover with joint compound

**TRIM-TEX INC** — Wall Mounted Deflection Bead

- C. **Fill, Void or Cavity Material\*** — Sealant — (Optional, not shown) — Where HOTROD (Item 3A2,3A3) or backer rod (Item 3B, or 3D) is not installed, sealant may be used to seal any gaps at end joints between ceiling runners to maintain L Ratings.

**HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC** — CP672 Firestop Spray or CFS-SP WB. Firestop Joint Spray

**SPECIFIED TECHNOLOGIES INC** — SpecSeal AS200 Elastomeric Spray

**UNITED STATES GYPSUM CO** — Type AS

- D. **Fill, Void or Cavity Material** — (Not shown) - Required for use with items 3A, 3A1. A continuous length of Denver Foam®, open cell polyurethane foam with a nominal diameter of 1/8 in. (3.2 mm) greater than the max width of the joint. The foam shall have a nominal density of 1.7 pcf. The foam is to be placed in the joint above the top edge of the drywall between the concrete slab. Any splices are to be tightly butted. A layer of tape and joint compound can then be applied over the open cell foam.

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

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