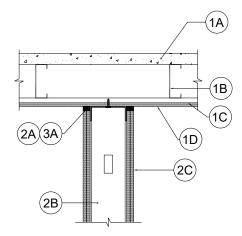
SYSTEM NO. HW-D-0550

ANSI/UL2079 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 CFM/Lin Ft L Rating at 400°F - Less Than 1 CFM/Lin Ft



- 1. **Floor-Ceiling Assembly** The 1 or 2 hr fire rated concrete and steel joist Floor-Ceiling assembly shall be constructed of the materials and in the manner described in the individual G500 Series Design in the UL Fire Resistance Directory, as summarized below:
 - A. Flooring Lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete as specified in the individual G500 Series Design.
 - B. Joists Steel joists or Structural Steel Members* as specified in the individual G500 Series Design.
 - C. Furring Channels Steel furring channels as specified in the individual G500 Series Design, spaced max 16 in. (406 mm) OC.
 - D. Gypsum Board* Min 5/8 in. (16 mm) thick, screw-attached to furring channels as specified in the individual G500 Series Design.

The hourly rating of the joint system is equal to the lesser of the hourly ratings of the floor-ceiling assembly and 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 gauge galv steel channels sized to accommodate steel studs (Item 2B). Floor runner to be provided with min 1-1/4 in. (32 mm) flanges. The ceiling runners are provided with a fill, void or cavity material and are described in Item 3A. Ceiling runner installed perpendicular to furring channels (Item 1C) and secured to each furring channel through gypsum board (Item 1D) with steel fasteners specified in the individual G500 series design for the attachment of the gypsum board to the furring channels.
 - A1. Light Gauge Framing* Slotted Ceiling Track (Not Shown) As an alternate to the Item 2A, a ceiling track consisting of galv steel channel with slotted flanges may be used when Item 3A.1 fill material is utilized. Slotted ceiling track sized to accommodate steel studs (Item 2B). Legs are to be min 1/4 in. (6 mm) longer than the maximum joint width. Attached to steel deck with steel fasteners or welds spaced max 24 in. (610 mm) OC.

BRADY CONSTRUCTION INNOVATIONS INC, DBA SLIPTRACK SYSTEMS — SLP-TRK CALIFORNIA EXPANDED METAL PRODUCTS CO — CST, CST 325 MARINO/WARE, DIV OF WARE INDUSTRIES INC — Type SLT

- B. **Studs** Steel studs to be min 3-5/8 in. (92 mm) wide. Studs cut 5/8 in. to 1-1/4 in. (16 to 32 mm) less in length than assembly height with bottom nesting in and secured to floor runner. 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 slot.
- B1. Framing Members Steel Studs* In lieu of Item B Proprietary channel shaped studs, 3-5/8 in. wide spaced a max of 24 in. OC. Studs to be cut 5/8 to 1-1/4 in (16 to 32 mm) less than the assembly height with bottom nesting in and secured to floor runner. 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™



SYSTEM NO. HW-D-0550 L Rating at Ambient - Less Than 1 CFM/Lin Ft ANSI/UL2079 Nominal Joint Width - See Chart, Section 3 Class II or III Movement Capabilities - See Chart, Section 3 Assembly Ratings - 1 and 2 Hr L Rating at 400°F - Less Than 1 CFM/Lin Ft

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 1/2 in. (13 mm) gap shall be maintained between the top of the gypsum board and the bottom of the floor-ceiling 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) below the bottom of the ceiling assembly. No gypsum board attachment screws shall be driven into the ceiling runner.

The hourly rating of the joint system is equal to the lesser of the hourly ratings of the floor-ceiling assembly and the wall assembly.

3. Joint System — Max separation between bottom of floor and top of wall (at time of installation of joint system) is 1/2 in. (13 mm) or 3/8 in. if Item 3A1 is utilized. The joint system is designed to accommodate a max 80 percent compression and or 30 percent extension from its installed width. When Item 3A2, 3A3 or 3A4 is used, the maximum installed joint width is 3/4 in. (19 mm) and the movement is max 80% compression and 33% extension. When 3A3 is used to fill nominal gap, the maximum installed width is 1/2 in. (13mm) and movement is 75% compression and 25% extension. When Item 3A5 is used the joint will accommodate 50 percent compression only. When item 3A8 is used the joint will accommodate 100% compression/extension for nominal 1/4 in. (6mm) gaps or compression only for 1/2 in. (12mm) gaps. When 3A9 is used, the maximum installed joint width is 3/8 in. (9.5 mm) and the movement is max 50 % compression only.

Item	Product	Max Gap	Movement
3A	DDA-1 (CEMCO)	1/2"	80% Comp 30% Ext
3A1	FAS Track 1000 (CEMCO, MARINO/WARE)	3/8,"	80% Comp 30% Ext
3A1	FAS Track 1000DL (CEMCO, MARINO/WARE)	3/8 ¹ '	80% Comp 30% Ext
3A2	HOTROD Type-X (CEMCO, MARINO/WARE)	3/4"	80% Comp 33% Ext
3A3	HOTROD Type-X (CEMCO, MARINO/WARE)	1/2"	75% Comp 25% Ext
3A4	HOTROD Type-XL (CEMCO, MARINO/WARE, TRIM-TEX)	3/4"	80% Comp 33% Ext
3A5	Fire Bead (CEMCO, MARINO/WARE, TRIM-TEX)	1/2"	50% Comp 0% Ext
3A6	Fire Gasket 1 (CEMCO, MARINO/WARE, TRIM-TEX)	1/2"	100% Comp 100% Ext
3A6	Fire Gasket 1 (CEMCO, MARINO/WARE, TRIM-TEX)	1"	100% Comp 0% Ext
3A7	Fire Gasket 1.5 (CEMCO, MARINO/WARE, TRIM-TEX)	3/4"	100% Comp 100% Ext
3A7	Fire Gasket 1.5 (CEMCO, MARINO/WARE, TRIM-TEX)	1-1/2"	100% Comp 0% Ext
3A8	Fire Gasket 0.5 (CEMCO, MARINO/WARE, TRIM-TEX)	1/4"	100% Comp 100% Ext
3A9	Super Seal-X (CEMCO, MARINO/WARE, TRIM-TEX)	3/8"	50% Comp 0% Ext

- B. Packing Material (Not Shown) Required for use with Items 3A and 3A1 are used.) A continuous length of 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 ceiling assembly. 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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