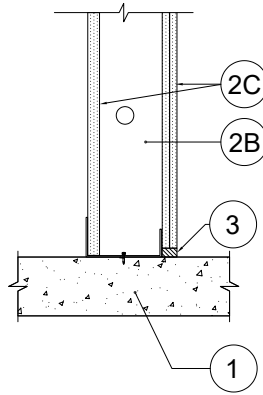


**SYSTEM NO. BW-S-0053**

ANSI/UL2079  
Assembly Ratings - 1 and 2 Hr

Nominal Joint Width - 1/2 in. max

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



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 min 6 in. (152 mm) thick UL Classified hollow-core Precast Concrete Units\*. See Precast Concrete Units (CFTV) category in the Fire Resistance Directory for names of manufactures.
2. **Wall Assembly** — The 1 or 2 hr fire rated gypsum board/steel stud shaft wall assembly shall be constructed of the materials and in the manner specified in the individual U400, V400 or W400 Series Wall and Partition Design in the UL Fire Resistance Directory. In addition, the wall may incorporate a head-of-wall joint system constructed as specified in the HW Series Joint Systems in the UL Fire Resistance Directory. The wall shall include the following construction features:

- A. **Steel Floor and Ceiling Runners** — Floor runner U-shaped, sized to accommodate steel studs (Item 2B), fabricated from min 24 ga galv steel. Runners attached to floor with steel fasteners located not greater than 2 in. from ends and not greater than 24 in OC. Flange height of ceiling runners shall be min 1/4 in. (6 mm) greater than max extended joint width. The ceiling runners are provided with a fill, void or cavity material and are described in Item 3.
- A1. **Light Gauge Framing\* - Slotted Ceiling Track** — (Not Shown) - As an alternate to 2A, a ceiling track consisting of galv steel channel with slotted flanges sized to accommodate steel "C-T", "I", or "C-H" studs (Item 2C). Attached to steel deck with steel fasteners or welds spaced max 24 in. (610 mm) OC.
- B. **Studs** — "C-H", "E" (back-to-back) or "C-T" - shaped studs, min 2-1/2 in. (64 mm) deep, fabricated from min 25 MSG galv steel. Cut to lengths 3/8 to 1/2 in. (10 to 13 mm) less than floor-to-ceiling height and spaced 24 in. (610 mm) OC.
- C. **Gypsum Board\*** — 1 in. (25 mm) thick gypsum liner panels and 1/2 in., 5/8 in. or 3/4 in. (13, 16 or 19 mm) thick gypsum panels installed as specified in the individual U400 or V400 Series shaft wall designs in the UL Fire Resistance Directory.

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

3. **Joint System** — Max separation between top of floor and bottom of gypsum board is 1/2in. (13 mm). The joint system shall consist of the following:

- A. **Fill, Void, or Cavity Material \*** — Nom 20 ga J-shaped track having a one 1-1/2 in. (38 mm) solid leg and one 2-1/2 in. (64 mm) leg nom 1/2 in. (13 mm) wide intumescent strip affixed to the top outer web along the outside corner facing the finish side of the wall. Track to be attached to the concrete wall with steel masonry or powder actuated fasteners spaced at a max of 24 in. (610 mm) OC.

**CALIFORNIA EXPANDED METAL PRODUCTS CO** — Fire Rated J-Track  
**UNITED STATES GYPSUM CO** — USG Sheetrock® Brand Firecode® J-Runner  
**MARINO/WARE, DIV OF WARE INDUSTRIES INC** — Fire Rated J-Track

- B. **Fill, Void or Cavity Material\*** — (Not Shown) - For nominal 1/2 in. (12mm) or smaller. As an alternate to Item 3A, a composite corrugated vinyl profile with a 1-1/8 in. (28 mm) wide leg and a 1/4 in. (6 mm) bubble gasket along the upper edge. A 1/4 in. (6 mm) wide intumescent strip affixed along the inside 1-1/8 in. (28 mm) leg. Composite vinyl profile is attached to the leg of the ceiling runner/track with 1/2 in. (12 mm) No. 8 framing screws or adhesively attached with double sided foam tape.

**CALIFORNIA EXPANDED METAL PRODUCTS CO** — Fire Gasket 0.5

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**\* 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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