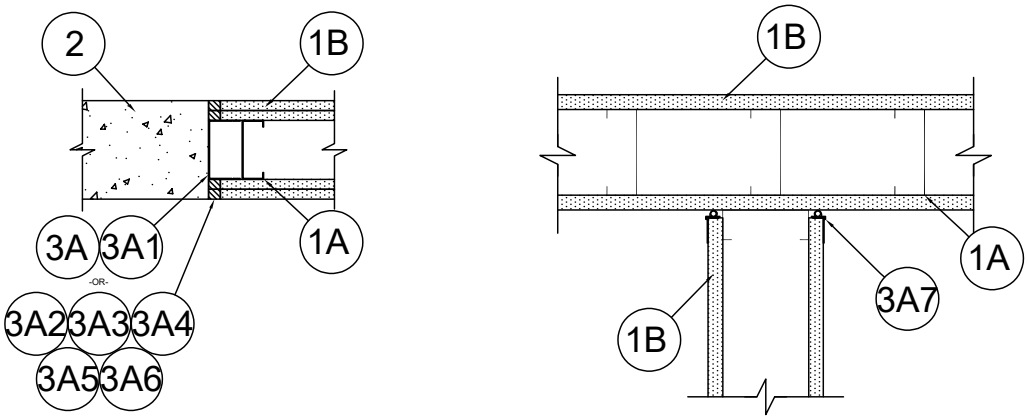
# SYSTEM NO. WW-D-0104

| CAN/ULC S115<br>Assembly Ratings - 1 and 2 Hr | Nominal Joint Width - See Chart, Section 3<br>Class II or III Movement Capabilities - See Chart, Section 3 | L Rating at Ambient - Less Than 1.55 L/s/m<br>L Rating at 203°C - Less Than 1.55 L/s/m |
|---|---|---|




1. **Wall Assembly** — The 1 or 2 hr fire-rated gypsum board/steel 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. S**tuds** — Steel studs to be min 3-1/2 in. (89 mm) wide by 1-1/4 in. (32 mm) deep corrosion protected min 25 MSG steel channels. Stud spacing not to exceed 24 in. (610 mm) OC with first stud located max 3-1/4 in. (83 mm) from concrete wall assembly (Item 2).

   A1. **Framing Members – Steel Studs*** — In lieu of Item A - Proprietary channel shaped studs, 3-5/8 in. (92 mm) wide spaced a max of 24 in. (610 mm) OC. For direct attachment of gypsum board only.

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   B. **Gypsum Board*** — Gypsum board sheets installed to a min total thickness of 5/8 in. (16 mm) or 1-1/4 in. (32 mm) on each side of wall for 1 and 2 hr fire rated assemblies, respectively. A nominal 1/4 in. (6 mm) gap shall be maintained between the edges of the gypsum board and the concrete wall assembly (Item 2). The screws attaching the gypsum board to the first stud shall be located 4 in. (102 mm) from face of concrete wall assembly. Gypsum board not attached to side runner. The hourly fire rating of the joint system is equal to the hourly rating of the gypsum wall assembly.

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

2. **Wall Assembly** — Min 4-3/4 in. (121 mm) thick steel- reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) structural concrete. Wall may also be constructed of any UL Classified Concrete Blocks*.

   **See Concrete Blocks** (CAZT) category in the Fire Resistance Directory for names of manufacturers.

3. **Joint System** — Max separation between masonry wall and gypsum board (at time of installation of joint system) is 1/4 in. (6 mm), 1/2 in. (13 mm) or 1 in. (25 mm). The joint system is designed to accommodate a max 100 percent compression or extension from its installed width. When 3A6 is used with 1 in. (25 mm) joint, the joint is limited to 100% compression only. When 3B.4 is used the joint will accommodate 50% compression and 0% extension. When 3A7 is used the joint will accommodate 50% compression only with a nominal joint width on 3/8 in. (9.5 mm). The joint system consists of the following:

| Item | Product | Max Gap | Movement |
|---|---|---|---|
| 3A | FAS Track DL (CEMCO, MARINO/WARE) | 1/2" | 100% Comp or Ext |
| 3A1 | FAS Track BT 1000 (CEMCO, MARINO/WARE) | 1/2" | 100% Comp or Ext |
| 3A2 | DDA-1 (CEMCO) | 1/2" | 100% Comp or Ext |
| 3A3 | HOTROD Type X (CEMCO) | 1/2" | 80% Comp 33% Ext |
| 3A4 | Fire Bead (CEMCO, MARINO/WARE, TRIM-TEX) | 1/2" | 50% Comp 0% Ext |
| 3A5 | Fire Gasket 0.5 (CEMCO, MARINO/WARE, TRIM-TEX) | 1/4" | 100% Comp 100% 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 | Super Seal-X (CEMCO, MARINO/WARE, TRIM-TEX) | 3/8" | 50% Comp 0% Ext |

B. **Fill, Void or Cavity Material*** — (Optional, Not Shown) - When 3A - 3A1 OR 3A2 is used 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 can then be applied over the open cell backer rod.

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