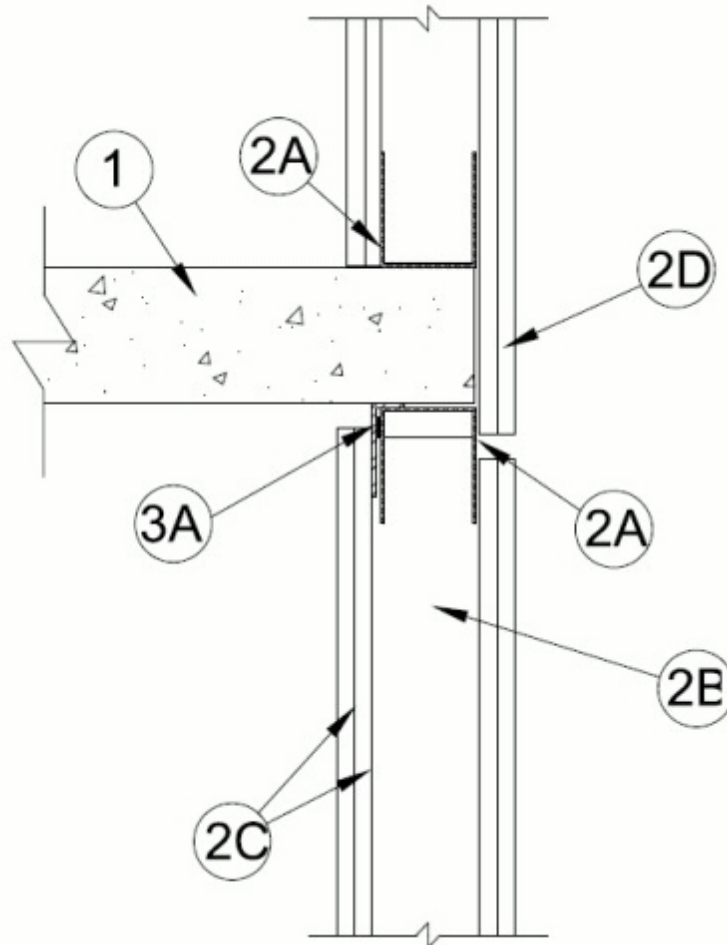




System No. HW-D-0723

October 28, 2013

ANSI/UL2079	CAN/ULC S115
Assembly Rating — 1 and 2 Hr (See Item 2)	F Ratings — 1 and 2 Hr (See Item 2)
Nominal Joint Width - 1/2 in. or 1 in.	FT Ratings — 1 and 2 Hr (See Item 2)
Class II or III Movement Capabilities — 100% Compression or Extension for 1/2 in. Joint; 100% Compression or 0% Extension for 1 in. Joint	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 - 1/2 in. or 1 in.
	Class II or III Movement Capabilities — 100% Compression or Extension for 1/2 in. Joint; 100% Compression or 0% Extension for 1 in. Joint
	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 steel reinforced lightweight or normal weight (100 -150 pcf or 1600-2400 kg/m³) 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

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, 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 — Channel shaped ceiling runner with width to accommodate studs, legs of min 2 in. (51 mm), and fabricated from min 24 MSG galv steel. Floor runners of wall assembly shall consist of min No. 25 ga galv steel channels sized to accommodate the steel studs. Floor runner to be provided with min 1-1/4 in. (32 mm) flanges. Runners to be attached to concrete floor with steel masonry fasteners spaced a max of 24 in. (610 mm) O.C.

B. Studs — Steel studs to be min 3-1/2 in. (89 mm) wide. Studs cut nom 1 in. (25 mm) less in length than assembly height with bottom nesting in and secured to floor runner. Studs to nest in ceiling runner without attachment. Studs spaced max 24 in. (610 mm) OC.

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 Wall and Partition Design in the UL Fire Resistance Directory except that a max 1 in. (25 mm) gap shall be maintained between the top of the gypsum board and the bottom of the floor assembly. Gypsum board on shaft side to overlap legs of ceiling runner min 1/2 in. (13 mm). The screws attaching the gypsum board to the studs along the top of the wall shall be located 1 to 1-1/2 in. (25 to 38 mm) below the bottom of the ceiling runner legs. No gypsum board attachment screws shall be driven into the ceiling runner.

D. 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 Wall and Partition Design in the UL Fire Resistance Directory except shaft side gypsum board to extend a max of 1/2 in. (13 mm) below the upper floor line overlapping the ceiling runner a min of 1/2 in. (13 mm). Gypsum board attached to the ceiling runner of the lower level. A max 1 in. (25 mm) gap shall be maintained between the edges of gypsum board of wall below to allow for movement capability of the joint.

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

3. Joint System — **Max separation between bottom of floor and top edge of gypsum board (non-shaft side) and between edges of gypsum board (shaft side) at time of installation is 1 in. (25 mm). The joint system is designed to accommodate a max 100 percent compression or extension from its installed width when joint width is nom 1/2 in. The joint system is designed to accommodate a max 100 percent compression or 0% extension from its installed width when joint width is nom 1 in.** The joint system shall consist of the following:

A. Fill, Void or Cavity Material* — Min 25 ga composite steel angle with one 5/8 in. (16 mm) leg and one 1-1/2 in (38 mm) leg with an intumescent strip affixed along the inside 1-1/2 in (38 mm) leg. The 5/8 in. leg of steel angle is friction fit between the top web of the ceiling runner and the concrete floor. Steel angle is required on non-shaft side of wall only.

RECTORSEAL — Track Safe

*Bearing the UL Classification Mark