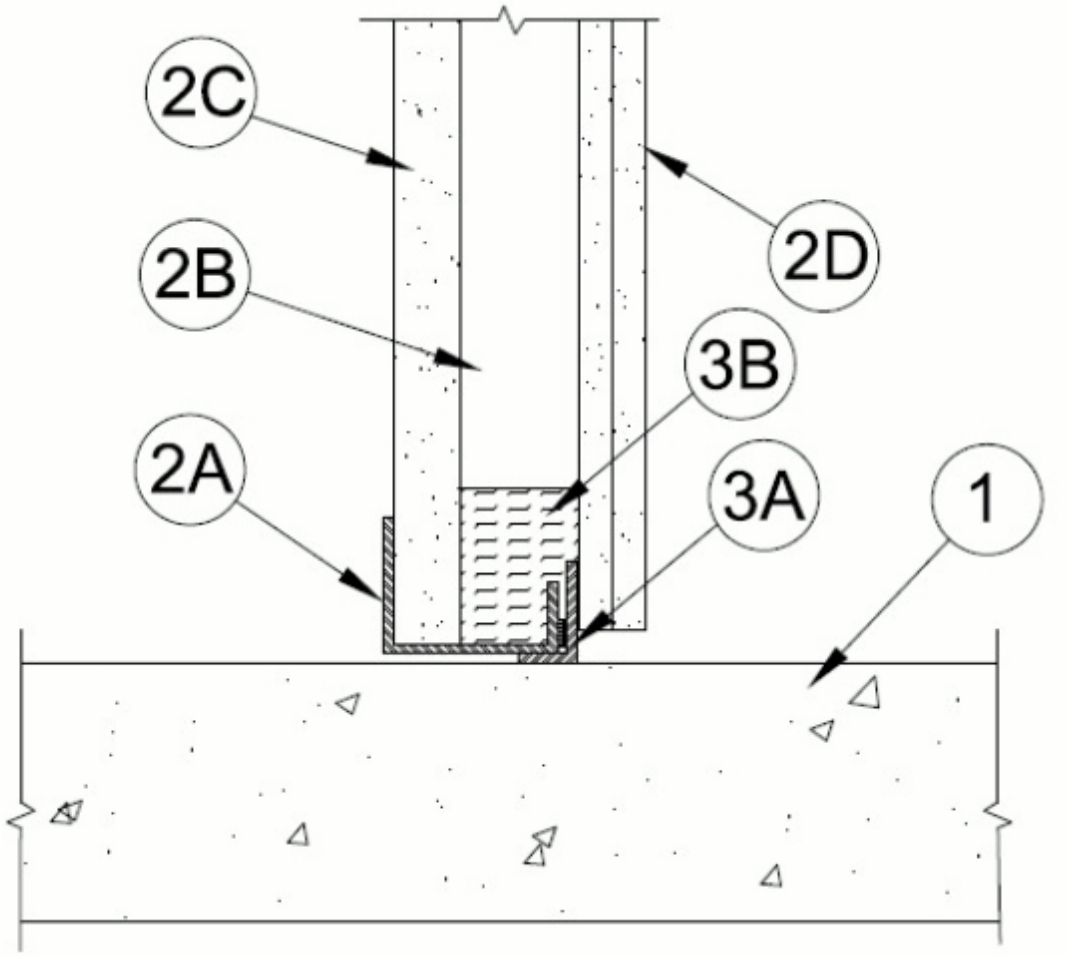
System No. BW-S-0031

October 30, 2013

ANSI/UL2079	CAN/ULC S115
Assembly Rating — 1 and 2 Hr (See Item 2)	F Rating — 1 and 2 Hr (See Item 2)
Nominal Joint Width - 3/4 in.	FT Rating — 1 and 2 Hr (See Item 2)
L Rating At Ambient — Less Than 1 CFM/Lin ft	FH Rating — 1 and 2 Hr (See Item 2)
L Rating At 400 F — Less Than 1 CFM/Lin ft	FTH Rating — 1 and 2 Hr (See Item 2)
	Nominal Joint Width - 3/4 in.
	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^3) structural concrete. Floor may also be constructed of any min 6 in. (152 mm) thick UL Certified hollow-core **Precast Concrete Units***.

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

1A. **Floor Assembly —** (Not Shown) — As an alternate to Item 1, the fire- rated fluted steel deck/concrete floor assembly shall be constructed of the materials and in the manner described in the individual D900 Series Floor-Ceiling Design in the UL Fire Resistance Directory and shall include the following construction features:

A. **Steel Floor and Form Units* —** Min 3 in. (76 mm) deep galv steel fluted floor units.

B. **Concrete —** Min 2-1/2 in. (64 mm) thick reinforced concrete, as measured from the top plane of the floor units.

2. **Shaft Wall Assembly —** The 1 or 2 h fire rated gypsum board/steel stud 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. The wall shall include the following construction features:

A. **Floor Runner —** "J"-shaped runner, min 4 in. (102 mm) wide with unequal legs of min 1 in. (25 mm) and min 2 in. (51 mm), fabricated from min 24 MSG galv steel. Floor runner to be attached to concrete floor with steel masonry fasteners spaced a max of 24 in. (610 mm) O.C. As an alternate to the "J"-shaped runner, a min 4 in. (102 mm) wide by 1 or 1-1/4 in. (25 or 32 mm) deep channel formed from min 24 MSG galv steel may be used for the floor runner.

B. **Studs —** "C-T", "I", or "C-H" shaped steel studs to be min 4 in. (102 mm) wide and formed of min 25 ga galv steel. Bottom of studs nest in floor runner. Studs spaced max 24 in. (610 mm) OC.

C. **Gypsum Board* —** 1 in. (25 mm) thick by max 24 in. (610 mm) wide gypsum board liner panels. Vertical edges inserted into "T" shaped section of "C-T" studs, into holding tabs of "I" studs or into "H"-shaped section of "C-H" studs. Wall to be constructed as specified in the individual U400, V400 or W400 Series Design in the UL Fire Resistance Directory.

D. **Gypsum Board* —** Gypsum board 1/2 or 5/8 in. (13 or 16 mm) thick, applied on finished side of wall as specified in the individual Wall and Partition Design. Wall to be constructed as specified in the individual U400, V400 or W400 Series Design in the UL Fire Resistance Directory, except that a max 3/4 in. (19 mm) gap shall be maintained between the bottom of gypsum board and top of concrete floor.

The hourly fire rating and the F, FT. FH and FTH 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 (at time of installation) is 3/4 in. (19 mm).** 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 web of the floor runner and the concrete floor on one side of wall only (either side).

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B. **Forming Material* —** Min 3 in. (76 mm) thickness of min 4 pcf (64 kg/m^3) mineral wool batt insulation cut to width of stud, compressed min 25 percent in width and friction fit into ceiling runner between leg of track and gypsum liner board. See **Forming Material** (XHKU) category in the Fire Resistance Directory for names of manufacturers.

*Bearing the UL Classification Mark