

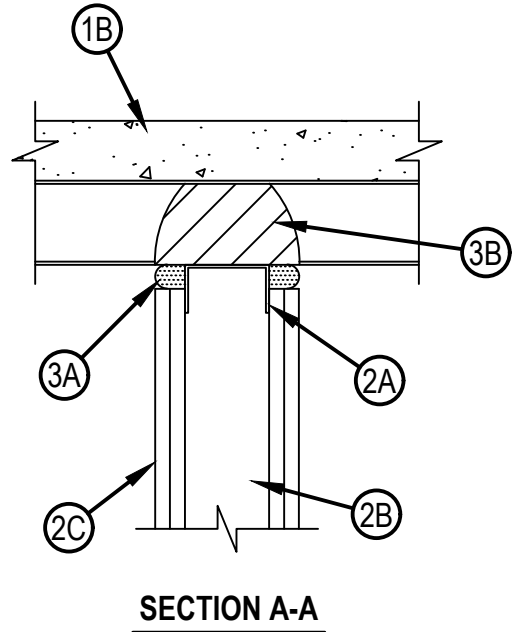
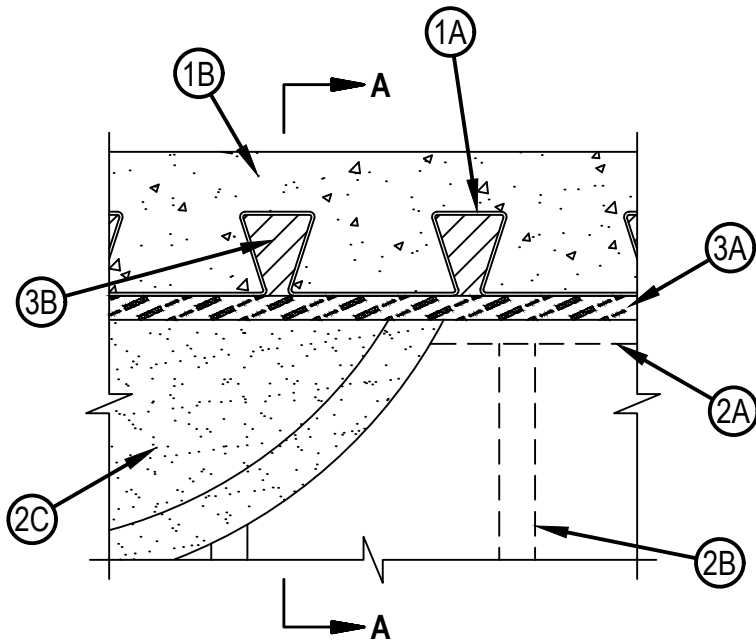


Classified by
Underwriters Laboratories, Inc.
to UL 2079 and CAN/ULC-S115

System No. HW-D-0932

HWD 0932

ANSI/UL2079	CAN/ULC S115
Assembly Ratings — 1 and 2 Hr (See Item 2)	F Rating — 1 and 2 Hr (See Item 2)
Nominal Joint Width — 1 or 1-1/2 In (See Item 3)	FT Rating — 1 and 2 Hr (See Item 2)
Class II or III Movement Capabilities — 50% Compression or Extension or 66% Compression only	FH Rating — 1 and 2 Hr (See Item 2)
L Rating at Ambient — Less than 1 CFM/Lin Ft (See Item 1C)	FTH Rating — 1 and 2 Hr (See Item 2)
L Rating at 400°F — Less than 1 CFM/Lin Ft (See Item 1C)	Nominal Joint Width - 25 or 38 mm (See Item 3)
	Class II or III Movement Capabilities — 50% Compression or Extension or 66% Compression only
	L Rating at Ambient — Less than 1.55 L/s/m (See Item 1C)
	L Rating at 204°C — Less than 1.55 L/s/m (See Item 1C)



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August 16, 2024

1. Floor Assembly — The fire-rated fluted steel deck/concrete floor assembly shall be constructed of the materials and in the manner described in the individual D900 Floor-Ceiling Design in the UL Fire Resistance Directory. The hourly fire rating of the floor assembly shall be equal to or greater than the hourly fire rating of the wall assembly. The floor assembly shall include the following construction features:

A. Steel Floor And Form Units* — Composite max 4 in. (102 mm) deep galv steel fluted units.

EPIC METALS CORP — Types “EC” or “Toris C”

A1. Steel Floor And Form Units* — Composite max 2 in. (51 mm) and max 3.5 in. (89 mm) deep galv steel fluted units.

NEW MILLENNIUM BUILDING SYSTEMS L L C — Versa-Dek®, Versa-Dek® 3.5VLSC

A2. Steel Floor And Form Units* — Composite max 2 in. (51 mm) and max 3.5 in. (89mm) deep galv steel fluted units.

Verco Decking Inc – A Nucor Co – Type 2.0D FORMLOK, Type 3.5D FORMLOK

A3. Steel Floor And Form Units* — Composite max 2 in. (51 mm) and max 3.5 in. (89mm) deep galv steel fluted units.

VULCRAFT, DIV OF NUCOR CORP – Type 2.0D FORMLOK, Type 3.5D FORMLOCK

B. Concrete — Min 2-1/2 in. (64 mm) thick reinforced (100-150 pcf or 1600-2400 kg/m³) concrete, as measured from the top plane of the floor units.

1A. Roof Assembly — (Not Shown) — As an alternate to the floor assembly, a fire rated fluted steel deck roof assembly may be used. The roof assembly shall be constructed of the materials and in the manner described in the individual P900 Series Roof-Ceiling Design in the UL Fire Resistance Directory. The hourly rating of the roof assembly shall be equal to or greater than the hourly rating of the wall assembly. The roof assembly shall include the following construction features:

A. Steel Floor And Form Units* — Composite max 4 in. (102 mm) deep galv steel fluted units.

EPIC METALS CORP — Types “Toris C” or “ER2R”

A1. Steel Floor And Form Units* — Composite max 2 in. (51 mm) and max 3.5 in. (89 mm) deep galv steel fluted units.

NEW MILLENNIUM BUILDING SYSTEMS L L C — Versa-Dek®, Versa-Dek® 3.5VLSC

A2. Steel Floor And Form Units* — Composite max 2 in. (51 mm) and max 3.5 in. (89mm) deep galv steel fluted units.

Verco Decking Inc – A Nucor Co – Type 2.0D FORMLOK, Type 3.5D FORMLOK

A3. Steel Floor And Form Units* — Composite max 2 in. (51 mm) and max 3.5 in. (89mm) deep galv steel fluted units.

VULCRAFT, DIV OF NUCOR CORP – Type 2.0D FORMLOK, Type 3.5D FORMLOCK

B. Roof Insulation — Min 2-1/2 in. (64 mm) thick poured insulating concrete, as measured from the top plane of the floor units.

2. 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 and shall include the following construction features:

A. Steel Floor and Ceiling Runners — Floor and ceiling runners of wall assembly shall consist of min No. 25 gauge galv steel channels sized to accommodate steel studs (Item 2B). Flange height of ceiling runner shall be min 1 in. (25.4 mm) greater than max extended joint width. Ceiling runner installed perpendicular to direction of fluted steel deck and secured to valleys with steel masonry anchors or steel fasteners spaced max 24 in. (610 mm) OC.

A1. Light Gauge Framing* — Slotted Ceiling Runner — As an alternate to the ceiling runner in Item 2A, slotted ceiling runner to consist of galv steel channel with slotted flanges sized to accommodate steel studs (Item 2B). Flange height of slotted ceiling runner shall be min 1 in. (25.4 mm) greater than max extended joint width. Slotted ceiling runner installed perpendicular to direction of fluted steel deck and secured to valleys with steel masonry anchors, steel fasteners or welds spaced max 24 in. (610 mm) OC.

CALIFORNIA EXPANDED METAL PRODUCTS CO — CST

CLARKDIETRICH BUILDING SYSTEMS — Types SLT, SLT-H

MARINO/WARE, DIV OF WARE INDUSTRIES INC — Type SLT

METAL-LITE INC — The System

SCAFCO STEEL STUD MANUFACTURING CO — Slotted Track

TELLING INDUSTRIES L L C — True-Action Deflection Track



- B. Studs — Steel studs to be min 3-5/8 in. (92 mm) wide. Studs cut 3/4 to 1 in. (19 to 25 mm) less in length than assembly height with bottom nesting in and resting on floor runner and with top nesting in ceiling runner without attachment. When slotted ceiling runner is used, steel studs secured to slotted ceiling runner with No. 8 by 1/2 in. (13 mm) long wafer head steel screws at mid-height of slot on each side of wall. Stud spacing not to exceed 24 in. (610 mm) OC.
- C. Gypsum Board* — For 1 hr assembly, one layer of 5/8 in. (16 mm) thick gypsum board is required in the individual Wall and Partition Design. For 2 hr assembly, two layers of 5/8 in. (16 mm) thick gypsum board is required in the individual Wall and Partition Design. The screws attaching the gypsum board to studs at the top of the wall shall be located 3-1/2 in. (89 mm) to 5-1/2 in. (138 mm) below the bottom edge of the ceiling runner.

The hourly ratings of the joint system are dependent on the hourly rating of the wall.

3. Joint System — When max separation between the bottom of steel floor unit and top of wall is 1 in. (25 mm), the joint system is designed to accommodate a max 50 percent compression or extension from its installed width. When max separation between the bottom of steel floor unit and top of wall is 1-1/2 in. (38 mm), the joint system is designed to accommodate a max 66% compression only from its installed width. The joint system consists of the following:

- A. Fill, Void or Cavity Material* — Top Track Seal — Factory supplied foam seal installed over the ceiling runner (Items 2A, 2A1) prior to attachment to underside of steel floor unit in accordance with the installation instructions.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CFS-TTS MD OS or CFS-TTS MD 600 Firestop Top Track Seal
- B. Fill, Void or Cavity Material* — Foam — Fill material installed to fill flutes above wall assembly. In 1 hr rated walls, foam to be installed flush with wall surfaces at both sides of wall. In 2 hr rated walls, foam to be installed flush with bottoms of flutes; and foam may be gradually recessed in from face of wall by max 1/2 to 1 in. (13 to 25 mm) as it rises to the top of the flutes.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 620 Fire Foam

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