

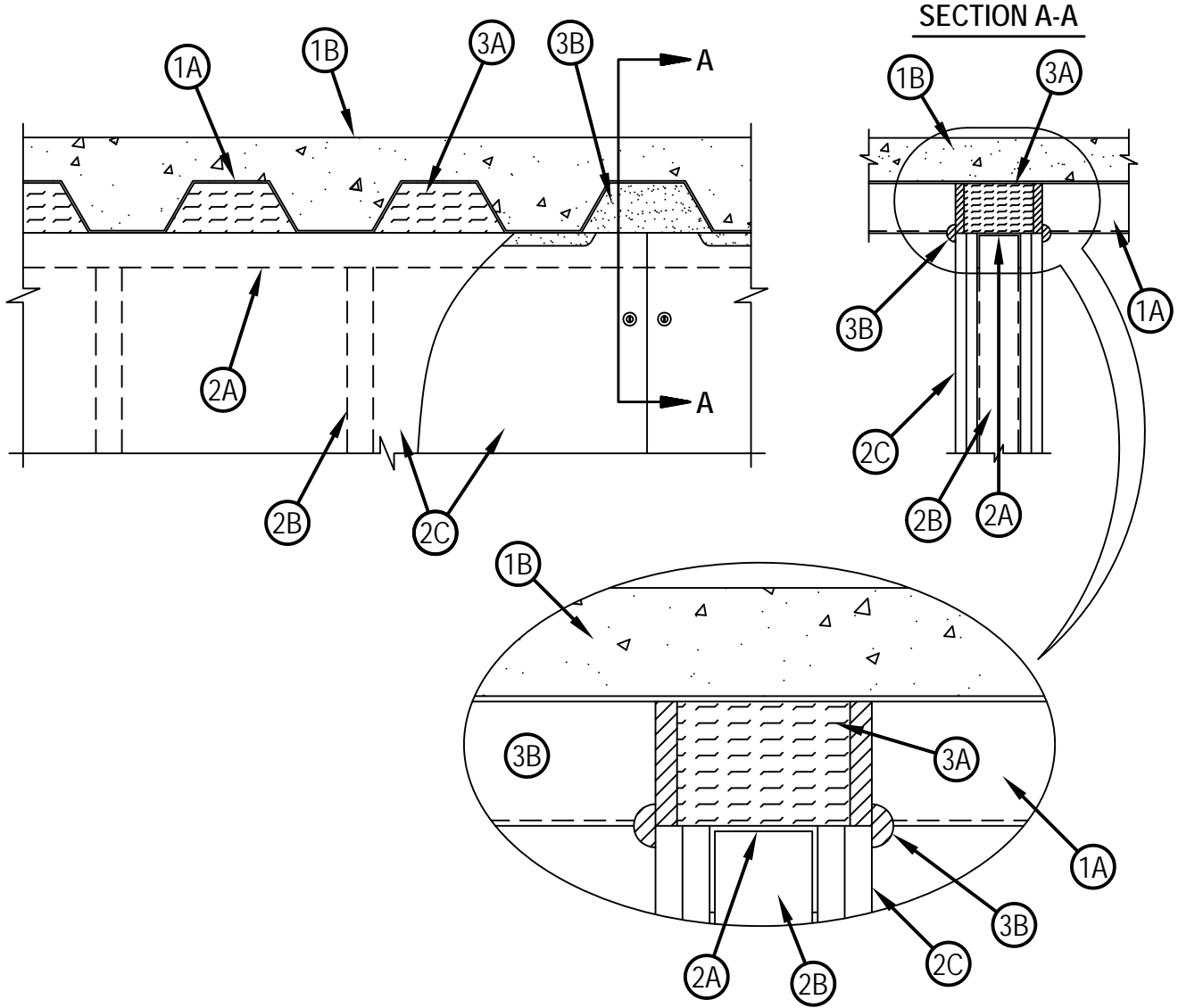


Classified by Underwriters Laboratories, Inc. to UL 2079 and CAN/ULC-S115

System No. HW-S-0054

Assembly Rating - 1 and 2 Hr (See Item 2)
L Rating at Ambient - Less than 1 CFM/Lin Ft
L Rating at 400° F - Less than 1 CFM/Lin Ft

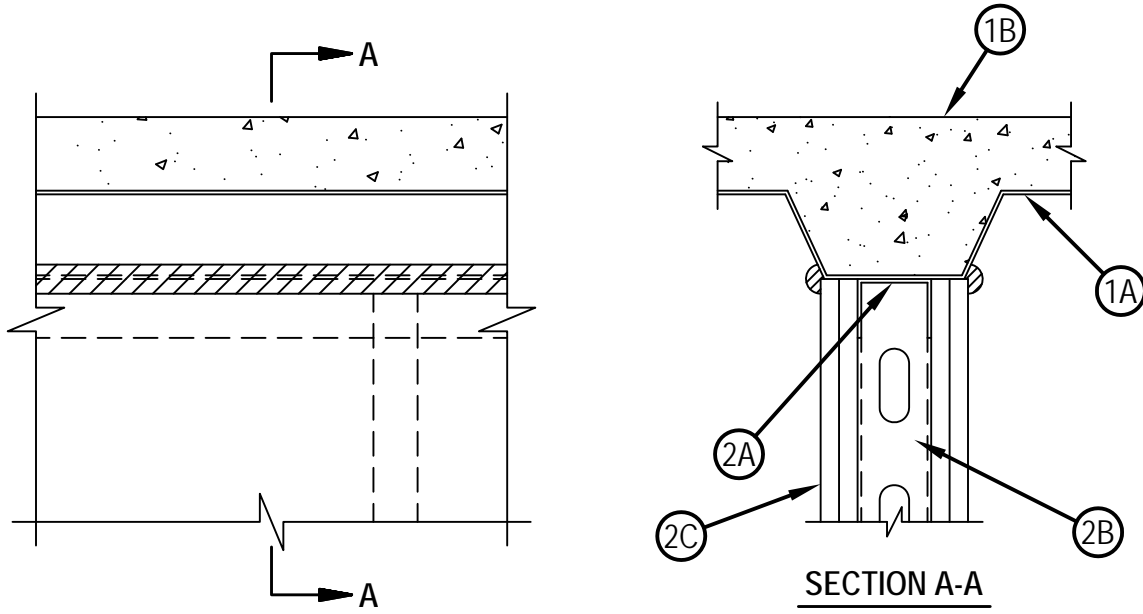
HW-S-0054



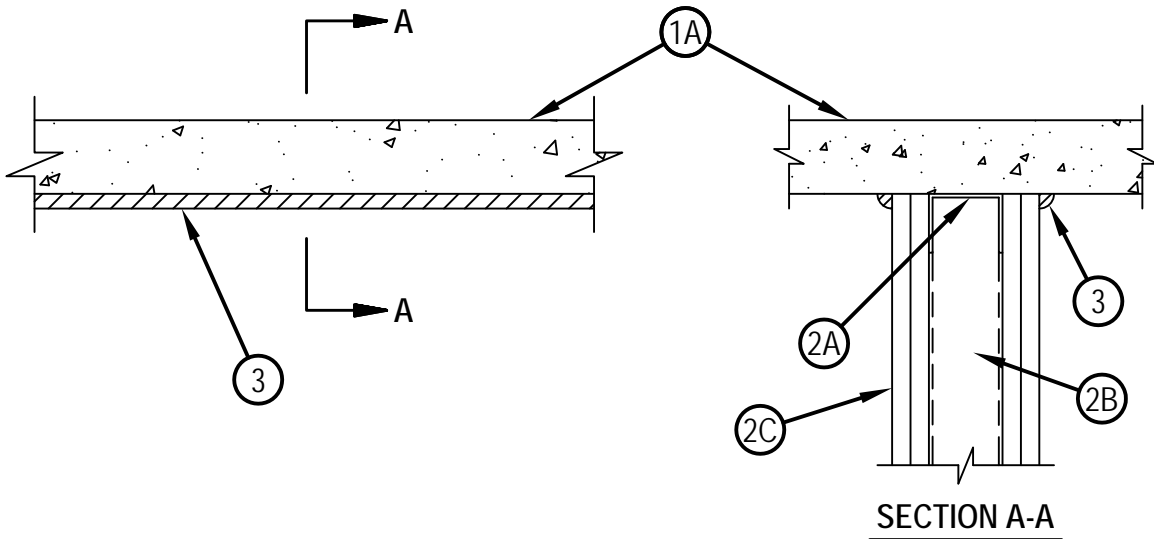
CONFIGURATION A



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CONFIGURATION B



CONFIGURATION C

- 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 and shall include the following construction features:
 - A. Steel Floor And Form Units* — Max 3 in. deep galv steel fluted units.
 - B. Concrete — Min 2-1/2 in. thick reinforced concrete, as measured from the top plane of the floor units.
- 1A. Floor Assembly — As an alternate to Item 1, min 4-1/2 in. thick reinforced lightweight or normal weight (100-150 pcf) structural concrete.



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1B. 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 Roof Deck — Max 3 in. deep galv steel fluted roof deck.

B. Roof Insulation — Min 2-1/4 in. thick poured insulating concrete, as measured from the top plane of the floor units.

2. 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-Series Wall or 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 galv steel channels sized to accommodate steel studs (Item 2B). Ceiling runner to be provided with 2 in. flanges. When Configuration A is used, ceiling runner is installed perpendicular to direction of steel floor units or roof deck. When Configuration B is used, ceiling runner is installed parallel to and beneath the valley of steel floor units or roof deck. Ceiling runner secured to valleys of steel floor unit or roof deck with steel fasteners or welds spaced 12 in. OC. When Conguration C is used, ceiling runner is secured to concrete floor slab with steel fasteners spaced 12 in. OC.

B. Studs — Steel studs to be min 2-1/2 in. wide by 1-1/4 in. deep corrosion protected min 25 MSG steel channels. Stud spacing not to exceed 24 in. OC.

C. Gypsum Board* — Gypsum board installed to a min total thickness of 5/8 in. and 1-1/4 in. on each side of wall for 1 and 2 hr rated assemblies, respectively. Wall to be constructed as specified in the individual Wall and Partition Design in the UL Fire Resistance Directory. Gypsum board to be butted tightly to bottom of steel units.

The hourly rating of the joint system is dependent on the hourly rating of the wall.

Joint Configuration A

3. Joint System — The joint system consists of forming material and a fill material in the flutes of the steel roof or floor units, as follows:

A. Forming Material* — Nom 4 pcf density mineral wool batt insulation, cut to the shape of the fluted deck, approx 20 percent larger than the area of the flutes and compressed and inserted into the flutes of the steel deck above the top of the ceiling runner. The mineral wool batt insulation is to project beyond each side of the ceiling runner, recessed 1/2 in. from both wall surfaces.

ROCK WOOL MANUFACTURING CO — Delta-Board

THERMAFIBER INC — Type SAF

A1. Forming Material*—Plugs — (Optional-Not Shown) Performed mineral wool plugs, formed to the shape of the fluted floor units, friction fit to completely fill the flutes above the ceiling channel. The plugs shall project beyond each side of the ceiling runner, recessed 1/2 in. from both surfaces.

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HILTI INC — CP777 Speed Plugs

B. Fill, Void or Cavity Material* — Min 1/2 in. thickness of fill material installed on each side of the wall in the flutes of the steel deck flush with each surface of the wall. An additional 1/2 in. bead of fill material installed at the gypsum board/steel deck interface on both sides of wall.

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Joint Configuration B

3. Fill, Void or Cavity Material* — Min 1/2 in. bead of fill material installed at the gypsum board/steel deck interface on both sides of the wall.

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HILTI INC — CP 606 Flexible Firestop Sealant

Joint Configuration C

3. Fill, Void or Cavity Material* — Min 1/2 in. bead of fill material installed at the gypsum board/concrete floor assembly interface on both sides of wall.

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HILTI INC — CP 606 Flexible Firestop Sealant

*Bearing the UL Classification Mark



Hilti Firestop Systems

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