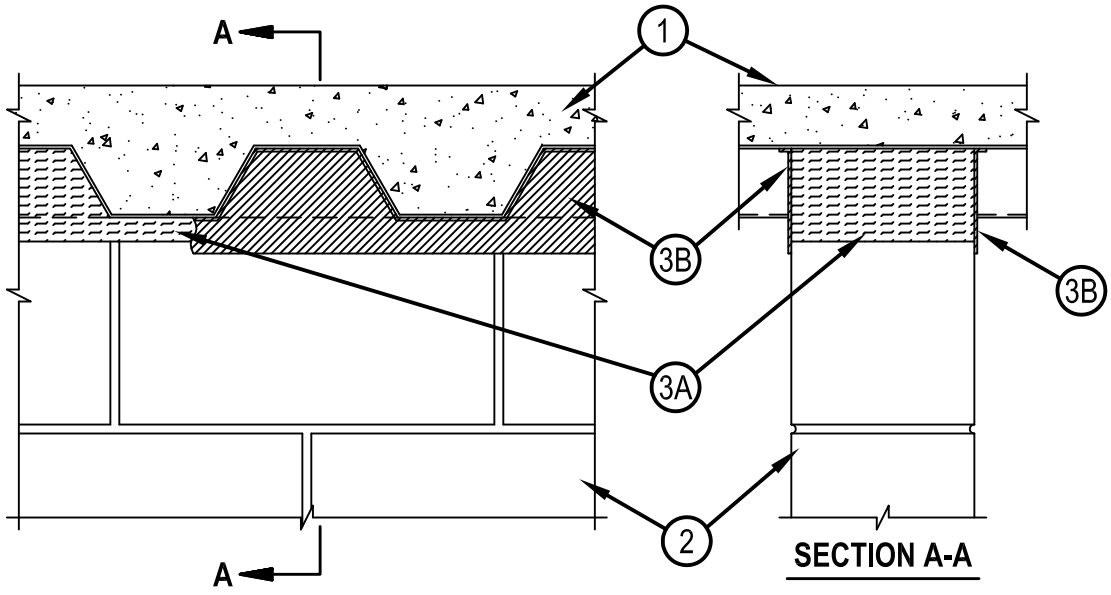
Classified by
Underwriters Laboratories, Inc.
to UL 2079 and CAN/ULC-S115

# System No. HW-D-0294

**Assembly Rating - 4 Hr**
**Nominal Joint Width - 1 In.**
**L Rating At Ambient — Less Than 1 CFM/Lin Ft**
**L Rating At 400°F — Less Than 1 CFM/Lin Ft**
**Class II Movement Capabilities - 12.5% Compression and Extension**




SECTION A-A

1. Floor Assembly — The fire-rated fluted steel floor unit/concrete floor assembly shall be constructed of the materials and in the manner described in the individual Floor-Ceiling Design in the Fire Resistance Directory. The hourly rating of the floor assembly shall be equal to or greater than the hourly rating of the wall assembly. The floor assembly shall include the following construction features:
   A. Steel Floor and Form Units* — Max 2 in. (51 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. Wall Assembly — Min 7-1/2 in. (191 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) structural concrete. Wall installed perpendicular to the valleys of the fluted steel floor units. Wall may also be constructed of any UL Classified 4 hr rated Concrete Blocks*. See Concrete Blocks category in the Fire Resistance Directory for names of manufacturers.
3. Joint System — Max separation between bottom of floor units and top of wall at time of installation is 1 in. (25 mm). The joint system is designed to accommodate a max 12.5 percent compression or extension from its installed width. The joint system shall consist of a forming material and a fill material as follows:
   A. Forming Material* — Nom 4 pcf (64 kg/m³) density mineral wool batt insulation cut approx 25 percent wider than the flutes and with a length approx equal to the overall thickness of the wall. Multiple pieces stacked on top of each other, as needed, and then compressed 50 percent in thickness and inserted into the flutes of the steel deck above the wall. Additional pieces of batt insulation, having a width approximately equal to the thickness of the wall, compressed 50 percent in thickness and installed cut edge first into the joint opening between the bottom of the steel floor units and the top of wall. Adjoining lengths of batts to be tightly butted. The mineral wool batt insulation is to be flush with wall surfaces.
      THERMAFIBER INC — Type SAF
   B. Fill, Void or Cavity Material* — Min 1/8 in. (3.2 mm) wet thickness (min 1/16 in. or 1.6 mm dry thickness) of fill material sprayed or troweled on each side of the wall to completely cover mineral wool forming material and to overlap a min of 1/2 in. (13 mm) onto concrete wall and steel deck on both sides of wall.
      HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP672 Firestop Spray or CFS-SP WB Firestop Joint Spray

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