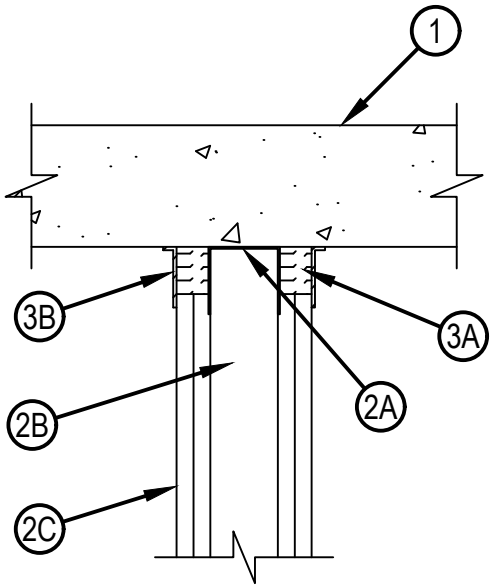
Classified by
UUnderwriters Laboratories, Inc.
to UL 2079 and CAN/ULC-S115

System No. HW-D-0540

Assembly Ratings — 1 and 2 Hr (See Item 2)
Nominal Joint Width — 1-1/2 In.
Class II Movement Capabilities — 50% Compression or Extension
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 6 in. (152 mm) thick UL Classified hollow-core Precast Concrete Units*.
   See Precast Concrete Units category in the Fire Resistance Directory for names of manufactures.
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 specified in the individual U400 or V400 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 1/4 in. (6 mm) greater than max extended joint width.. Ceiling runner secured to concrete floor slab with steel fasteners or steel masonry anchors 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). Slotted ceiling runner installed perpendicular to direction of fluted steel deck and secured to valleys with steel masonry anchors spaced max 24 in. (610 mm) OC.
   SCAFCO STEEL STUD MANUFACTURING CO
   BRADY CONSTRUCTION INNOVATIONS INC, DBA SLIPTRACK SYSTEMS — SLP-TRK
   THE STEEL NETWORK INC — VertiTrack VT, series,250VT, 362VT, 400VT, 600VT and 800VT
   B. Studs — Steel studs to be min 3-1/2 in. (89 mm) wide. Studs cut 1-1/4 to 1-1/2 in. (32 to 38 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. Stud spacing not to exceed 24 in. (610 mm) OC.
   C. Gypsum Board* — Gypsum board installed to a min total thickness of 5/8 or 1-1/4 in. (16 or 32 mm) on each side of wall, for 1 or 2 hr fire resistance rated walls, respectively. Wall to be constructed as specified in the individual U400 or V400 Series Design in the UL Fire Resistance Directory, except that a max 1-1/2 in. (38 mm) gap shall be maintained between the top of the gypsum board and the bottom of concrete floor. The screws attaching the gypsum board to the studs shall be located 1 to 1-1/2 in. (25 to 38 mm) below bottom of ceiling runner.
   The hourly fire rating of the joint system is dependent on the hourly rating of the wall.

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3. Joint System — Max width of joint (at time of installation of joint system) is 1-1/2 in. (38 mm). The joint system is designed to accommodate a max 50 percent compression or extension from its installed width. The joint system shall consist of the following:

A. Forming Material* — Nom 5/8 or 1-1/4 in. (16 or 32 mm) thick strips of min 4 pcf (64 kg/m3) mineral wool batt insulation, for 1 and 2 hr rated assemblies, respectively. Strips cut to width, compressed 50 percent in thickness and inserted cut-edge first into gap between top of the gypsum board and bottom of the floor assembly, flush with both surfaces of the wall.

IIG MINWOOL L L C — MinWool-1200 Safing
JOHNS MANVILLE INTERNATIONAL INC — Safing
ROCK WOOL MANUFACTURING CO — Delta Board
ROXUL INC — SAFE
THERMAFIBER INC — Type SAF

A1. Forming Material*—Strips — As an alternate to Item 3A, nom 5/8 in. (16 mm) and 1-1/4 in. (32 mm) wide precut mineral wool strips for 1 and 2 hr rated assemblies, respectively. The strips are compressed 50 percent in thickness and f inserted cut-edge first into gap between top of the gypsum board and bottom of the floor assembly, flush with both surfaces of the wall.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 767 Speed Strips

B. Fill, Void or Cavity Material* — Min 1/16 in. (1.6 mm) dry thickness (min 1/8 in. or 3.2 mm wet thickness) of fill material sprayed on each side of the wall to completely cover mineral wool forming material and to overlap min 1/2 in. (13 mm) onto the gypsum board and concrete floor assembly.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — 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.