



Classified by
Underwriters Laboratories, Inc.
to UL 1479

System No. HW-D-0946

Assembly Ratings — 1 and 2 Hr (See Item 2)

Nominal Joint Width — 1 or 1-1/4 In. (See Item 4)

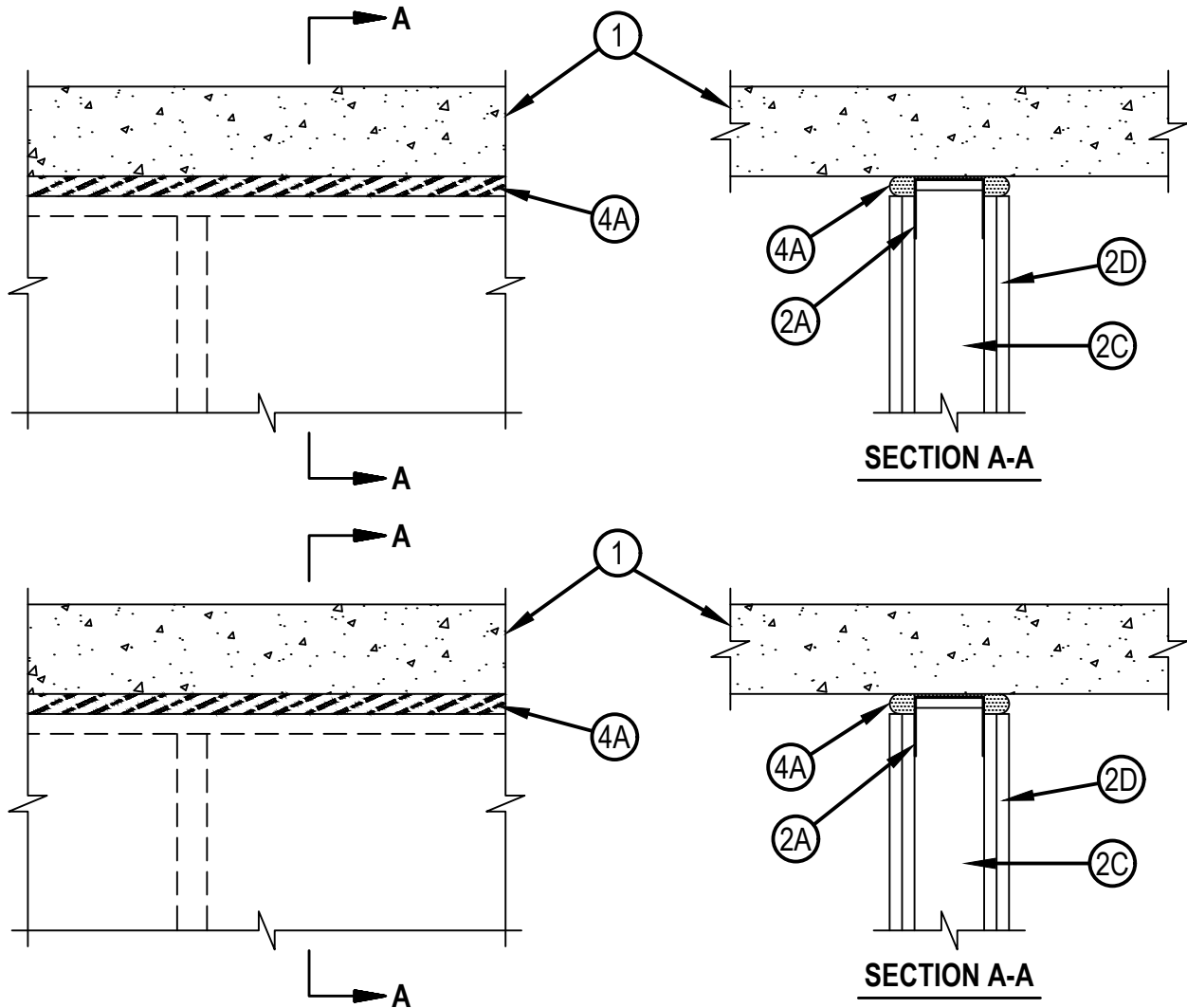
Class II Movement Capabilities — 25% Compression or Extension or 25%

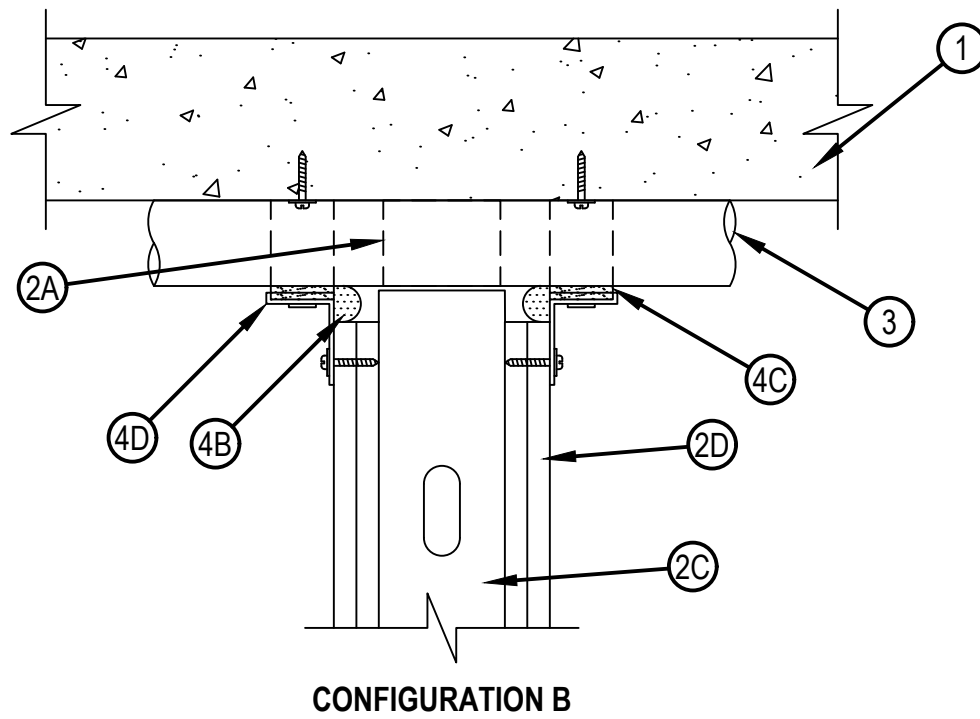
Compression only (See Item 4)

L Rating at Ambient — 2.63 CFM/Lin Ft

L Rating at 400°F — 2.33 CFM/Lin Ft

HWD 0946





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 min 6 in. (152 mm) thick UL Classified hollow-core Precast Concrete Units*
See Precast Concrete Units (CFTV) category in the Fire Resistance Directory for names of manufacturers.
 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 1-1/4 in. (32 mm) greater than max extended joint width. Ceiling runner secured to concrete floor with steel masonry anchors or steel concrete 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 ceiling runner shall be min 1-1/4 in. (32 mm) greater than max extended joint width. Slotted Ceiling runner secured to concrete floor with steel masonry anchors or steel concrete fasteners spaced max 24 in. (610 mm) OC.
- BRADY CONSTRUCTION INNOVATIONS INC, DBA SLIPTRACK SYSTEMS — SLP-TRK
 CEMCO, LLC — 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 3-1/2 in. (89 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 (Item 2A1) 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 2-1/2 in. (64 mm) to 4-1/2 in. (114 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. Through Penetrant —(Optional. Configuration B) — One penetrant may be installed perpendicular to wall against the concrete floor (Item 1). Ceiling runner to be discontinuous and terminate nom 1/4 in. (6 mm) from each side of penetrant and each end of ceiling runner secured to floor. Gypsum board cut to contour with an annular space of 3/4 in. (19 mm) maintained between the penetrant and the gypsum board cutout. Penetrant to be rigidly supported and secured tight to the floor, on both sides of the joint system. The following types and sizes of penetrant may be used:
 - A. Polyvinyl Chloride (PVC) Pipe —Nom 2 in. (51 mm) diam (or smaller) Schedule 40 solid core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
 - B. Chlorinated Polyvinyl Chloride (CPVC) Pipe —Nom 2 in. (51 mm) diam (or smaller) Schedule 40 CPVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
 - C. Chlorinated Polyvinyl Chloride (CPVC) Pipe —Nom 2 in. (51 mm) diam (or smaller) SDR13.5 CPVC pipe for use in closed (process or supply) piping systems.
 - D. Rigid Nonmetallic Conduit (RNC)+ —Nom 2 in. (51 mm) diam (or smaller) Schedule 40 PVC conduit installed in accordance with the National Electrical Code (NFPA No. 70.)
- 4. Joint System — When max separation between the bottom of floor and top of wall is 1 in. (25 mm), the joint system is designed to accommodate a max 25 percent compression or extension from its installed width. When max separation between the bottom of floor and top of wall is 1-1/4 in. (32 mm), the joint system is designed to accommodate a max 25% 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 (Item 2A) prior to attachment to underside of concrete floor in accordance with the installation instructions. Top track seal to be compressed min 1/2 in. (13 mm) at butted seams. Seams at penetration opening (Item 3) to be butted against penetrant.
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* — Top Track Seal —Required when Item 3 is used. Factory supplied foam seal installed within annular space between penetrant (Item 3) and gypsum board at each side of wall. Top track seal installed as a single piece with ends butting tightly to the bottom of concrete floor. Flap of top track seal to overlap gypsum board and be stapled in place with two fasteners equally spaced.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CFS-TTS MD OS or CFS-TTS MD 600 Firestop Top Track Seal
 - C. Fill, Void or Cavity Material* — Wrap Strip —Required when Item 3 is used. Nom 3/16 in. (5 mm) thick by 1-3/4 in. (44 mm) wide intumescent wrap strip. Two layers of wrap strip are wrapped around the penetrant in a U-shaped fashion with ends tightly butted to concrete floor. Wrap strip installed at both sides of wall, butting tightly against Top Track Seal (Item 4B) and gypsum board.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 648E Wrap Strip
 - D. Steel Collar —Required when Item 3 is used. Steel collar fabricated from coils of precut min 0.016 in. (0.4 mm) thick (No. 28 gauge) galv steel available from fill material manufacturer. Collar shall be min 1-3/4 in. (44 mm) deep with 1 in. (25 mm) wide by 2 in. (51 mm) long anchor tabs on 1-3/4 in. (44 mm) centers. In addition, collars contain preformed retainer tabs 1/2 in. (13 mm) wide by 3/16 in. (5 mm) long, located opposite the anchor tabs. Collar shall be cut to tightly fit over the U-shaped wrap strip with two anchor tabs (one to each side of penetrant) bent toward underside of concrete floor and secured to floor with min 3/4 in. (19 mm) long concrete screws or anchors with min 3/4 in. (19 mm) steel washers. Remaining anchor tabs bent flush against Top Track Seal flap (Item 4B) and gypsum wall.

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

