

## System No. HW-D-0757

- Floor Assembly Min 4-1/2 in. (114 mm) thick 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 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 (floor runners) galv or min No. 20 gauge (ceiling runners) 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 masonry anchors, steel fasteners spaced 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 min 3-1/2 in. (89 mm) steel studs (Item 2B). Slotted ceiling runner secured to concrete floor slab with steel masonry anchors or steel fasteners 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

- A2. Light Gauge Framing\* Vertical deflection Ceiling Runner As an alternate to the ceiling runners in Items 2A and 2A1, vertical deflection ceiling runner to consist of galv steel channel with slotted vertical deflection clips mechanically fastened within runner. Slotted clips, provided with step bushings, for permanent fastening of steel studs. Flanges sized to accommodate min 3-1/2 in. (89 mm) steel studs (Item 2B). Vertical deflection ceiling runner secured to concrete floor slab with steel fasteners or steel masonry anchors spaced max 24 in. (610 mm) OC. THE STEEL NETWORK INC VertiTrack VTD250, VTD362, VTD400, VTD600 and VTD800
- A3. Light Gauge Framing\* Notched Ceiling Runner As an alternate to the ceiling runners in Items 2A through 2A3, notched ceiling runners to consist of C-shaped galv steel channel with notched return flanges sized to accommodate min 3-1/2 in. (89 mm) steel studs (Item 2B). Notched ceiling runner secured to concrete floor slab with steel masonry anchors or steel fasteners spaced max 24 in. (610 mm) OC. OLMAR SUPPLY INC Type SCR
- B. Studs Steel studs to be min 3-1/2 in. (64 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. When vertical deflection ceiling runner (Item 2A2) is used, steel studs secured to slotted vertical deflection clips, through the bushings, with steel screws at mid-height of each slot. As an option, when solid ceiling runner is used, steel studs to be min 2-1/2 in. (64 mm) wide. Stud spacing not to exceed 24 in. (610 mm) OC.
- C. Resilient Channel (Optional) Nominal 1/2 in. (13 mm) deep 25-gauge steel resilient furring channel secured to studs (Item 2B) with No. 8 Steel screws spaced 24 in. (610 mm) OC on one or both sides of wall (see Configurations B and C). Top row of resilient furring channel to have minimum 1/4 in (7 mm) spacing from bottom edge of top track. Resilient channel may be installed at one or both sides of wall.
- D. 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. For both hourly ratings, a max 3/4 in. (19 mm) gap shall be maintained between the top of gypsum board and the bottom of surface of the concrete floor. The screws attaching the gypsum board to studs at the top of the wall shall be located 1 in. (25 mm) to 1-1/2 in. (38 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.



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- 3. Fill, Void or Cavity Material\* Top Track Seal When max separation between the bottom of floor and top of wall is 1/2 in. (13 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 floor and top of wall is 3/4 in. (19 mm), the joint system is designed to accommodate a max 66% compression only from its installed width. Factory supplied foam seal sized for width of and installed over the ceiling runner (Item 2A) prior to attachment to underside of concrete floor in accordance with the installation instructions. Butt joints in CFS-TTS shall be compressed min 1/2 in. (13 mm).
- HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC CFS-TTS 212, CFS-TTS 358, CFS-TTS 600, CFS-TTS R OS or CFS-TTS-OS
  Fill, Void or Cavity Material\* (Optional) A PVC wall mounted deflection bead can be installed over the surface of the joint at one or both sides of wall. Nom 1-1/8 in. (28.6 mm) leg of the bead rests against the face of the gypsum wall and is secured in accordance with manufacturer installation instructions. Bead includes an integral triangular shaped flexible gasket that fits over the joint and allows for dynamic movement. TRIM-TEX INC Wall Mounted Deflection Bead

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



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