



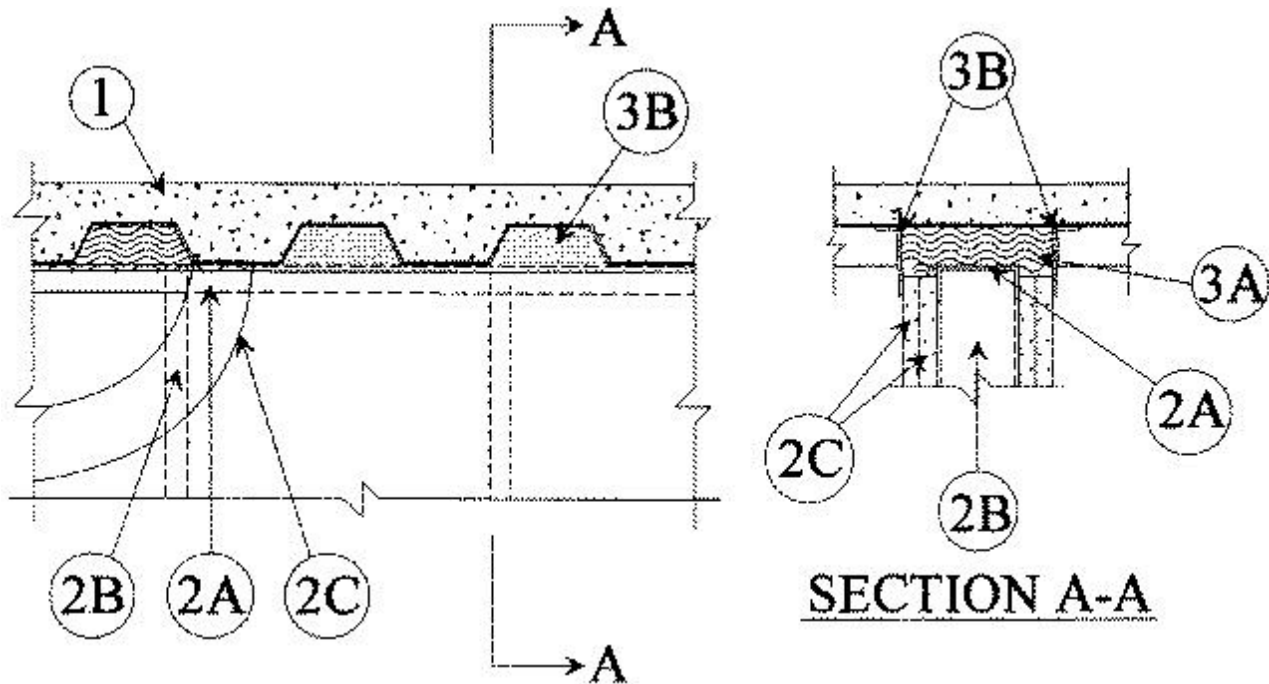
System No. HW-D-0018

December 09, 2004

Assembly Rating — 2 Hr

Nominal Joint Width — 5/8 In.

Class II and III Movement Capabilities — 25% Compression or Extension (See Item 3)



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 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 floor units.

B. **Concrete** — Min 2-1/2 in. thick reinforced concrete, as measured from the top plane of the floor units.

2. **Wall Assembly** — The 2 h fire-rated gypsum board/steel stud wall assembly shall be constructed of the materials and in the manner described 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). Ceiling runner to be provided with 2 in. flanges. Ceiling runner installed perpendicular to direction of fluted steel deck and secured to valleys with steel masonry anchors or by welds spaced max 12 in. OC.

A1. **Light Gauge Framing* — Clipped Ceiling Runner** — As an alternate to the ceiling runner in Item 2A, clipped runner to consist of galv steel channel with clips preformed in track flanges which positively engage the inside flange of the steel studs (Item 2B). Track sized to accommodate steel studs (Item 2B). Track flanges to be min 2-1/2 in. Clipped ceiling runner installed perpendicular to direction of fluted steel deck and secured to valleys with steel masonry anchors spaced max 12 in. OC.

A2. **Light Gauge Framing*- Notched Ceiling Runner** — As an alternate to the ceiling runners in Items 2A and 2A1, notched ceiling runners to consist of C-shaped galv steel channel with notched return flanges sized to accommodate steel studs (Item 2B). Notched ceiling runner installed perpendicular to direction of fluted steel deck and secured to valleys with steel masonry anchors spaced max 12 in. OC.

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B. **Studs** — Steel studs to be min 2-1/2 in. wide. Studs cut 5/8 in. 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. OC.

C. **Gypsum Board*** — Gypsum board sheets installed to a min total thickness of 1-1/4 in. on each side of wall. Wall to be constructed as specified in the individual Wall and Partition Design in the UL Fire Resistance Directory, except that a nom 1/2 to 5/8 in. gap shall be maintained between the top of the gypsum board and the and the bottom of the steel deck and the top row of screws shall be installed into the studs 4 in. below the valleys of the steel deck .

3. Joint System — Max separation between bottom of floor and top of wall (at time of installation of joint system) is 5/8 in. The joint system is designed to accommodate a max 25 percent compression or extension from its installed width. The joint system consists of a packing material and a fill material in the flutes of the steel deck and between the top of the gypsum board and the bottom of the steel deck, as follows.

A. **Packing Material** — Min 5-1/2 in. thickness of min 0.5 pcf density fiberglass insulation firmly packed and centered into flutes of steel deck. Min 1-1/4 in. thickness of 0.5 pcf density fiberglass insulation firmly packed between top of wall and bottom of the steel deck.

B. **Fill, Void or Cavity Material*** — Min 1/4 in. thickness of fill material installed on each side of the wall over the packing material (Item 3A). Additional fill material to be installed such that it laps the top of the wall and the steel deck by a min of 1/2 in.

RECTORSEAL — Metacaulk 1100

*Bearing the UL Classification Mark