

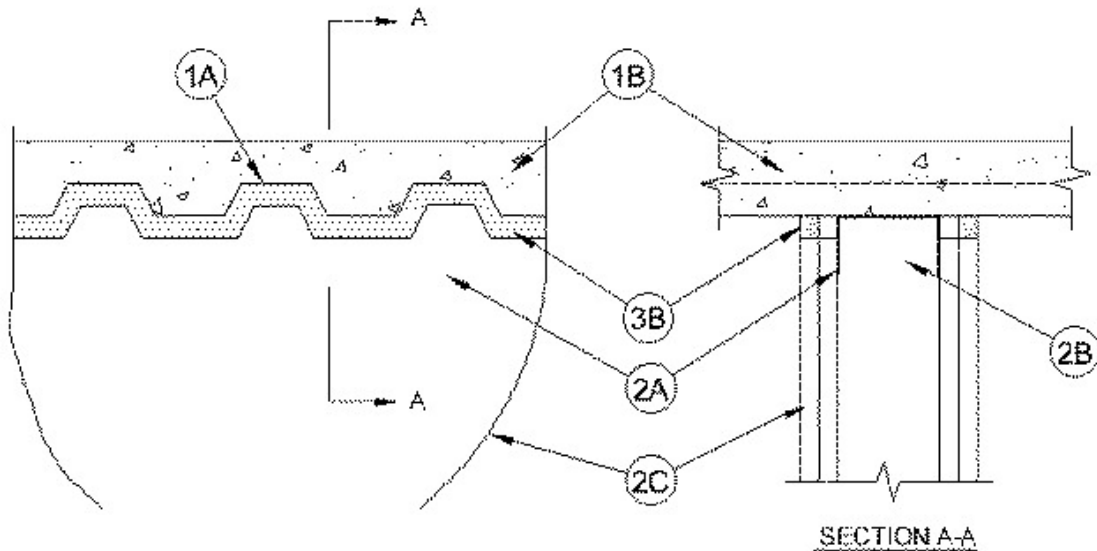
System No. HW-D-0448

June 13, 2006

Assembly Rating - 1 and 2 Hr (See Item 2)

Nominal Joint Width - 3/4 in.

Class II and III Movement Capabilities - 20% Compression and Extension



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 D900 Series 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 1 or 2 hour fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U400 Series Wall and Partition. Designs 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 galv steel channels sized to accommodate steel studs (Item 2B). Ceiling runner to be provided with 3 in. flanges. Ceiling runner shall be installed perpendicular to direction of fluted floor units and secured to valley with steel fasteners or by welds spaced max 24 in. OC.

B. **Studs** — Steel studs to be min 3-1/2 in. wide. Studs cut 1-1/2 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. Studs secured to floor runner with sheet metal screw. As an alternate to securing the studs to the ceiling runner, the ceiling runner may be notched with the Snip N' Slide™ tool used to provide positive securement of the studs within the ceiling runner without the screws. When deflection channel is not used studs shall not be secured to ceiling runner, however, the ceiling runner may be notched with the Snip N' Slide™ tool. Stud spacing not to exceed 24 in. OC.

C. **Gypsum Board*** — Gypsum board sheets installed to a min total thickness of 5/8 in. and 1-1/4 in. on each side of wall for 1 and 2 hr rated assemblies, respectively. Wall to be

constructed as specified in the individual Wall and Partition Design in the UL Fire Resistance Directory, except that the gypsum board shall be cut to fit the contour of the steel floor units with a nom $\frac{3}{4}$ in. gap and the top row of screws shall be installed into the studs 3-1/2 in. below the lower surface the floor. **The hourly fire rating of the joint system is equal to the hourly fire rating of the wall assembly.**

3. Joint System — Max separation between bottom of floor and top of gypsum board at time of installation of joint system is $\frac{3}{4}$ in. The joint system is designed to accommodate a max 20 percent compression or extension from its installed width. The joint system consists of bond breaker tape (for 1 hr condition) and a fill material, as follows:

A. **Bond Breaker Tape** — (Not shown, for use in 1 hr systems) Polyethylene tape supplied in rolls. Tape applied to flanges of ceiling runner (Item 2A) to prevent bonding of the sealant at points other than the top and bottom of the linear gap.

B. **Fill, Void or Cavity Material*** — Min $\frac{5}{8}$ in. thickness of fill material applied on each side of wall to overlap a min of $\frac{1}{2}$ in. onto wall and steel deck on both sides of wall at a wet depth of $\frac{1}{16}$ in.

FLAME TECH INC — Firestop-814+

*Bearing the UL Classification Mark