

System No. HW-D-1020

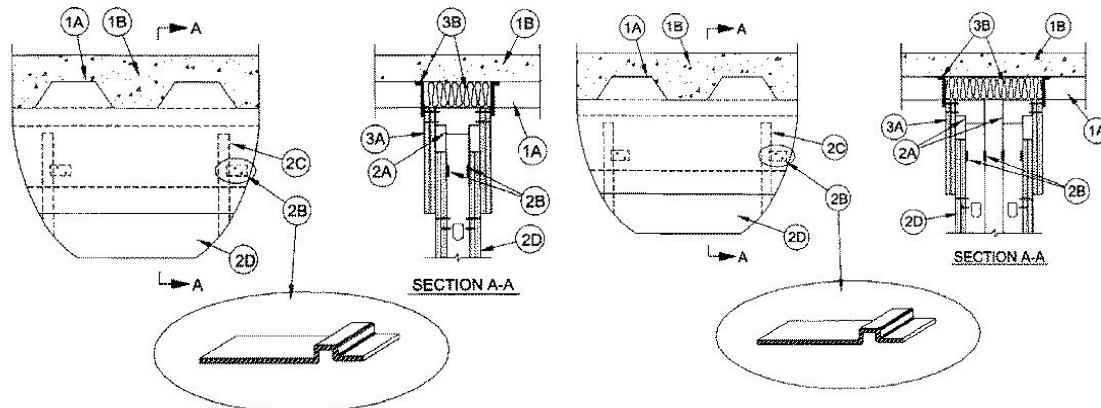
October 31, 2003

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

Nominal Joint Width — 3 In.

Class II and III Movement Capabilities — 100% Compression or Extension

(UL/cUL)



CONFIGURATION A

CONFIGURATION A1

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. The hourly fire rating of the floor assembly shall be equal to or greater than the hourly fire rating of the wall assembly. The floor assembly shall include the following construction features:
 - A. **Steel Floor and Form Units*** — Max 3 in. deep galv fluted floor units.
 - B. **Concrete** — Min 2-1/2 in. thick reinforced (100-150 pcf) concrete, as measured from the top plane of the floor units.
- 1A. **Roof Assembly** — As an alternate to Item 1, the fire-rated roof assembly shall be constructed of the materials and in the manner described in the individual P900 Series Roof-Ceiling Designs in the UL Fire Resistance Directory and shall contain max 3 in. deep galv steel fluted roof units. The hourly fire rating of the assembly shall be equal or greater than the hourly fire rating of the wall assembly. In the case of spray-applied protection materials in the steel roof units, the joint system shall be installed prior to the spray-applied protection material.
- 1B. **Floor Assembly** — As an alternate to Item 1, min 4-1/2 in. thick reinforced lightweight or normal weight (100-150 pcf) structural concrete.
2. **Wall Assembly** — The 1 or 2 hr fire-rated gypsum board /steel stud wall assembly shall be constructed of the materials and in the manner described in the individual U400 and V400-Series Wall and Partition Design in the UL Fire Resistance Directory and shall include the following construction features:
 - A. **Light Gauge Framing* — Deflection Trak** — Deflection trak of wall assembly shall consist of min No. 25 gauge galv steel channels sized to accommodate steel studs (Item 2C) and with offset legs to accommodate wall cladding (Item 3A). Deflection trak installed perpendicular to floor units. Min No. 25 gauge deflection trak secured on both sides to valley of floor units with 1-1/2 in. long welds spaced max 12 in. OC. Min No. 20 gauge deflection trak may be secured with steel fasteners spaced 12 in. OC.

FIRE TRAK CORP — Shadowline and Cavity Shadowline
 - B. **Slip Clip** — Slip Clips are attached to the inside bottom leg of the ceiling runner (Item 2A) with 2 - No. 8 by 1/2 in. long steel self-drilling framing screws and engage the short flange of the studs.

FIRE TRAK CORP — Slip Clips
 - C. **Studs** — Steel studs to be min 2-1/2 in. wide and as specified in the individual Wall and Partition Design in the UL Fire Resistance Directory. Studs cut 4 in. less in length than the 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.
 - D. **Gypsum Board*** — Gypsum board sheets installed and attached to studs and runners as specified in the individual Wall and Partition Design in the UL Fire Resistance Directory, except that a nominal 3-1/2 in. gap shall be maintained between top of the gypsum board and the bottom flange of the deflection trak. Top row of screws shall be installed into the studs 13-1/2 in. below the top edge of the gypsum board sheets.

E. **Bracing** — (Not shown) Bracing as specified in the individual Wall and Partition Design in the UL Fire Resistance Directory.

The hourly assembly rating of the joint is equal to the fire rating of the wall.

Firestop Configuration A and A1

3. **Joint System-** — Max separation between bottom flange of the deflection trak and top of wallboard (at the time of installation of the joint system) is 1 in. The joint system is designed to accommodate a max 100 percent compression or extension from its installed width. The joint system consists of spray applied fire resistive material (Item 3A), and wall cladding (Item 3B) as follows:
- A. **Wall Cladding** — Strips of the gypsum wallboard material attached to the deflection trak. The number of layers, board type and thickness and fastener type shall be as specified for the gypsum board in the individual Wall and Partition Design in the UL Fire Resistance Directory. Fasteners shall be max spaced 3 in. OC. The top of the wall cladding shall be flush with the valleys of the steel floor units and overlap the gypsum board 7 in.
 - B. **Flute Fill** — The batt insulation and fill material are to be installed as specified in the Joint System HW-D-0091

TREMCO INC — TREMstop Acrylic SP

*Bearing the UL Classification Mark



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