

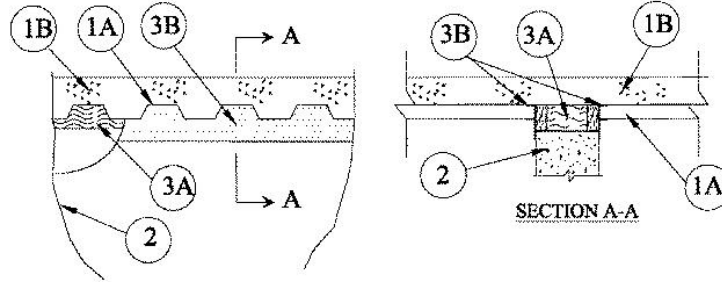
System No. HW-D-0092

September 14, 2006

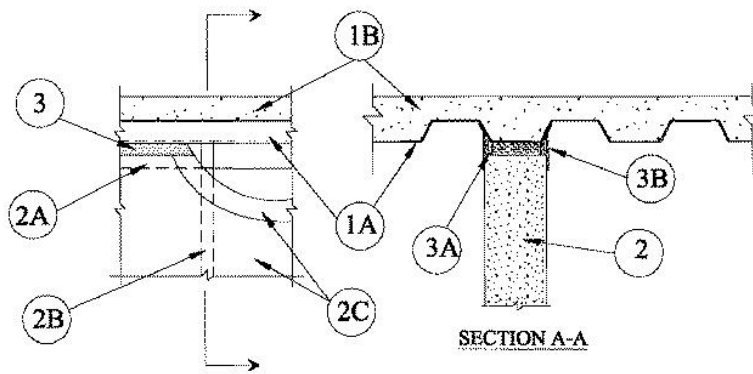
Assembly Rating – 2 and 3 Hr (See Items 3 and 4)

Nominal Joint Width – 1 and 2 Hr (See Item 3)

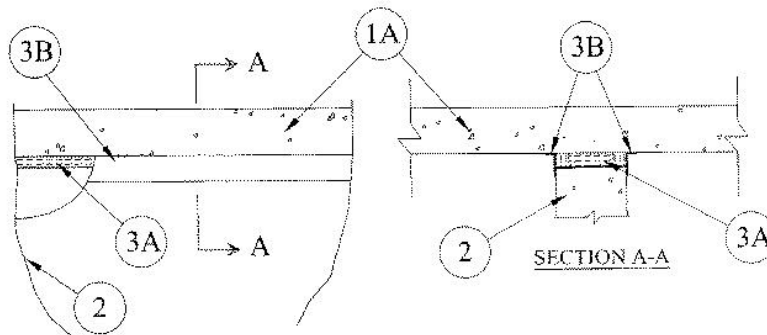
Class II and III Movement Capabilities – 25% and 18% Compression or Extension (See Item 3)
(UL/cUL)



CONFIGURATION A



CONFIGURATION B



CONFIGURATION C

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 units.
 - B. **Concrete** — Min 2-1/2 in. thick reinforced concrete, as measured from the top plane of the floor units.
- 1A. **Floor Assembly** — As an alternate to Item 1, min 4-1/2 in. thick lightweight or normal weight (100-150 pcf) structural concrete.
2. **Wall Assembly** — Min 6-1/8 in. thick steel reinforced lightweight or normal weight (100 to 155 pcf) concrete. Wall to be perpendicular to (Joint Configuration A), or parallel to and centered under the valleys (Joint Configuration B), of the steel floor units. Wall may also be constructed of any UL Classified **Concrete Blocks***.

See **Concrete Blocks** (CAZT) category in the Fire Resistance Directory for names of manufacturers.
3. **Joint System** — Max separation between bottom of floor and top of wall is 2 in. The joint system is designed to accommodate a max 18 percent compression or extension from its installed width. When joint width is max 1 in., joint can accommodate a max 25 percent compression or extension from its intended width. F Rating for joint system designed for max 18% movement is 3 hr. F Rating for joint system designed for max 25% movement is 2 hr. The joint system consists of a forming material and a fill material, as follows:

Joint Configuration A

- A. **Forming Material*** — Min 4 in. thick, 4 pcf density mineral wool batt insulation cut to fit the general shape of the joint. Insulation cut to a width 100 percent greater than joint width. Insulation compressed 50 percent in width and inserted into opening between top of wall and bottom of steel deck, flush with one surface of wall. Additional piece of 2 in. thick, min 4 pcf density mineral wool batt insulation is similarly cut, compressed 50 percent in width and inserted within joint, flush with opposite face of wall.

FIBREX INSULATIONS INC — FBX Safing Insulation
IIG MINWOOL L L C — MinWool-1200 Safing
ROCK WOOL MANUFACTURING CO — Delta Board
ROXUL INC — Type Safe
THERMAFIBER INC — Type SAF

- B. **Fill, Void or Cavity Material*** — Min 1/8 in. wet thickness of fill material sprayed or brushed on each side of the wall to completely cover mineral wool and overlap a min of 1/2 in. onto wall and steel deck.

TREMCO INC — TREMstop Acrylic-SP

Joint Configuration B

- A. **Forming Material*** — Min 4 in. thick, 4 pcf density mineral wool batt insulation cut to a width 100 percent greater than joint width. Insulation compressed 50 percent in width and inserted into opening between the top of the wall and the steel deck and recessed 2 in. from one surface of wall. Additional piece of min 4 pcf mineral wool batt insulation having a thickness of 2 in. is cut to a width 100 percent greater than joint width, compressed 50 percent and inserted between the top of the wall and the steel deck, flush with opposite side of the wall.

FIBREX INSULATIONS INC — FBX Safing Insulation
IIG MINWOOL L L C — MinWool-1200 Safing
ROCK WOOL MANUFACTURING CO — Delta Board
ROXUL INC — Type Safe
THERMAFIBER INC — Type SAF

- B. **Fill, Void or Cavity Material*** — Min 1/8 in. wet thickness of fill material sprayed or brushed on each side of the wall to completely cover mineral wool and overlap a min of 1/2 in. onto wall and steel deck.

TREMCO INC — TREMstop Acrylic-SP

Joint Configuration C

- A. **Forming Material*** — Min 4 in. thick, 4 pcf density mineral wool batt insulation cut to a width 100 percent greater than joint width, compressed 50 percent in width and inserted into opening between the top of the wall and the bottom of floor, flush with one surface of wall. Additional piece of 2 in. thick, min 4 pcf mineral wool batt insulation similarly cut, compressed 50 percent in width and inserted between the top of the wall and the bottom of floor, flush with opposite wall surface.

FIBREX INSULATIONS INC — FBX Safing Insulation
IIG MINWOOL L L C — MinWool-1200 Safing
ROCK WOOL MANUFACTURING CO — Delta Board
ROXUL INC — Type Safe
THERMAFIBER INC — Type SAF

- B. **Fill, Void or Cavity Material*** — Min 1/8 in. wet thickness of fill material sprayed or brushed on each side of the wall to completely cover mineral wool and overlap a min of 1/2 in. onto wall and floor.

TREMCO INC – TREMstop Acrylic-SP

4. **Through Penetrant** – (Optional, Not Shown) Nom 1/2 in. (13 mm) diam rigid steel conduit or steel electrical metallic tubing (EMT) may be installed parallel with and within the flutes of the steel floor or roof deck. The conduit or EMT shall be located near the mid-depth of the steel deck with a clearance of 1/2 to 1-1/2 in. (13 to 38 mm) between the conduit or EMT and the steel deck. A max of one conduit or EMT is permitted in an individual flute. When conduit or EMT is installed in flute of steel deck, the hourly rating of the joint system is 2 hr.

*Bearing the UL Classification Mark



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Tremco Commercial Sealants & Waterproofing

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