

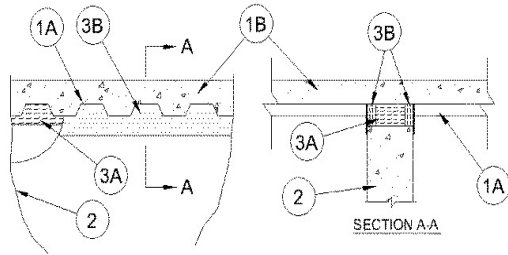
System No. HW-D-0251

August 14, 2002

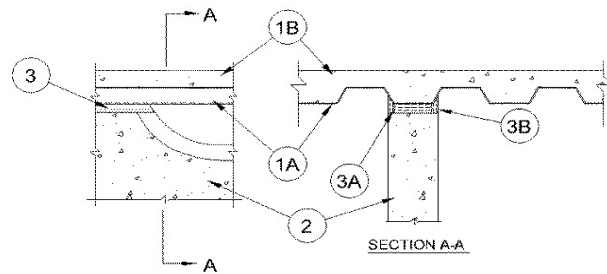
Assembly Rating — 4 Hr

Nominal Joint Width — 2 in.

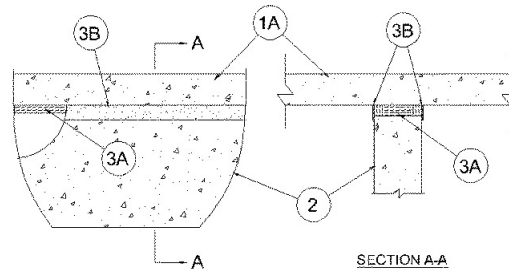
Class I and II Movement Capabilities — 18% compression or extension
(UL/cUL)



CONFIGURATION A



CONFIGURATION B



CONFIGURATION C

1. **Floor Assembly** The 4 hr 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 to 150 pcf) structural concrete.
2. **Wall Assembly** Min 6 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. The joint system consists of a forming material and a fill material, as follows:

Joint Configuration A

- A. **Forming Material*** Nominal 4 in. thickness, min 4 pcf mineral wool batt insulation cut to fit the general shape of the joint. Insulation within flute cut 15 percent wider and 100 percent higher than flute size. Insulation within joint width below valleys of steel deck cut 100 percent higher than joint width. Insulation compressed and installed within joint, recessed 1/2 in. from both surfaces of wall.

FIBREX INSULATIONS INC — FBX Safing Insulation

ROCK WOOL MANUFACTURING CO — Delta Board

- B. **Fill, Void or Cavity Material*** Min 1/2 in. thickness of fill material applied on each side of the wall to completely cover mineral wool, flush with each surface concrete wall.

TREMCO INC — Fyre-Sil

Joint Configuration B

- A. **Forming Material*** Nominal 4 in. thick, min 4 pcf mineral wool batt insulation cut into strips. Width of insulation strips to be 100 percent wider than joint width. Strips compressed 50 percent in width and inserted into joint, recessed 1/2 in. from both surfaces of wall.

FIBREX INSULATIONS INC — FBX Safing Insulation

ROCK WOOL MANUFACTURING CO — Delta Board

- B. **Fill, Void or Cavity Material*** Min 1/2 in. thickness of fill material applied on each side of the wall to completely cover mineral wool flush with each surface of concrete wall.

TREMCO INC — Fyre-Sil

Joint Configuration C

- A. **Forming Material*** Nominal 4 in. thick, min 4 pcf mineral wool batt insulation cut into strips. Width of insulation strips to be 100 percent wider than joint width. Strips compressed 50 percent in width and inserted into joint, recessed 1/2 in. from both surfaces of wall.

FIBREX INSULATIONS INC — FBX Safing Insulation

ROCK WOOL MANUFACTURING CO — Delta Board

- B. **Fill, Void or Cavity Material*** Min 1/2 in. thickness of fill material applied on each side of the wall to completely cover mineral wool flush with each surface of concrete wall.

TREMCO INC — Fyre-Sil

*Bearing the UL Classification Mark



Reprinted from the Online Certifications Directory with permission from Underwriters Laboratories Inc.
Copyright © 2008 Underwriters Laboratories Inc. ®

Tremco Commercial Sealants & Waterproofing

3735 Green Road, Beachwood, OH 44122 // Phone: 216.292.5000 // 800.321.7906
220 Wicksteed Avenue, Toronto, ON M4H 1G7 // Phone: 416.421.3300 // 800.363.3213
1451 Jacobson Avenue, Ashland OH 44805 // Phone: 419.289.2050 // 800.321.6357