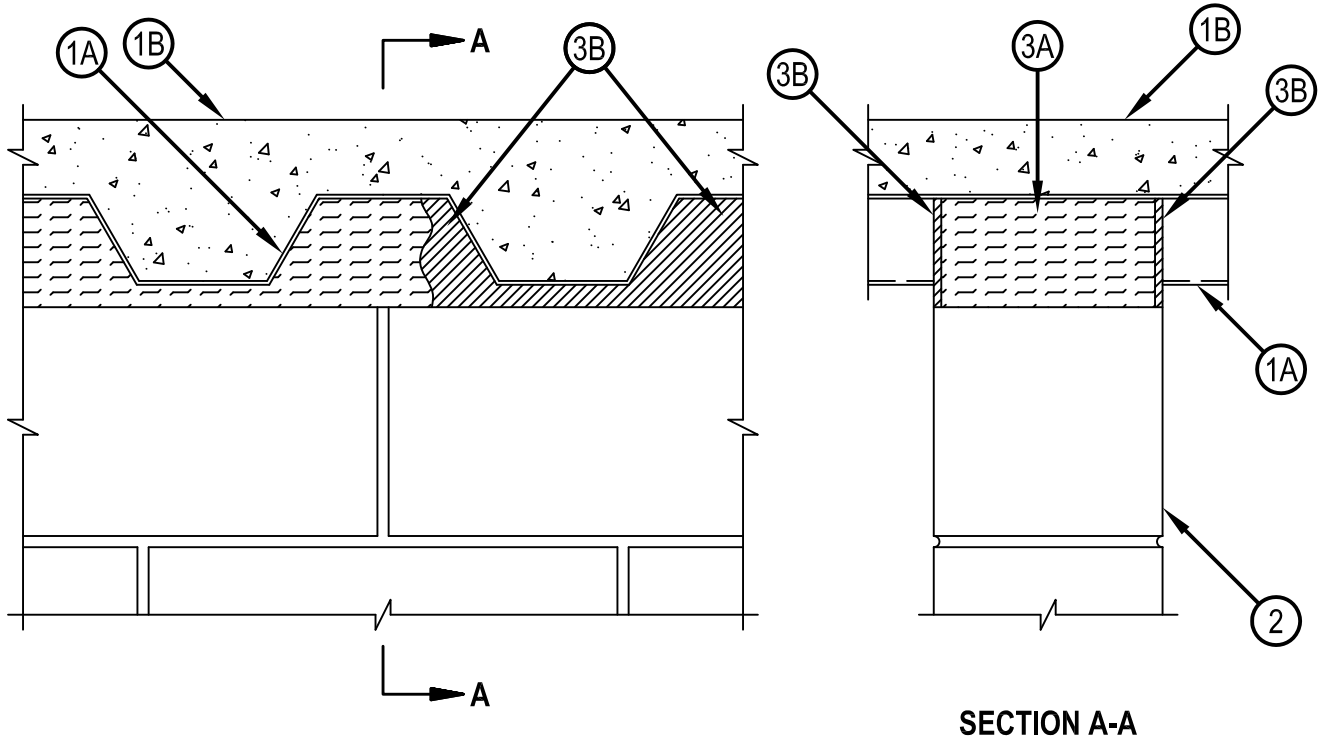


## System No. HW-D-0080

  
 Classified by  
 Underwriters Laboratories, Inc.  
 to UL 2079 and CAN/ULC-S115

ANSI/UL2079	CAN/ULC S115
Assembly Rating — 2 Hr	F Rating — 2 Hr
Nominal Joint Width - 3/4 In.	FT Rating — 2 Hr
Class II Movement Capabilities — 33% Compression or Extension	FH Rating — 2 Hr
	FTH Rating — 2 Hr
	Nominal Joint Width - 3/4 In.
	Class II Movement Capabilities — 33% Compression or Extension



1. Floor Assembly — The fire-rated fluted steel floor unit/concrete floor assembly shall be constructed of the materials and in the manner described in the individual D700 or D900 Floor-Ceiling Design in the 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.
  - C. Spray-Applied Fire Resistive Materials — (Optional, Not Shown) — Prior to the installation of the Forming Material and Fill, Void or Cavity Materials (Items 3A, 3B, respectively), the steel floor units may be sprayed with a min 5/16 in. thickness to a max 11/16 in. thickness of fire resistive material.

W R GRACE & CO - CONN — Type MK-6/HY
- 1A. Roof Assembly — (Not Shown) — As an alternate to the floor assembly, a fire rated fluted steel deck roof assembly may be used. The roof assembly shall be constructed of the materials and in the manner described in the individual P900 Series Roof-Ceiling Design in the UL Fire Resistance Directory. The hourly rating of the roof assembly shall be equal to or greater than the hourly rating of the wall assembly. The roof assembly shall include the following construction features:
  - A. Steel Roof Deck — Max 3 in. deep galv steel fluted roof deck.
  - B. Roof Insulation — Min 2-1/4 in. thick poured insulating concrete, as measured from the top plane of the floor units.



**Hilti Firestop Systems**

Reproduced by HILTI, Inc. Courtesy of  
 Underwriters Laboratories, Inc.  
 December 27, 2013

- 1B. Roof Assembly — As an alternate to Items 1 and 1A, a fire rated protected fluted steel deck roof assembly may be used. The roof assembly shall be constructed of the materials and in the manner described in the individual P700 Series Roof-Ceiling Design in the UL Fire Resistance Directory. The hourly rating of the roof assembly shall be equal to or greater than the hourly rating of the wall assembly. The roof assembly shall include the following construction features:
- A. Steel Roof Deck — Max 3 in. deep galv steel fluted roof deck.
  - B. Spray—Applied Fire Resistive Materials\* — (Not Shown)—Prior to the installation of the steel ceiling runners, Forming Material and Fill, Void or Cavity Material (Items 2A, 3A, 3B), the roof assembly shall be sprayed with the type and thickness of fire resistive material indicated in the individual P700 Series design.
2. Wall Assembly — Min 5 in. thick steel reinforced lightweight or normal weight (100-150 pcf) concrete. Wall may also be constructed of a UL Classified Concrete Blocks\*.
- See Concrete Block (CAZT) category in the Fire Resistance Directory for names of manufacturers.
3. Joint System — Max separation between bottom of or roof floor and top of wall is 3/4 in. The joint system is designed to accommodate a max 33 percent compression or extension from its installed width. The joint system consists of a packing material and a fill material between the top of the wall and the bottom of the floor or roof, as follows:
- A. Forming Material — Min 4-1/2 in. thickness of 4 pcf density mineral wool batt insulation was cut to the shape of the fluted deck, approximately 20 percent larger than the area of the flutes and compressed into the flutes of the steel deck above the wall assembly. The forming material shall be recessed 1/4 in. from each side of the wall. Additional pieces of forming material, compressed min 50 percent, in thickness and installed edge first into joint opening between bottom of steel deck and top of wall, parallel with joint direction. Compressed batt sections recessed 1/4 in. from both wall surfaces. Adjoining lengths of batt to be tightly butted with butted seams spaced min 48 in. apart along the length of the joint.
  - A1. Forming Material\*—Plugs — (Optional-Not Shown) Performed mineral wool plugs, formed to the shape of the steel deck units, friction fit to completely fill the flutes. The plugs shall be recessed 1/4 in. from both wall surfaces. Additional forming material, described in Item 3A, to be used in conjunction with the plugs to fill the gap between the top of the wall and bottom of steel deck.  
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP777 Speed Plugs
  - B. Fill, Void or Cavity Material\* - Sealant — Min 1/4 in. thickness of fill material installed on each side of the wall in the flutes of the steel deck and between the top of the wall and the bottom of the steel deck, flush with each surface of the wall.  
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP601S Elastomeric Firestop Sealant or CFS-S SIL GG Sealant

\*Bearing the UL Classification Mark

