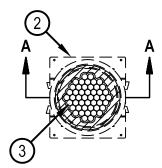
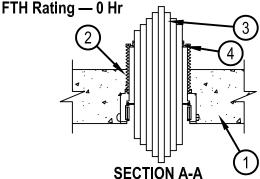


## System No. F-A-3001

F Rating — 3 Hr FT Rating — 0 Hr

FH Rating — 0 Hr





- 1. Floor Assembly Min 114 mm (4-1/2 in.) thick reinforced lightweight or normal weight 1600-2400 kg/cu m (100-150 pcf) concrete.
- 1A. Floor Assembly (Optional-Not Shown) The fire rated unprotected concrete and steel floor assembly shall be constructed of the materials and in the manner specified in the individual D900 Series designs in the UL Fire Resistance Directory and as summarized below:
  - A. Concrete Min 114 mm (4-1/2 in.) thick reinforced lightweight or normal weight 1600-2400 kg/cu m (100-150 pcf) concrete.
  - B. Steel Floor and Form Units\* Composite or non-composite max 76 mm (3 in.) deep galv steel fluted units as specified in the individual Floor-Ceiling Design.
- 2. Firestop Device\* Cast in place firestop device permanently embedded during concrete placement in accordance with accompanying installation instructions with a max 51 mm (2 in.) projection above top surface of the concrete.
  - HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC CP 680-75/2.5"N, CP 680-110/4"N, CP 680-160/6"N, CP 680-M 2", CP 680-M 3", CP 680-M 4", CP 680-P 2", CP 680-P 4", CP 680-P 6", CP 680-PX 2", CP 680-PX 3"
- 3. Cables Cables to be rigidly supported on both sides of the assembly. Any combination of the following types and sizes of copper conductor cables may be used:
  - A. Max 1/C 500 kcmil (or smaller) copper conductor cable with polyvinyl chloride (PVC) insulation and jacket.
  - B. Max 7/C No. 12 AWG with polyvinyl chloride (PVC) insulation and jacket.
  - C. Max 300 pair No. 24 AWG telephone cable with PVC insulation and jacket.
  - D. Multiple fiber optical communication cable jacketed with PVC and having a max OD of 16 mm (1/2 in.).
  - E. Max 3/C No. 12 AWG with ground with polyvinyl chloride jacketed steel clad Type MC cable.

The firestop device and max cable bundle diameter shall be sized as follows:

Cable Bundle Diameter	Firestop Device
Min 25 mm (1 in.) to Max 51 mm (2 in.)	CP 680-75/2.5"
	CP 680-M 2", CP 680-P 2", CP 680-PX 2"
76 mm (3 in.)	CP 680-M 3", CP 680-P 3", CP 680-P 3",
Min 76 mm (3 in.) to Max 114 mm (4-1/2 in)	CP 680-110/4"
	CP 680-P 4"
Min 76 mm (3 in.) to Max 102 mm (4 in)	CP 680-M 4", CP 680-P 4"
165 mm (6-1/2 in.)	CP 680-160/6"
	CP 680-P 6"

- 5. Fill, Void or Cavity Material\* Putty Min 3 mm (1/8 in.) thickness of fill material applied at top surface of device overlapping onto cables and device or floor.
  - HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC CP 618 Firestop Putty Stick or CP 617 Putty Pad
- \* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

