

System No. F-A-2246

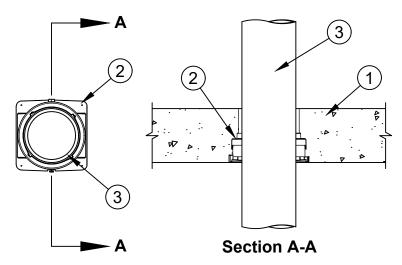
F Ratings - 2 and 3 Hr (See Item 3)

T Ratings - 0, 1/4, 1, 1-1/4, 1-1/2 and 3 Hr (See Item 3)

L Rating At Ambient - Less Than 1 CFM/sq ft (See Items 3, 4 and 6)

L Rating At 400 F - Less Than 1 CFM/sq ft (See Items 3, 4 and 6)

W Rating - Class 1 (See Item 4 and 6)



- 1. **Floor Assembly -** Reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete floor. Except as footnoted in the table under Item 3, min thickness of concrete floor assembly is 4-1/2 in. (114 mm).
- 1A. **Floor Assembly -** (Not Shown) As an alternate to Item 1, the fire rated unprotected concrete and steel floor assembly shall be constructed of the material and in the manner specified in the individual D900 Series designs in the UL Fire Resistance Directory and as summarized below:
 - A. **Concrete** Reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete. Except as footnoted in the table under Item 3, min thickness of concrete, as measured from the top plane of the steel floor units is 4-1/2 in. (114 mm).
 - B. **Steel Floor and Form Units* -** Composite or non-composite max 3 in. (76 mm) deep galv steel fluted units as specified in the individual Floor-Ceiling Design.
- Firestop Device* Cast in place firestop device permanently embedded during the concrete pour or grouted
 into the concrete assembly in accordance with the accompanying installation instructions. The devices may be
 cut flush or extend above the top surface of the floor.
 - **SPECIFIED TECHNOLOGIES INC** SpecSeal CD201, CD201C, CD202, CD201GW, CD301, CD301C, CD302, CD301GW, CD401, CD402, CD401GW, CD601 or CD601GW Cast In Firestop Device
- 2A. **Firestop Device* -** (Not Shown) When Item 1A is used, a steel deck adapter kit consisting of steel plates and a nonmetallic extension tube is used in conjunction with Item 2. Install the deck adapter in accordance with the accompanying installation instructions.

SPECIFIED TECHNOLOGIES INC - SpecSeal SpecSeal CD201DK, CD301DK, CD401DK or CD601DK Cast In Firestop Device Deck Adapter





- 2B. Firestop Device* (Not Shown) When the concrete floor slab or concrete topping thickness over steel deck exceeds 8 in. (203 mm), a nonmetallic extension tube shall be used in conjunction with Item 2. The extension tube shall be installed in accordance with the accompanying installation instructions. The extension tube may be cut flush with the top surface of the floor or extend beyond the top surface of the floor.
 - SPECIFIED TECHNOLOGIES INC SpecSeal CD201EK, CD301EK, CD401EK, CD601EK or CD601X Cast In Firestop Device Extension
- 3. Through Penetrants One nonmetallic pipe or conduit to be installed within the firestop system. Pipe or conduit to be rigidly supported on both sides of the floor assembly. The following types and sizes of nonmetallic pipes or conduits may be used:
 - A. Polyvinyl Chloride (PVC) Pipe Nom 6 in. (152 mm) diam (or smaller) solid or cellular core Schedule 40 polyvinyl chloride (PVC) pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
 - B. Chlorinated Polyvinyl Chloride (CPVC) Pipe Nom 6 in. (152 mm) diam (or smaller) SDR 13.5 chlorinated polyvinyl chloride (CPVC) pipe for use in closed (process or supply) piping systems.
 - C. Rigid Nonmetallic Conduit+ Nom 6 in. (152 mm) diam (or smaller) Schedule 40 PVC conduit installed in accordance with the National Electrical Code (NFPA 70).
 - D. Acrylonitrile Butadiene Styrene (ABS) Pipe Nom 4 in. (102 mm) diam (or smaller) solid or cellular core Schedule 40 acrylonitrile butadiene styrene (ABS) pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
 - E. Fire Retardant Polypropylene (FRPP) Pipe -Nom 6 in. (152 mm) diam (or smaller) Schedule 40 fire retardant polypropylene (FRPP) pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

Pipe Type	Nom Pipe Diam (a)	Min Concrete Thickness in. (mm)	F Rating Hr	T Rating Hr	Firestop Device
PVC, CPVC, RNC	1-1/2 or 2 in. (38 or 51 mm)	2-1/2 (64)	2	1-1/4	CD201, CD201C, CD202, CD201GW
PVC, CPVC, RNC	2-1/2 or 3 in. (64 or 76 mm)	2-1/2 (64)	2	1 1/2	CD301, CD301C, CD302, CD301GW
PVC, CPVC, RNC	3-1/2 or 4 in. (89 or 102 mm)	2-1/2 (64)	2	1/4	CD401, CD402, CD401GW
PVC, CPVC, RNC	6 in. (152 mm)	2-1/2 (64)	2	1	CD601, CD601GW
FRPP	6 in. (152 mm)	2-1/2 (64)	2	1/4	CD601, CD601GW
PVC, CPVC, RNC	1-1/2 or 2 in. (38 or 51 mm)	4-1/2 (114)	3	3	CD201, CD201C, CD202, CD201GW
PVC, CPVC, RNC	2-1/2 or 3 in. (64 or 76 mm)	4-1/2 (114)	3	3	CD301, CD301C, CD302, CD301GW
PVC, CPVC, RNC	3-1/2 or 4 in. (89 or 102 mm)	4-1/2 (114)	3	3	CD401, CD402, CD601GW
PVC, CPVC, RNC	6 in. (152 mm)	4-1/2 (114)	3	3	CD601, CD601GW





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ABS, FRPP	1-1/2 or 2 in. (38 or 51 mm)	4-1/2 (114)	3	0	CD201, CD201C, CD202
ABS, FRPP	1-1/2 or 2 in. (38 or 51 mm)	4-1/2 (114)	3	3	CD201GW
ABS	2-1/2 or 3 in. (64 or 76 mm)	4-1/2 (114)	3	0	CD301, CD301C, CD302, CD301GW
ABS	3-1/2 or 4 in. (89 or 102 mm)	4-1/2 (114)	3	0	CD401, CD402, CD401GW
FRPP	2-1/2 or 3 in. (64 or 76 mm)	4-1/2 (114)	2	0	CD301GW
FRPP	3-1/2 or 4 in. (89 or 102 mm)	4-1/2 (114)	2	0	CD401GW
FRPP	6 in. (152 mm)	4-1/2 (114)	3	1/4	CD601, CD601GW

- (a) When nonmetallic pipe or conduit with diam smaller than those shown in the table above is used, packing material and/or fill material shall be installed into the device as described in Items 4 and 5. L Ratings for these penetrants only apply when the fill material is used. Otherwise, the L Rating for each firestop device is less than 1 CFM/ft² at ambient and at 400F.
- 4. Packing Material (Not Shown) When required under Item 3, min 4 in. (102 mm) thickness of min 4 pcf (64 kg/m³) mineral wool firmly packed into device flush with top edge of device (Item 2), and extending a min 1 in. (25 mm) below the top surface of the floor. When W Ratings for penetrants are required, min 4 in. (102 mm) thickness of min 4 pcf (64 kg/m³) mineral wool firmly packed into device recessed 1/4 in. (6 mm) from top edge of device (Item 2) to accommodate sealant (Item 6). When L Ratings for penetrants with a diam smaller than those shown in the table above are required, recess mineral wool 1/4 in. (6 mm) from top edge of device to accommodate sealant (Item 6).
 - W Rating does not require installation of packing material when SpecSeal CD201GW, CD301GW, CD401GW or CD601GW Cast In Firestop Devices are used.
- 5. **Fill, Void, or Cavity Material* Putty -** (Not Shown) When required under Item 3, as an option to Item 4, min 1 in. (25 mm) depth of fill material applied to fill annulus between penetrant and throat of firestop device at top of floor.
 - SPECIFIED TECHNOLOGIES INC SpecSeal Putty
- 6. **Fill, Void, or Cavity Material* -** (Optional, Not Shown) To achieve W Ratings for penetrants, or to achieve L Ratings for penetrants with a diam smaller than those shown in the table above, apply min 1/4 in. (6 mm) depth of sealant atop packing material (Item 4) flush with top edge of device.
 - SPECIFIED TECHNOLOGIES INC SpecSeal SIL300 Sealant or SpecSeal SIL300SL Sealant
 - W Rating does not require installation of fill, void or cavity material when SpecSeal CD201GW, CD301GW, CD401GW or CD601GW Cast In Firestop Devices are used.
 - * Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.
 - + Bearing the UL Listing Mark





