

FIRESTOP SUBMITTAL PACKAGE

SPECSEAL[®] CAST-IN FIRESTOP DEVICE FOR ELECTRICAL, COMMUNICATION, OR TELECOM APPLICATIONS

PROJECT:

SUBMITTED BY:



CAST-IN FIRESTOP DEVICE

| SYSTEM | DESCRIPTION |
|----------|---|
| F-A-1110 | Max 6" steel conduit or EMT. 3 Hr. |
| F-A-1117 | One or more max 3" steel conduit, max 3" EMT. 3 Hr. W Rating (Class 1). |
| F-A-1118 | Max 4" conduit, max 4" EMT. 2 Hr. Equal F & T. W Rating (Class 1). |
| F-A-2203 | One or more max 1" RNC, OFR, ENT. 3 Hr F Rating. 3 Hr T Rating. W Rating (Class 1). |
| F-A-2192 | Max. 6" RNC. 3 Hr T Rating. 3 Hr F Rating. |
| F-A-3055 | Electrical, Telephone or Data Cables (max 40% fill). 3 Hr F Rating. W Rating (Class 1). |

General Certificate of Conformance

Product Data Sheets

SpecSeal Cast-In Firestop Device

Material Safety Data Sheets

SpecSeal Cast-In Firestop Device



Specified
Technologies
Inc.

200 Evans Way, Suite 2
Somerville, NJ 08876
Phone: (908) 526-8000
Fax: (908) 526-9623
Toll Free: (800) 992-1180

GENERAL CERTIFICATE of CONFORMANCE

Description: SpecSeal® CAST-IN FIRESTOP DEVICE

Catalog Numbers:

CD200, CD200M, CD300, CD300M, CD400, CD400M

These products are tested to the following standards where applicable:

ASTM STANDARD:

E814 Fire Tests of Through-Penetration Firestops

E119 Fire Tests of Building Construction and Materials

UL STANDARD:

1479 Fire Tests of Through-Penetration Firestops

263 Fire Tests of Building Construction and Materials

Chemical Content Statement:

No asbestos, PCB's, or water-soluble intumescent ingredients are used or contained in these products.

J.P. Stahl Jr., CFPS
Director of Engineering

January 20, 2009

Date

Paul M. Jankowski
Quality Control Manager

January 20, 2009

Date





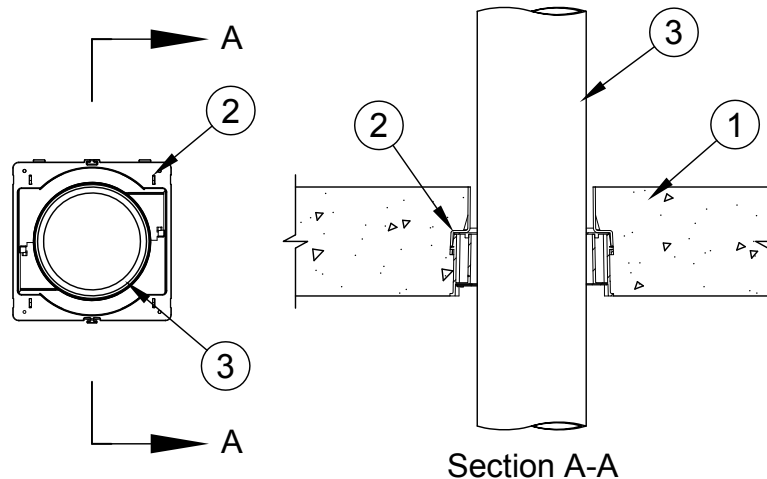
System No. F-A-1110

F Rating - 3 Hr

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

L Rating At Ambient - Less Than 1 CFM/sq ft (See Item 4)

L Rating At 400 F - Less Than 1 CFM/sq ft (See Item 4)



1. **Floor Assembly** - Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete floor.
- 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** - Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete topping, as measured from the top plane of the steel floor units.
 - 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.
2. **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 throat of the firestop device may be cut flush with the top surface of the floor or extend beyond the top surface of the floor. **When throat of firestop device extends less than 3 in. (76 mm) above top of floor, T Rating is 1/4 hr. When throat of firestop device extends min 3 in. (76 mm) above top of floor, T Rating is 1 hr.**

SPECIFIED TECHNOLOGIES INC - SpecSeal CD200, CD200M, CD300, CD300M, CD400, CD400M CD600, or CD600M 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 shall be used in conjunction with Item 2. The deck adapter shall be installed in accordance with the accompanying installation instructions.

SPECIFIED TECHNOLOGIES INC - SpecSeal CD200DK, CD300DK, CD400DK or CD600DK Cast In Firestop Device Deck Adapter



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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 CD200X, CD300X, CD400X or CD600X Cast In Firestop Device Extension

3. **Through Penetrant** - One metallic pipe, tube or conduit to be centered within the firestop system. Pipe, conduit or tube to be rigidly supported on both sides of the floor assembly. The following types and sizes of through penetrant may be used:
- A. **Steel Pipe** - Nom 6 in. (152 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
 - B. **Iron Pipe** - Nom 6 in. (152 mm) diam (or smaller) cast or ductile iron pipe.
 - C. **Conduit** - Nom 6 in. (152 mm) rigid steel conduit or steel electrical metallic tubing (EMT).
 - D. **Copper Pipe or Tubing** - Nom 4 in. (102 mm) diam (or smaller) Type M (or heavier) copper tubing or Regular (or heavier) copper pipe.

| Nom Pipe Diam+ | Firestop Device |
|--------------------------------|-----------------|
| 1-1/2 or 2 in. (38 or 51 mm) | CD200 or CD200M |
| 2-1/2 or 3 in. (64 or 76 mm) | CD300 or CD300M |
| 3-1/2 or 4 in. (89 or 102 mm) | CD400 or CD400M |
| 6 in. (152 mm) | CD600 or CD600M |

4. **Fill, Void, or Cavity Material* - Putty** - (Optional, Not Shown) - Min 1 in. (25 mm) depth of fill material applied to fill annulus between penetrant and throat of firestop device at top of floor. **L Ratings apply only when putty fill material is used.**

SPECIFIED TECHNOLOGIES INC - SpecSeal Putty

*Bearing the UL Classification Mark

+Bearing the UL Listing Mark



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System No. F-A-1117

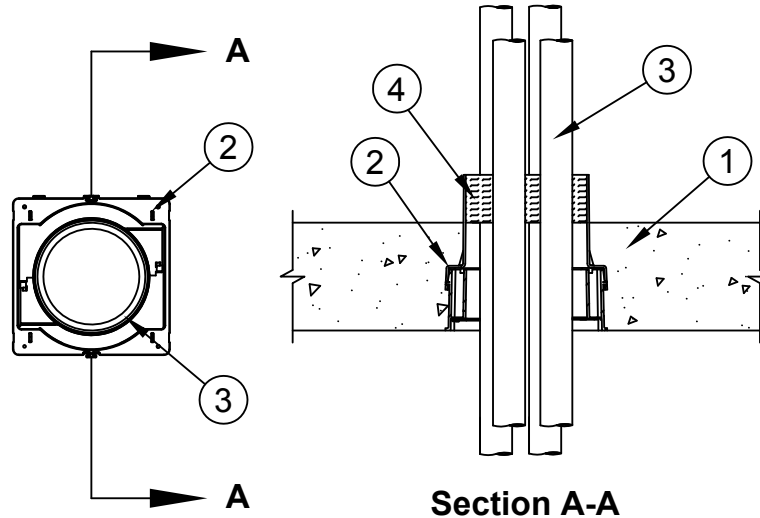
F Rating - 3 Hr

T Rating - 1/4 and 1 Hr (See Item 2)

L Rating At Ambient - Less Than 1 CFM/sq ft (See Item 5)

L Rating At 400 F - Less Than 1 CFM/sq ft (See Item 5)

W Rating - Class 1 (See Item 5)



1. **Floor Assembly** - Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete floor.
- 1A. **Alternate Floor Assembly** - (Not Shown) - 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** - Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete, as measured from the top plane of the steel floor units.
 - B. **Steel Floor and Form Units*** - 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.
- 2A. **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 throat of the firestop device may be cut flush with the top surface of the floor or extend beyond the top surface of the floor. When throat of firestop device extends less than 3 in. (76 mm) above top of floor, T Rating is 1/4 hr. When throat of firestop device extends min 3 in. (76 mm) above top of floor, T Rating is 1 hr.

SPECIFIED TECHNOLOGIES INC - SpecSeal CD200, CD200M, CD300, CD300M, CD400 or CD400M Cast In Firestop Device

- 2B. **Firestop Device*** - (Not Shown) - When the concrete thickness exceeds 8 in. (204 mm), a nonmetallic extension tube is used in conjunction with Item 2. Install the extension tube in accordance with the accompanying installation instructions.

SPECIFIED TECHNOLOGIES INC - SpecSeal CD200X, CD300X, or CD400X Cast In Firestop Device Extension



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3. **Through Penetrants** - One or more metallic pipes, tubing, or conduits to be installed within the firestop system. Annular space between pipes, conduits, or tubing and periphery of opening shall be min 0 in. (0 mm) (point contact) to max 2 in. (51 mm). Annular space between pipes, conduits, or tubing to be min 1/8 in. (3 mm) to max 2 in. (51 mm). Pipes, tubing, or conduits to be rigidly supported on both sides of the floor assembly. The following types and sizes of the metallic pipes or conduits may be used:
- A. **Steel Pipes** - Nom 3 in. (102 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
 - B. **Iron Pipes** - Nom 3 in. (102 mm) diam (or smaller) cast or ductile iron pipe.
 - C. **Conduit** - Nom 3 in. (102 mm) rigid steel conduit or steel electrical metallic tubing (EMT).
 - D. **Copper Pipes or Tubing** - Nom 3 in. (102 mm) diam (or smaller) Type M (or heavier) or Regular (or heavier) copper pipe or tube.
4. **Packing Material** - Min 2 in. (51 mm) thickness of min 4 pcf (64 kg/m³) mineral wool firmly packed into device flush with top edge of device (Item 2). When W Ratings are required, recess mineral wool 1/4 in. (6 mm) from top edge of device to accommodate sealant (Item 5).
5. **Fill, Void, or Cavity Material*** - (Optional, Not Shown) - Min 1/4 in. (6 mm) depth of fill material applied to fill annulus between penetrant and throat of firestop device at top of floor. L and W Ratings apply only when fill material is used.

SPECIFIED TECHNOLOGIES INC - Pensil 300 Silicone Sealant or Pensil 300SL Silicone Sealant

*Bearing the UL Classification Mark



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System No. F-A-1118

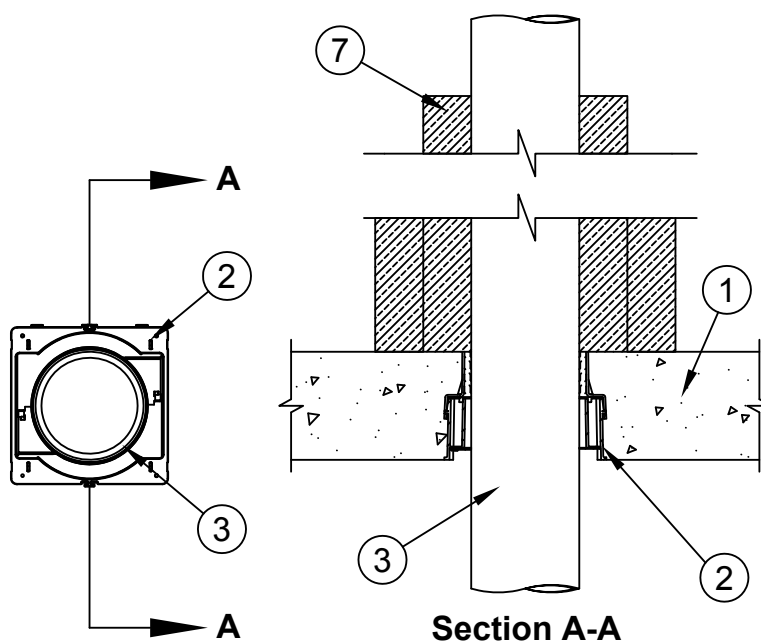
F Rating - 2 Hr

T Rating - 2 Hr

L Rating At Ambient - Less Than 1 CFM/sq ft (See Item 6)

L Rating At 400 F - Less Than 1 CFM/sq ft (See Item 6)

W Rating - Class 1 (See Item 6)



1. **Floor Assembly** - Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete floor.
- 1A. **Alternate Floor Assembly** - (Not Shown) - 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** - Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete, as measured from the top plane of the steel floor units.
 - B. **Steel Floor and Form Units*** - 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.
2. **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 throat of the firestop device may be cut flush with the top surface of the floor or extend beyond the top surface of the floor.

SPECIFIED TECHNOLOGIES INC - SpecSeal CD200, CD200M, CD300, CD300M, CD400 or CD400M 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 CD200DK, CD300DK, or CD400DK Cast In Firestop Device Deck Adapter



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2B. **Firestop Device*** - (Not Shown) - When the concrete thickness exceeds 8 in. (204 mm), a nonmetallic extension tube is used in conjunction with Item 2. Install the extension tube in accordance with the accompanying installation instructions.

SPECIFIED TECHNOLOGIES INC - SpecSeal CD200X, CD300X, or CD400X Cast In Firestop Device Extension

3. **Through Penetrants** - One metallic pipe, tube, 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 the metallic pipes or conduits may be used:
- A. **Steel Pipes** - Nom 4 in. (102 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
 - B. **Iron Pipes** - Nom 4 in. (102 mm) diam (or smaller) cast or ductile iron pipe.
 - C. **Conduit** - Nom 4 in. (102 mm) rigid steel conduit or steel electrical metallic tubing (EMT).
 - D. **Copper Pipes or Tubing** - Nom 4 in. (102 mm) diam (or smaller) Type M (or heavier) or Regular (or heavier) copper pipe or tube.

| Nom Pipe Diam+ | Firestop Device |
|----------------------------------|------------------|
| 1-1/2 to 2-1/2 in. (38 to 64 mm) | CD200 and CD200M |
| 2 to 3-1/2 in. (51 to 76 mm) | CD300 and CD300M |
| 3 to 4 in. (76 to 102 mm) | CD400 and CD400M |

+When metallic pipe, conduit, or tubing with diam smaller than those shown in the table above are used, fill material or packing material shall be installed into the device as described within Item 4 and 5.

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). When W Ratings are required, recess mineral wool 1/4 in. (6 mm) from top edge of device to accommodate sealant (Item 6).
5. **Fill, Void, or Cavity Material*** - Putty - (Not Shown) - When required under Item 4, as an option to Item 4, min 1 in. (25 mm) depth of fill material applied within device flush with top edge of device (Item 2).

SPECIFIED TECHNOLOGIES INC - SpecSeal Putty

6. **Fill, Void, or Cavity Material*** - (Optional, Not Shown) - Min 1/4 in. (6 mm) depth of fill material applied to fill annulus between penetrant and throat of firestop device at top of floor. L and W Ratings apply only when fill material is used.

SPECIFIED TECHNOLOGIES INC - Pensil 300 Silicone Sealant or Pensil 300SL Silicone Sealant

7. **Duct Wrap Material*** - Nom 2 in. (51 mm) thick duct wrap tightly wrapped around penetrant to extend 36 in. (914 mm) above floor. An additional layer of nom 2 in. (51 mm) thick duct wrap tightly wrapped around the first layer of duct wrap to extend 12 in. (305 mm) (914 mm) above floor. All longitudinal seams of both layers of duct wrap are sealed with foil tape.

THERMAL CERAMICS INC - FireMaster® Duct Wrap 2x2, FireMaster Duct Wrap 2x2+, FireMaster FastWrap XL, or Pyroscat Duct Wrap XL

*Bearing the UL Classification Mark

+Bearing the UL Listing Mark



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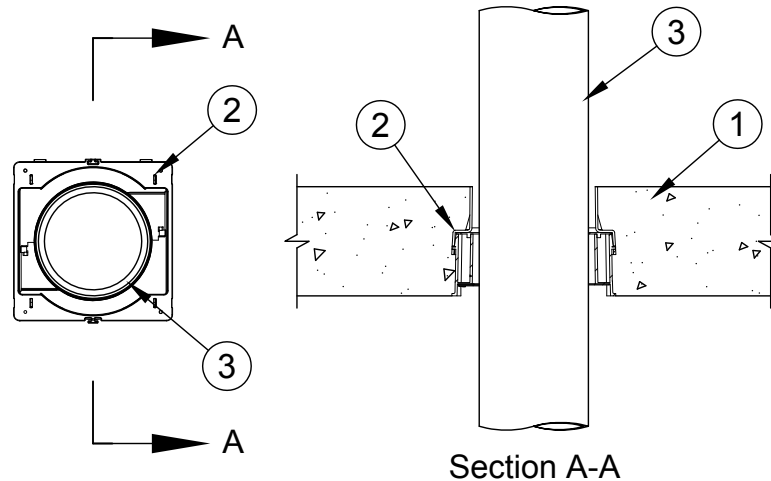
System No. F-A-2192

F Rating - 3 Hr

T Ratings - 0 and 3 Hr (See Item 3)

L Rating At Ambient - Less Than 1 CFM/sq ft (See Item 7)

L Rating At 400 F - Less Than 1 CFM/sq ft (See Item 7)



1. **Floor Assembly** - Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete floor.
- 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** - Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete floor.
 - 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.
2. **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 CD200, CD300, CD400 or CD600 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 CD200DK, CD300DK, CD400DK or CD600DK Cast In Firestop Device Deck Adapter

- 2B. **Firestop Device*** - (Not Shown) - When the concrete thickness exceeds 8 in. (203 mm), a nonmetallic extension tube is used in conjunction with Item 2. Install the extension tube in accordance with the accompanying installation instructions.

SPECIFIED TECHNOLOGIES INC - SpecSeal CD200X, CD300X, CD400X or CD600X Cast In Firestop Device Extension



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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 the 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. **When PVC pipe is used, T Rating is 3 hr.**
 - 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. **When CPVC pipe is used, T Rating is 3 hr.**
 - 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). **When PVC conduit is used, T Rating is 3 hr.**
 - 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. **When ABS pipe is used, T Rating is 3 hr.**
 - E. **Fire Retardant Polypropylene (FRPP) Pipe** - Nom 4 in. (102 mm) diam (or smaller) solid or cellular core Schedule 40 fire retardant polypropylene (FRPP) pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems. **When FRPP pipe is used, T Rating is 0 hr.**

| Nom Pipe Diam+ | Firestop Device |
|--------------------------------|-----------------|
| 1-1/2 or 2 in. (38 or 51 mm) | CD200 |
| 2-1/2 or 3 in. (64 or 76 mm) | CD300 |
| 3-1/2 or 4 in. (89 or 102 mm) | CD400 |
| 6 in. (152 mm) | CD600 |

4. **Fill, Void, or Cavity Material* - Putty** - (Optional, Not Shown) - Min 1 in. (25 mm) depth of fill material applied to fill annulus between penetrant and throat of firestop device at top of floor. **L Ratings apply only when putty fill material is used.**

SPECIFIED TECHNOLOGIES INC - SpecSeal Putty

*Bearing the UL Classification Mark

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System No. F-A-2203

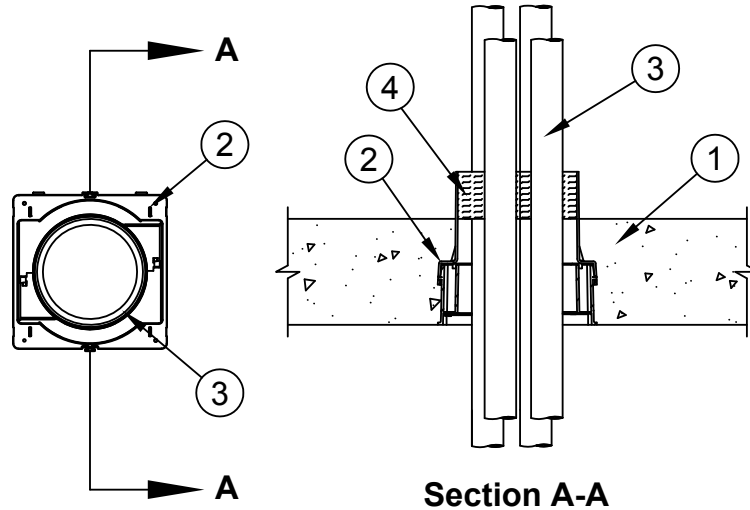
F Rating - 3 Hr

T Ratings - 3 Hr

L Rating At Ambient - Less Than 1 CFM/sq ft (See Item 5)

L Rating At 400 F - Less Than 1 CFM/sq ft (See Item 5)

W Rating - Class 1 (See Item 5)



1. **Floor Assembly** - Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete floor.
- 1A. **Alternate Floor Assembly** - (Not Shown) - 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** - Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete, as measured from the top plane of the steel floor units.
 - B. **Steel Floor and Form Units*** - 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.
2. **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 throat of the firestop device may be cut flush with the top surface of the floor or extend beyond the top surface of the floor.

SPECIFIED TECHNOLOGIES INC - SpecSeal CD200, CD300, or CD400 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 CD200DK, CD300DK, or CD400DK Cast In Firestop Device Deck Adapter



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- 2B. **Firestop Device*** - (Not Shown) - When the concrete thickness exceeds 8 in. (204 mm), a nonmetallic extension tube is used in conjunction with Item 2. Install the extension tube in accordance with the accompanying installation instructions.

SPECIFIED TECHNOLOGIES INC - SpecSeal CD200X, CD300X, or CD400X Cast In Firestop Device Extension

3. **Through Penetrants** - One or more nonmetallic pipes, tubing, or conduits to be installed within the firestop system. Annular space between pipes, conduits, or tubing and periphery of opening shall be min 0 in. (0 mm) (point contact) to max 2 in. (51 mm). Annular space between pipes, conduits, or tubing to be min 1/8 in. (3 mm) to max 1 in. (25 mm). Pipes, tubing, or conduits to be rigidly supported on both sides of the floor assembly. The following types and sizes of the metallic pipes or conduits may be used:
- A. **Polyvinyl Chloride (PVC) Pipe** - Nom 1 in. (25 mm) diam (or smaller) Schedule 40 solid or cellular core PVC pipe for use in vented (drain, waste, or vent) or closed (process or supply) piping systems.
 - B. **Chlorinated Polyvinyl Chloride (CPVC) Pipe** - Nom 1 in. (25 mm) diam (or smaller) SDR11 CPVC pipe for use in closed (process or supply) piping systems.
 - C. **Rigid Nonmetallic Conduit+** - Nom 1 in. (25 mm) diam (or smaller) Schedule 40 PVC conduit installed in accordance with the National Electrical Code (NFPA 70).
 - D. **Crosslinked Polyethylene (PEX) Tubing** - Nom 1 in. (25 mm) diam (or smaller) SDR 9 PEX tubing for use in closed (process or supply) piping systems.
 - E. **Optical Fiber Raceways (OFR)+** - Nom 1 in. (25 mm) diam (or smaller) optical fiber raceway (innerduct) formed of PVC or PVDF installed in accordance with the National Electrical Code (NFPA 70).
 - F. **Electrical Nonmetallic Tubing (ENT)+** - Nom 1 in. (25 mm) diam (or smaller) ENT formed of PVC installed in accordance with the National Electrical Code (NFPA 70).
4. **Packing Material** - Min 2 in. (51 mm) thickness of min 4 pcf (64 kg/m³) mineral wool firmly packed into device flush with top edge of device (Item 2). When W Ratings are required, recess mineral wool 1/4 in. (6 mm) from top edge of device to accommodate sealant (Item 5).
5. **Fill, Void, or Cavity Material*** - (Optional, Not Shown) - Min 1/4 in. (6 mm) depth of fill material applied to fill annulus between penetrant and throat of firestop device at top of floor. L and W Ratings apply only when fill material is used.

SPECIFIED TECHNOLOGIES INC - Pensil 300 Silicone Sealant or Pensil 300SL Silicone Sealant

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+Bearing the UL Listing Mark



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System No. F-A-3055

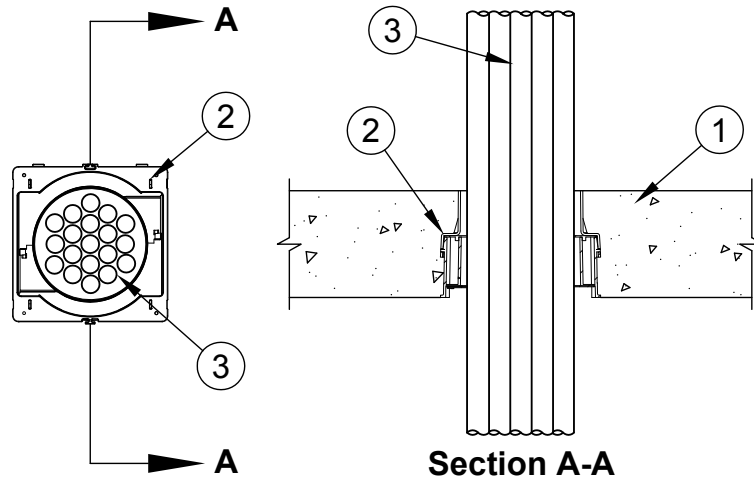
F Rating - 3 Hr

T Rating - 1/2 Hr

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 Items 3, 4 and 6)



1. **Floor Assembly** - Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete floor.
- 1A. **Alternate Floor Assembly** - (Not Shown) - The fire rated unprotected concrete and steel deck 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** - Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete, as measured from the top plane of the steel floor units.
 - 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.
2. **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 CD200, CD200M, CD300, CD300M, CD400 or CD400M 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 CD200DK, CD300DK, or CD400DK Cast In Firestop Device Deck Adapter

- 2B. **Firestop Device*** - (Not Shown) - When the concrete thickness exceeds 8 in. (203 mm), a nonmetallic extension tube is used in conjunction with Item 2. Install the extension tube in accordance with the accompanying installation instructions.

SPECIFIED TECHNOLOGIES INC - SpecSeal CD200X, CD300X, or CD400X Cast In Firestop Device Extension



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3. **Cables** - Cables to be rigidly supported on both sides of the assembly. When L or W Ratings are required, aggregate cross-sectional area of cables in device to be max 40 percent of the cross-sectional area of the opening in device. Min separation between cables and between cables and periphery of opening is 1/8 in. (3 mm). See table below for max cable bundle diameter. Any combination of the following types and sizes of copper conductor cables may be used:
- A. Max 1/C 750 kcmil cable with crosslinked polyethylene (XLPE) jacket.
 - B. Max 7/C No. 12 AWG or max 12/C No. 14 AWG cable with XLPE insulation and jacket.
 - C. Max 400 pair No. 24 AWG cable with PVC or plenum-rated insulation and jacket.
 - D. Max 3/8 in. diam optical fiber communication cable with PVC or plenum-rated jacket.
 - E. Max 1/2 in. diam aluminum or steel armored optical fiber communication cable with PVC or plenum-rated jacket.
 - F. Max 4 pair No. 24 AWG Cat 5, Cat 5E or Cat 6 cable with PVC or plenum-rated jacket.
 - G. Coaxial cable with fluorinated ethylene insulation and jacket having a max diam of 5/8 in. (16 mm).

| Max Cable Diam, in. (mm) | Firestop Device |
|--------------------------|------------------|
| 2-3/8 (60) | CD200 and CD200M |
| 3-1/2 (89) | CD300 and CD300M |
| 4-1/2 (114) | CD400 and CD400M |

+When cable bundle diam is smaller than those shown in the table above, fill material or packing material shall be installed into the device as described within Item 4 and 5.

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 3). When W Ratings are required, min 4 in. (102 mm) thickness of min 4 pcf (64 kg/m³) mineral wool firmly packed into the top of the device (Item 2) and recessed min 1/4 in. (6 mm) from top edge of device to accommodate for sealant (Item 6).
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 within device flush with top edge of device (Item 2).

SPECIFIED TECHNOLOGIES INC - SpecSeal Putty

6. **Fill, Void, or Cavity Material*** - (Optional, Not Shown) - To achieve L or W Ratings, apply min 1/4 in. (6 mm) depth of sealant atop packing material (Item 4) flush with top edge of device with all interstices between cables filled.

SPECIFIED TECHNOLOGIES INC - Pensil 300 Sealant, SpecSeal Series SIL300 Sealant or Pensil 300 SL Sealant or SpecSeal Series SIL300 Sealant

*Bearing the UL Classification Mark

+Bearing the UL Listing Mark



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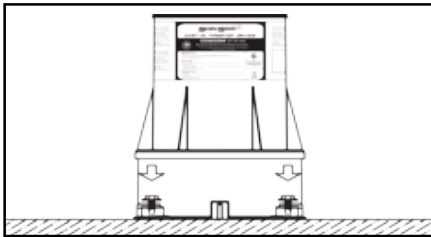
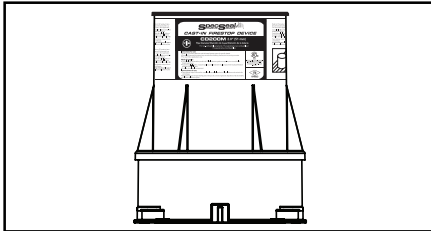
F-A-3055
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CAST IN FIRESTOP DEVICE

APPLICATIONS

SpecSeal® Cast-In Firestop Devices are engineered for use in concrete floors to form firestopped openings for various through penetrating items including plastic or metal pipes, cables, and insulated pipes.



PERFORMANCE

SpecSeal® Cast-In Firestop Devices have been successfully tested in accordance with ASTM E814 (ANSI/UL1479) in one, two, and three hour fire-rated floor assemblies. Consult factory for individual system designs and application requirements.

SPECIFICATIONS

The firestop system shall be a molded plastic sleeve supplied with an intumescent firestopping system with an integral water and smoke resistant seal. The device shall be installed in accordance with the manufacturer's written instructions. The device shall also be classified by Underwriters Laboratories Inc. (UL) as a through-penetration firestop device when tested to ASTM E814 (ANSI/UL1479) for up to a 3 hr rating.

PHYSICAL PROPERTIES

Table A:

| PROPERTIES | CAST-IN FIRESTOP DEVICE |
|-------------------------|-------------------------|
| Shell Construction: | Polypropylene |
| Expansion Begins: | 320° F (160° C) |
| Volume Expansion: | 250X (free expansion) |
| In Service Temperature: | -- |
| Shelf Life | None |
| Standard Height | 8 in. |

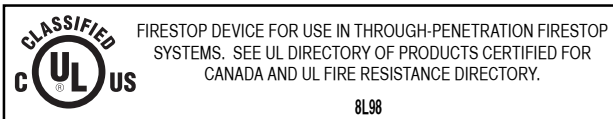
PRODUCT DESCRIPTION

SpecSeal® Cast-In Firestop Devices consist of molded plastic sleeves incorporating an intumescent firestopping system and flexible smoke and water resistant seal secured with a steel retaining plate system. The molded plastic body can be easily cut as required to accommodate concrete thickness even in as little as 2-1/2 in. (64 mm) of concrete. The 2, 3, 4 and 6 in. (51, 76, 102 and 152 mm) devices are sized to accommodate pipes ranging from 1-1/2 to 6 in. (38 to 152 mm) trade size.

Accessories are available to adapt SpecSeal® Cast-In Firestop Devices to other uses. Available accessories include a steel deck kit to facilitate installation in fluted metal deck as well as extension tubes to lengthen the device for situations where the floor thickness is greater than 8 in. (204 mm).

FEATURES

- Easy installation, eliminates core drilling
- Pipes can be installed from top or bottom
- Integral water and smoke resistant gasket
- Color coded for easy identification. Red for combustible or noncombustible penetrants; black for noncombustible penetrants
- Factory-metered dose of intumescence; eliminates guess work



SPECIFIED DIVISIONS

| Division | Section | Title |
|----------|----------|------------------------|
| 3 | 03 11 00 | Concrete Forming |
| 3 | 03 30 00 | Cast-in-Place Concrete |
| 7 | 07 84 00 | Firestopping |

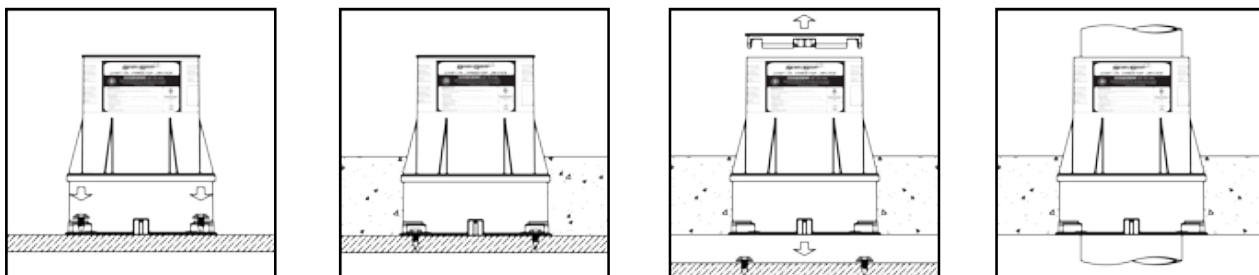
Table B:

| DIMENSIONS | | | |
|-------------|---------------------------|-------------------------------|---------------------------------------|
| ID (in. mm) | Device Footprint (in. mm) | Deck Plate Footprint (in. mm) | Nom. Steel Deck Opening Size (in. mm) |
| 2 (51) | 5-1/8 x 5-1/8 (131 x 131) | 5-1/8 x 10-3/8 (131 x 264) | 3-5/8 (93) |
| 3 (76) | 5-3/4 x 5-3/4 (146 x 146) | 5-3/4 x 11 (146 x 280) | 4-1/4 (108) |
| 4 (102) | 6-3/4 x 6-3/4 (172 x 172) | 6-3/4 x 12 (172 x 305) | 5-1/4 (134) |
| 6 (152) | 9 x 9 (229 x 229) | 9 x 15 (229 x 381) | 7-1/4 (184) |



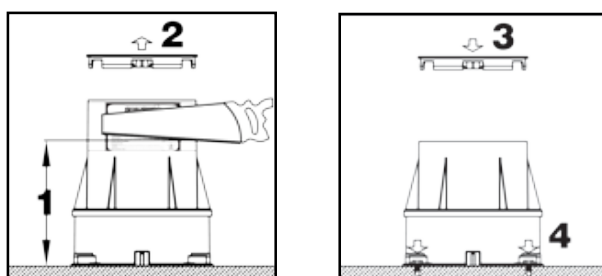
INSTALLATION INSTRUCTIONS

The following steps represent a typical installation for SpecSeal® Cast-In Firestop Devices. See Table B for physical dimensions. Consult installation instructions for more specific information.



OPTIONAL INSTALLATION INSTRUCTIONS

Cast-In Firestop Device may be cut to slab thickness prior to installation.

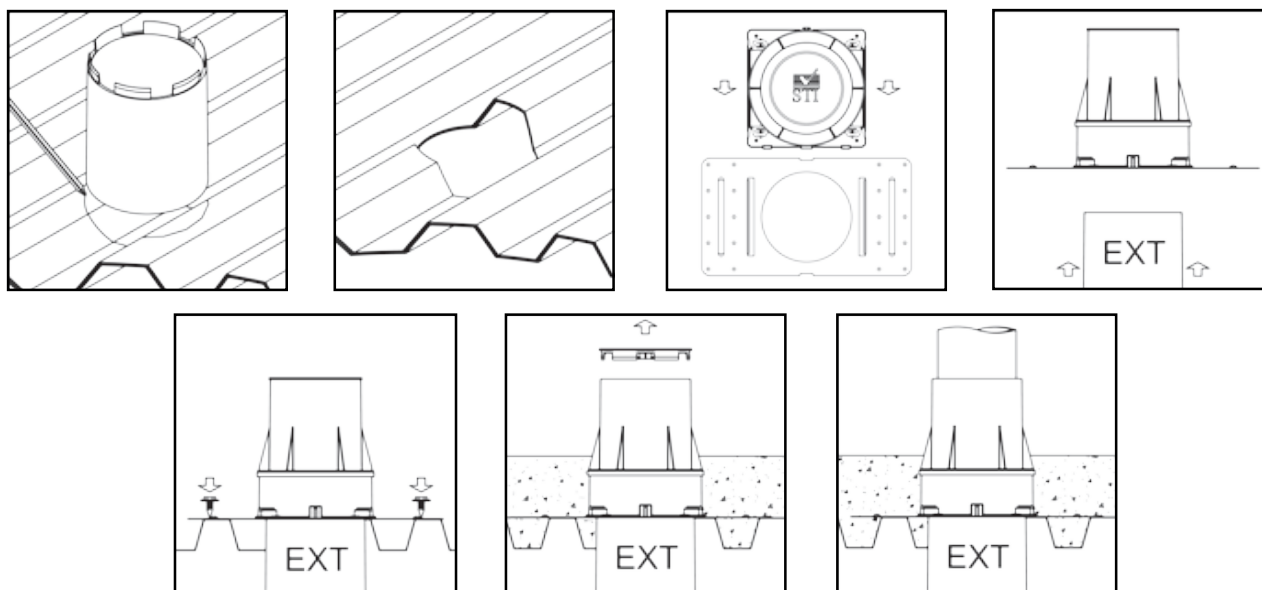


Extension may be added for thicker concrete flooring



CONCRETE OVER STEEL DECK

Use appropriate Cast-In Firestop Device (see table above) with listed accessory per instructions included with products.



DO NOT USE DEVICE FOR WALL APPLICATIONS

MAINTENANCE

Installations should be inspected periodically for subsequent damage. Any damage should be repaired using SpecSeal® products.

TECHNICAL SERVICE

Specified Technologies Inc. provides toll free technical support to assist in product selection and appropriate installation design. UL Systems, Material Safety Data Sheets and other technical information is available at the Technical Library at www.stifirestop.com.

PRECAUTIONARY INFORMATION

No unusual hazards are known or expected. Observe normal safety procedures during installation.

AVAILABILITY

SpecSeal® Cast-In Firestop Devices are available from authorized STI distributors worldwide. For information on where to buy, please visit www.stifirestop.com or call 800.992.1180.

ORDERING INFORMATION

CATALOG NO. DESCRIPTION

Devices for Combustible and Noncombustible Penetrants

| | |
|-------|--|
| CD200 | 2" (51 mm) Trade Size Cast-In Firestop Device |
| CD300 | 3" (76 mm) Trade Size Cast-In Firestop Device |
| CD400 | 4" (102 mm) Trade Size Cast-In Firestop Device |
| CD600 | 6" (152 mm) Trade Size Cast-In Firestop Device |

Devices for Noncombustible Penetrants

| | |
|--------|--|
| CD200M | 2" (51 mm) Trade Size Cast-In Firestop Device |
| CD300M | 3" (76 mm) Trade Size Cast-In Firestop Device |
| CD400M | 4" (102 mm) Trade Size Cast-In Firestop Device |
| CD600M | 6" (152 mm) Trade Size Cast-In Firestop Device |

Extension Tubes

| | |
|--------|---------------------------------------|
| CD200X | 2" (51 mm) Trade Size Extension Tube |
| CD300X | 3" (76 mm) Trade Size Extension Tube |
| CD400X | 4" (102 mm) Trade Size Extension Tube |
| CD600X | 6" (152 mm) Trade Size Extension Tube |

Deck Adapter Kits

| | |
|---------|---|
| CD200DK | 2" (51 mm) Trade Size Metal Deck Adapter |
| CD300DK | 3" (76 mm) Trade Size Metal Deck Adapter |
| CD400DK | 4" (102 mm) Trade Size Metal Deck Adapter |
| CD600DK | 6" (152 mm) Trade Size Metal Deck Adapter |

IMPORTANT NOTICE: All statements, technical information, and recommendations contained herein are based upon testing believed to be reliable, but the accuracy and completeness thereof is not guaranteed.

WARRANTY

Specified Technologies Inc. manufactures its goods in a manner to be free of defects. Should any defect occur in its goods (within one year), Specified Technologies Inc., upon prompt notification, will at its option, exchange or repair the goods or refund the purchase price.

LIMITATIONS AND EXCLUSIONS:

THIS WARRANTY IS IN LIEU OF ALL OTHER REPRESENTATIONS EXPRESSED OR IMPLIED (INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR USE) AND UNDER NO CIRCUMSTANCES SHALL SPECIFIED TECHNOLOGIES INC. BE RESPONSIBLE FOR ANY INCIDENTAL OR CONSEQUENTIAL PROPERTY DAMAGE OR LOSSES. PRIOR TO USE, THE USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR ITS INTENDED USE, AND THE USER ASSUMES ALL RISKS AND LIABILITY FOR SUBSEQUENT USE. No statement or recommendation not contained herein shall have any force or effect unless in an agreement signed by officers of seller and manufacturer.

STI is a member of the following organizations:



Specified Technologies Inc.
THE FIRESTOP AUTHORITY

200 Evans Way • Somerville, NJ 08876 | Toll Free: 800-992-1180 • F: 908.526.9623



Technical Service 1-800-992-1180
www.stifirestop.com

STI Product Data Sheet • Cast-In Firestop Device • FOD-5113 01/2009



Material Safety Data Sheet

20-JANUARY-2009

SPECSEAL® CAST IN FIRESTOP DEVICE

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Material Identification

| | |
|-----------------|-----------------------------------|
| PRODUCT NAME | SPECSEAL® CAST IN FIRESTOP DEVICE |
| CHEMICAL FAMILY | Article |

Company Identification

MANUFACTURER/DISTRIBUTOR

Specified Technologies Inc.
200 Evans Way
Somerville, NJ 08876

PHONE NUMBERS

Product Information : 1-908-526-8000
Emergency : 1-800-255-3924

OTHER INFORMATION

A Material Safety Data Sheet is not required on Specseal® Cast In Firestop Device due to the fact that this product is an "article" as defined within 29CFR 1910.1200. Accordingly, this product is exempt from OSHA Labeling/MSDS requirements.

This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief accurate and reliable as of the data compiled. However, no representation, warranty, or guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information.

Responsibility for MSDS :

Specified Technologies Inc.
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