

Specified Technologies, Inc.
Design No. STI/PF 120-08
Through Penetration
SpecSeal SSC Collar, SpecSeal RED2 WrapStrip,
SpecSeal LCI, SpecSeal SSP Putty
CAN/ULC S115 at 50 Pa (0.20" of H₂O)
Rating: See Table 1

Table 1. Ratings

Pipe Diam. (in.) ¹	Diam of Opening (in.) ¹	SSC Collar or Required # of Layers or Thickness (in.) ¹	Fasteners Required	Sealant	Penetrating Item (Sch 40) ²	Rating (min)			
						F	FT	FH	FTH
1.5	2	SSC 150 or 1/4 x 1- 1/2 [2 Layers]	2	Required	PVC, ccPVC, RNC	120	0	120	0
				Optional	XFR 15-50 PVC, CPVC, ABS, ccABS	120	0	15	0
2	2.5	SSC 200 or 1/4 x 1- 1/2 [2 Layers]	2	Required	PVC, ccPVC, RNC	120	0	120	0
				Optional	XFR 15-50 PVC, CPVC, ABS, ccABS	120	0	15	0
3	4	SSC 300 or 1/4 x 1- 1/2 [3 Layers]	3	Required	XFR 15-50 PVC, PVC, ccPVC, RNC, ABS, ccABS	120	0	120	0
4	5	SSC 400 or 1/4 x 1- 1/2 [4 Layers]	3	Optional	XFR 15-50 PVC, PVC, ccPVC, RNC, ABS, ccABS	120	0	120	0

¹ Convert inches to millimeters multiply by 25.4.

² XFR 15/50 PVC, Proprietary Extra Fire Resistant Polyvinyl Chloride, CPVC-Chlorinated Polyvinyl Chloride, PVC-Polyvinyl Chloride, ccPVC Cellular Core Polyvinyl Chloride, RNC Rigid Non-metallic Conduit (Made of PVC Sch 40 or thinner), ABS-Acrylonitrile Butadiene Styrene, ccABS-Cellular Core Acrylonitrile Butadiene Styrene

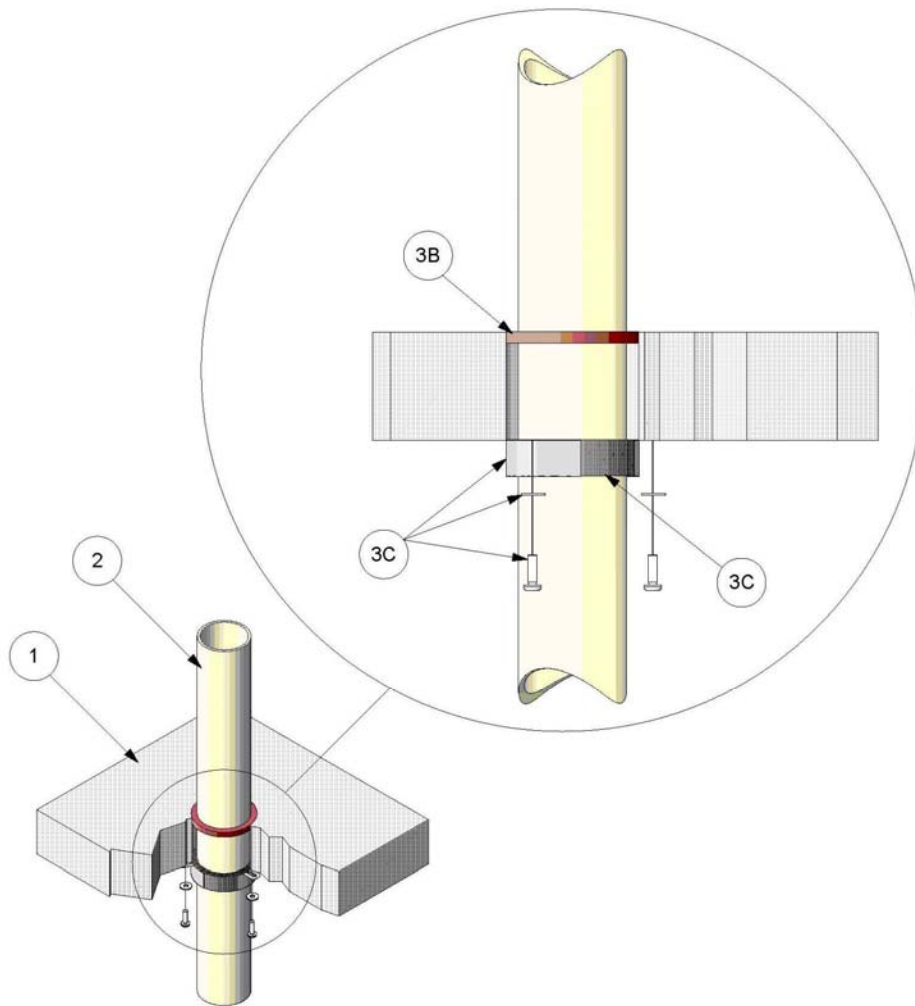


Figure 1. SpecSeal SSP or SpecSeal LCI

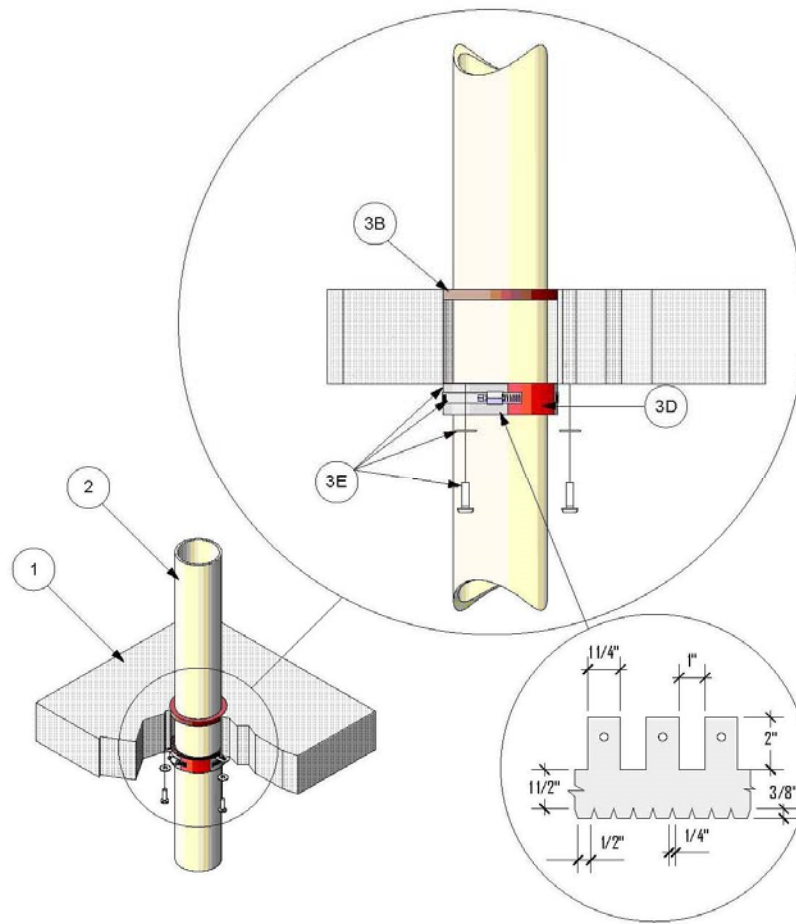


Figure 2. Optional Steel Collar and SpecSeal RED2 Wrap Strip with Hose Clamp

- 1. FLOOR/CEILING ASSEMBLY** - Use a two hour fire-rated floor/ceiling assembly consisting of min. 4-1/2 in. (114 mm) thick normal weight (100-150 pcf) reinforced concrete. Create a round through-opening with diameter in accordance with the Table 1.
- 2. PENETRATING ITEM** – See Table 1 for Penetrating Item Type and Size. All Pipe wall thicknesses are Sch 40 and are intended for use in vented or closed systems. Concentrically position in the opening made in the Floor/Ceiling Assembly (Item 1) the desired pipe. Establish an annular space between the Penetrating Item (Item 2) and the edge of the opening in the Floor/Ceiling Assembly (Item 1) so as to center the Penetrating Item (Item 2) in the opening in the Floor/Ceiling Assembly (Item 1).
- 3. FILL, VOID OR CAVITY MATERIAL** – Apply the following materials to the annular space between the Floor/Ceiling Assembly (Item 1) and the Penetrating Item (Item 2)
 - A. Forming Material (Optional not shown) - Install polyethylene backer rod, mineral wool batt insulation or glass fiber insulation friction fit into opening as a permanent form to facilitate installation of Sealant (Item 3B).



- B. CERTIFIED MANUFACTURER: Specified Technologies Inc.

CERTIFIED PRODUCT: Sealant

MODEL: SpecSeal SSP Putty or SpecSeal LCI

Apply a min. 1/2 in. (13mm) depth of sealant fill material in the annular space between the Floor/Ceiling Assembly (Item 1) and the Penetrating Item (Item 2) to the annular space flush with the top of the Floor/Ceiling Assembly (Item 1) when required by the Table 1 to achieve desired ratings.

- C. CERTIFIED MANUFACTURER: Specified Technologies Inc.

CERTIFIED PRODUCT: Prefabricated intumescent collar

MODEL: SpecSeal SSC Collar (see Table 1 for applications)

Collar - Install around the Penetrating Item (item 2) in accordance with the accompanying installation instructions. Device incorporates anchor tabs for attachment to the bottom surface of the Floor/Ceiling Assembly by means of 1/4 in. (6mm) diameter by 1-1/4 in. (32mm) long concrete anchors in conjunction with min. 1 inch (26mm) diameter steel fender washers. As an alternate to the steel concrete anchors, nominal 1-1/4 in. (32mm) long steel powder actuated fasteners provided with 3/4 in. (19mm) diameter

steel washers may be used to secure anchor tabs.

- D. CERTIFIED MANUFACTURER: Specified Technologies Inc.

CERTIFIED PRODUCT: Intumescent Wrap Strip

MODEL: SpecSeal RED2 Wrap Strip (see Table 1 for applications)

WrapStrip - As an alternate to Collar (Item 3B) and in conjunction with Restraining Collar (Item 3E), nominal 1/8 in. (3.2mm) by 1-1/2 in. (38 mm) wide SpecSeal RED2 Wrapstrips faced on both sides with a plastic film. Strips tightly wrapped around nonmetallic pipe with edges butted against the underside of the floor. The wrap strips may be installed with butted seams in successive layers aligned or offset or continuously wrapped around the Penetrating Item (Item 2). Temporarily hold Wrap Strip layers in place with tape. See Table 1 for minimum number of layers required per nominal pipe size.

- E. Steel Collar - As an alternate to Collar (Item 3C) and in conjunction with Wrap Strip (Item 3D) use a nominal 1-1/2 in. (38mm) deep collar with 1 in. (25mm) wide by 2 inch (51mm) long anchor tabs for attachment to concrete and min. 1/2 in. (6mm) wide retaining tabs located opposite the anchor tabs. Steel collar, with anchor tabs bent outward 90 degrees, wrapped tightly around wrap strip layers with min. 1 in. (25mm) overlap at seam. Retainer tabs to be bent 90 degrees toward pipe to lock



wrap strips in position. Anchor tabs to be pressed tightly against floor or wall surface(s). Collar to be secured in place with one 1/2 in. (13mm) wide by 0.028 in. (0.7mm) thick stainless steel hose clamp. As an alternate to the hose clamps, collar secured together by means of three No. 8 by 1/4 in. (6 mm) long steel screws. Collar to be secured to floor or wall surface(s) with 1/4 in. (6 mm) dia. by min. 1-1/4 in. (32 mm) long steel concrete anchors in conjunction with min. 1 in. (25 mm) dia. steel fender

washers. As an alternate to the steel concrete anchors, nominal 1-1/4 in. (32 mm) long steel powder actuated fasteners provided with 3/4 in. (19 mm) dia. steel washers may be used to secure anchor tabs. The number of fasteners is dependent upon the nominal diameter of the Penetrating Item (Item 2). Refer to Table 1 for applicable number of fasteners.

Consult the listing report on the Directory of Building Products (<https://bpdirectory.intertek.com>) for the edition of the standard(s) evaluated.

Compliance of the assembly described in this Design Listing with the referenced standard relies on verification that the assembly constructed in the field is consistent with that described herein. Intertek certified products may be verified by the approved Intertek label; other products must be verified by the Authority Having Jurisdiction as meeting the specifications stated herein.