3M Company
Design No. 3M/PHV 120-02
Through Penetration
3M™ FireStrap™
3M™ FirePlug™
3M™ Fire Barrier Mortar
3M™ FireDam FD-150+
3M™ Fire Barrier IC 15WB+
3M™ Fire Barrier CP 25WB+
3M™ Fire Barrier 3000WT
CAN/ULC-S115
Rating: See Table 1
Pressure Differential: Positive, 50 Pa (0.20 in. w.g.)

TABLE 1. RATINGS

		CAN/ULC-S115			
Penetrating Item	**Max. Pipe Size**	**F**	**FT**	**FH**	**FTH**
PVC	**2 in.**	**2 Hr**	**0 Hr**	**2 Hr**	**0 Hr**
System XFR	**2 in.**	**2 Hr**	**0 Hr**	**2 Hr**	**0 Hr**

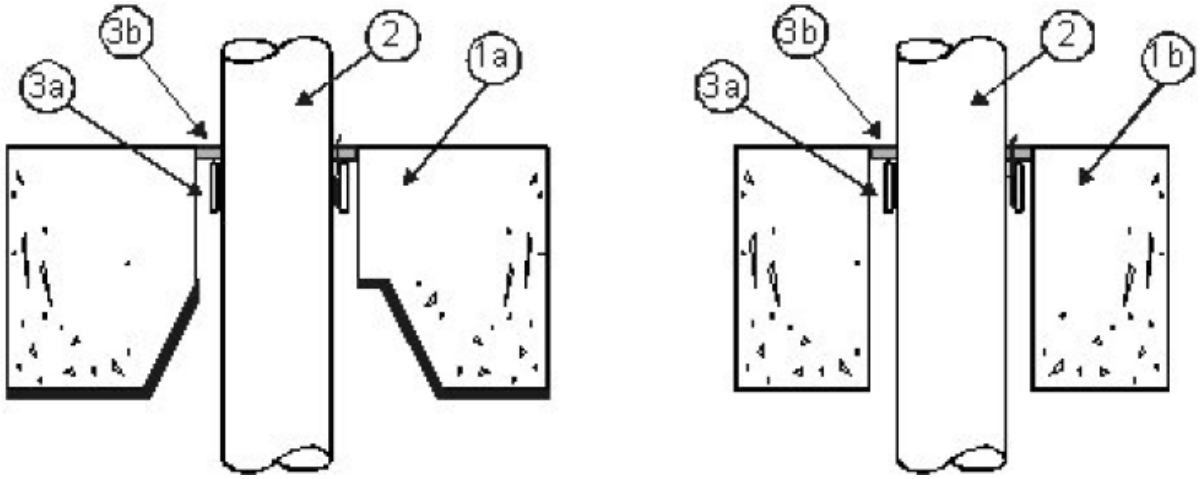

Figure 1. Penetration Detail

1. **FLOOR ASSEMBLY:** Code conforming 2-hour fire-rated floor assembly, nominal 2-1/2-in. concrete, Q Deck or Fluted Deck, normal or low density cast concrete.

   1a/b. Floor or Wall Assembly: Code conforming 2 hour fire-rated floor or wall assembly, nominal 4-1/2-in. thickness, normal or low density cast concrete or Hollow Core Concrete (not shown). Wall may also be constructed of nominal 8-in. thick concrete blocks (filled or unfilled).

2. **PENETRATING ITEMS:** (See Table 1) Nominal 2-in. diameter, Schedule 40, PVC and System XFR pipes for use in DWV (Drain, Waste and Vent) or Closed (Process and Supply) piping systems. Ratings achieved will equal that of floor or wall assembly.

3. **FIRESTOP SYSTEM COMPONENTS:**

   a. **Certified Products:**
   - **3M™ FireStrap™**
   - **3M™ FirePlug™**
   - **3M™ Fire Barrier Mortar**

   Install 3M™ FireStrap™ or 3M™ FirePlug™ within opening, recessed 1/4 in. from the floor surface, according to the manufacturer's instructions. For Hollow Core Concrete install on the underside flush with the bottom surface and apply sealant (Item 3b) on floor side, 1/2-in. thickness over 1-in. thickness of tightly packed, 4 pcf, Intertek-Certified mineral wool, recessed 1/2 in. from the floor surface, according to the manufacturer's instructions. For walls install firestop system flush to the surface on both sides. To reduce hole diameter to the size listed, back fill with 3M™ Fire Barrier Mortar or non-shrink grout.

Pipe Size	Hole Size
1-1/2 in.	3 in.
2 in.	3 in.

2 **FILL, VOID, OR CAVITY MATERIAL:**

Certified Products: Sealant
- **3M™ FireDam FD-150+**
- **3M™ Fire Barrier IC 15WB+**
- **3M™ Fire Barrier CP 25WB+**
- **3M™ Fire Barrier 3000WT**

Apply to seal the annular space between the opening and the firestop device (Item 3a), to a 1/4-in. thickness flush with the floor or wall surface. Firestop system is applied to both sides for wall applications.

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.