

3M Company
Design No. 3M/PHV 120-08
Through Penetration
3M™ FireStrap™
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

Penetrating Item	Max. Pipe Size	CAN/ULC-S115
		F, FT, FH, FTH
PVC	2 in.	2 Hr
ccABS	3 in.	2 Hr
ABS	3 in.	2 Hr
PVC – Thin Wall	2 in.	2 Hr

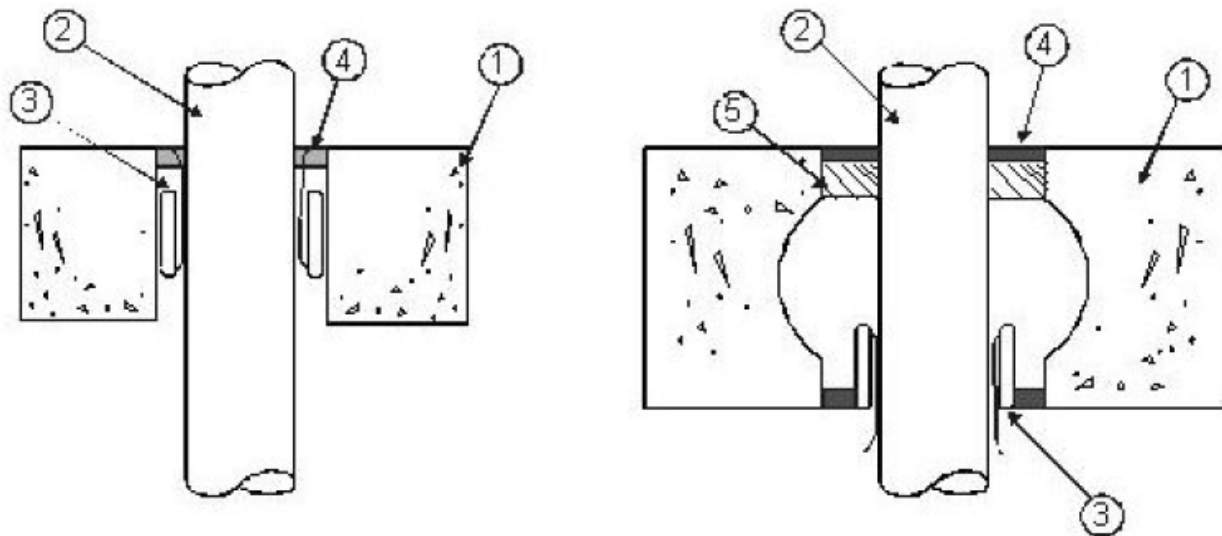


Figure 1. Penetration Detail



1. **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 concrete core. 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, ccABS, ABS, PVC pipes for use in DWV (Drain, Waste and Vent) or Closed (Process and Supply) piping systems and PVC- Thin Wall Vacuum Tubing (nominal 2-in. diameter). Ratings achieved will equal that of floor or wall assembly (Item 1).

3. **FIRESTOP SYSTEM COMPONENTS:**

a. **Certified Products:**

- **3M™ FireStrap™**
- **3M™ Fire Barrier Mortar**

Install 3M™ FireStrap™ within opening, recessed 1-1/4 in. from either surface for solid concrete floor applications, according to the manufacturer's instructions. For Hollow Core Concrete install on the underside flush with the bottom 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. **Use 3M™ Firestrap™ 1-1/2 in. for PVC – Thin Wall Vacuum Tubing (nominal 2-in. diameter).

Pipe Size	Hole Size
1-1/2 in.	2-1/2 in.
2 in.	3 in.
3 in.	4-1/2 in.

4. **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 1/2-in. thickness flush with the floor or wall surface. Firestop system is applied to both sides for wall applications.

5. **FORMING MATERIAL:**

Minimum 1-in. thickness of Intertek-Certified, 4 pcf, mineral wool tightly packed around the pipe, recessed 1/2-in. from the floor or wall surface.

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.