3M Company
Design No. 3M/PHV 120-07
Through Penetration
3M™ Fire Barrier Ultra PPD
3M™ Fire Barrier Ultra RC Pack
3M™ Fire Barrier GS Wrap Strip
3M™ Fire Barrier RC-1 Collar
3M™ Fire Barrier IC 15WB+
3M™ Fire Barrier CP 25WB+
3M™ Fire Barrier 3000WT
3M™ FireDam 150+

CAN/ULC-S115
Rating: See Table 1
Pressure Differential: Positive, 50 Pa (0.20 in. w.g.)

TABLE 1. RATINGS

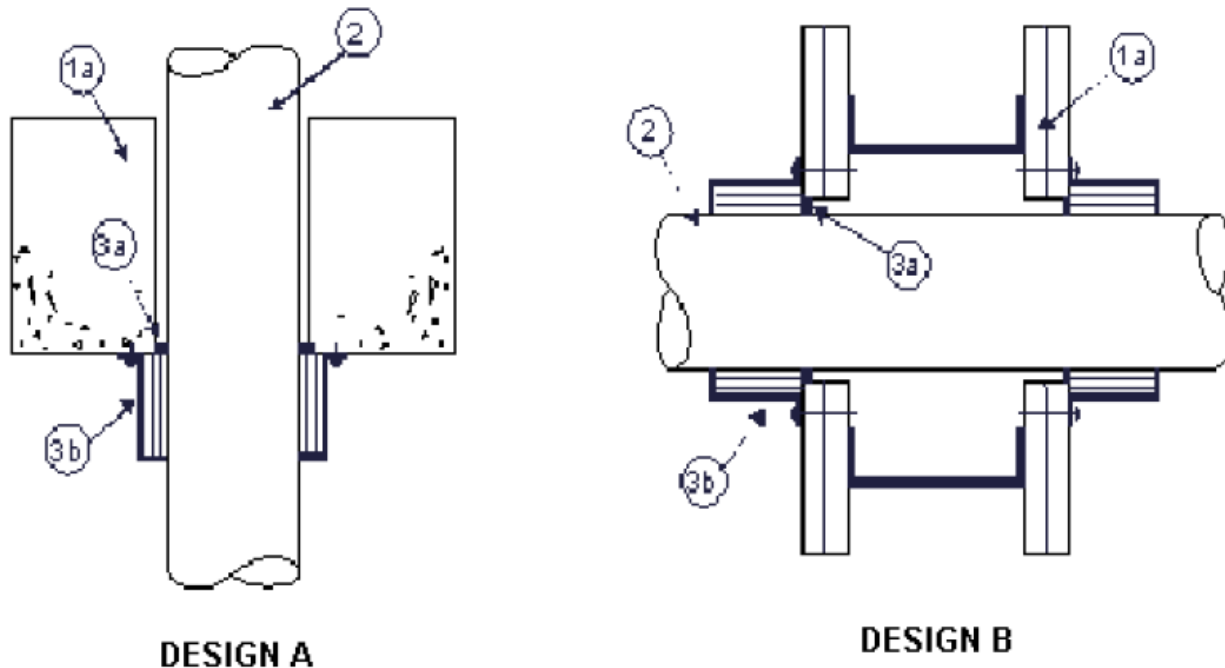| Penetrating Item	Pipe Size	DESIGN A CAN/ULC-S115		DESIGN B CAN/ULC-S115	
		F, FH	FT, FTH	F, FH	FT, FTH
PVC	1-1/2 in. to 4 in.	2 Hr	1-1/2 Hr	2 Hr	2 Hr
System XFR	1-1/2 in. to 4 in.	2 Hr	1-1/2 Hr	2 Hr	2 Hr

Figure 1. Penetration Detail

1. **FLOOR OR WALL ASSEMBLY:**
   a) **Design A: Floor or Wall Assembly**
   Code conforming 2-hour fire-rated floor or wall assembly, nominal 4-1/2-in. thick normal or low density cast concrete or hollow core concrete. Wall may also be constructed of nominal 8-in. thick concrete blocks (filled or unfilled).
   b) **Design B: Wall Assembly**
   Code conforming 2 hour fire-rated wall, metal or wood framed gypsum wallboard, wall assembly.

2. **PENETRATING ITEMS:** (See Table 1) Nominal 4-in. diameter, Schedule 40, PVC and System XFR pipes, used for DWV (Drain, Waste & Vent) or Closed (Process & Supply) piping systems. Ratings achieved will equal that of the rated assembly (Item 1).

3. **FIRESTOP SYSTEM COMPONENTS:**
   a) **Certified Products: Sealant**
   - **3M™ Fire Barrier CP 25WB+**
   - **3M™ Fire Barrier IC 15WB+**
   - **3M™ Fire Barrier 3000WT**
   - **3M™ FireDam FD-150+**

   Apply a 1/4-in. thickness of sealant to fill the annular space at the pipe penetration, prior to the installation of the firestop device (Item 3b).

   b) **Certified Products: 3M™ Fire Barrier Ultra RC Pack or 3M™ Fire Barrier Ultra PPD:** Device to be installed on underside of floors and both sides of walls and latched around pipe.
   Anchors

Masonry: Secure firestop device with 1/4-in. diameter by 1-1/4-in. long steel anchors, Tapcon® or equivalent fasteners in conjunction with 1-1/4-in. diameter, steel fender washers.

Gypsum Wallboard: Secure firestop device with 1/4-in. diameter, hollow dry wall anchors or steel toggle bolts in conjunction with 1-1/4-in. diameter, steel fender washers.

Table 2. Size Chart

Pipe Size	Max. Opening	3M™ Fire Barrier Ultra RC Pack	3M™ Fire Barrier Ultra PPD	Ultra GS Wrap Layers	Fasteners
1-1/2 in.	2-1/2 in.	RC Pack 2	PPD 2.0	1	2
2 in.	3 in.	RC Pack 2	PPD 2.0	1	2
3 in.	4 in.	RC Pack 3	PPD 3.0	2	3
4 in.	5 in.	RC Pack 4	PPD 4.0	3	4

c) **Certified Products: 3M™ Fire Barrier Ultra GS Wrap Strip in 3M™ Fire Barrier RC-1 Collar:** (Not Shown) Use nominal 1/8-in. thick, 2-in. wide 3M™ Fire Barrier Ultra GS Wrap Strip and nominal 2-in. wide 3M™ Fire Barrier RC-1 Collar as an alternative to 3M™ Fire Barrier Ultra RC Pack. Install the wrap strip tightly around pipe continuously with the same number of layers as required for 3M™ Fire Barrier Ultra RC Pack. Butt the wrap strips tightly against floor or wall surface. Use aluminum foil tape, steel wire tie, or equivalent to hold wrap strip in place temporarily. Use 3M™ Fire Barrier RC-1 collar to retain the wrap strip. Bend the anchor tabs outward 90 degrees and install the collar tightly around the wrap strip with 1-in. overlap at the ends. Anchor tabs to be pressed tightly against floor or wall surfaces, and collar to be compressed around wrap strip layers, secured with 1/2-in. wide stainless steel hose clamp at the middle of the collar. Fasten the collar tabs to the underside for floors or to both sides for wall applications as specified for the 3M™ Fire Barrier RC-1 Collar.

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.