

3M Company
Design No. 3M/PHV 120-04
Through Penetration
3M™ Fire Barrier Ultra PPD
3M™ Fire Barrier Ultra RC Pack
3M™ Fire Barrier Ultra GS Wrap Strip
3M™ Fire Barrier RC-1 Collar
3M™ Fire Barrier CP 25WB+
3M™ Fire Barrier 3000WT

CAN/ULC-S115, ASTM E814
Rating: See Table 1

Pressure Differential: Positive, 50 Pa (0.20 in. w.g.)

TABLE 1. RATINGS

Design	Penetrating Item	Max. Pipe Size	CAN/ULC-S115		ASTM E814	
			F, FH	FT, FTH	F	T
A	PEX	1 in.	2 Hr	0 Hr	2 Hr	0 Hr
B & C	PEX	1 in.	1 & 2 Hr	0 Hr	1 & 2 Hr	0 Hr

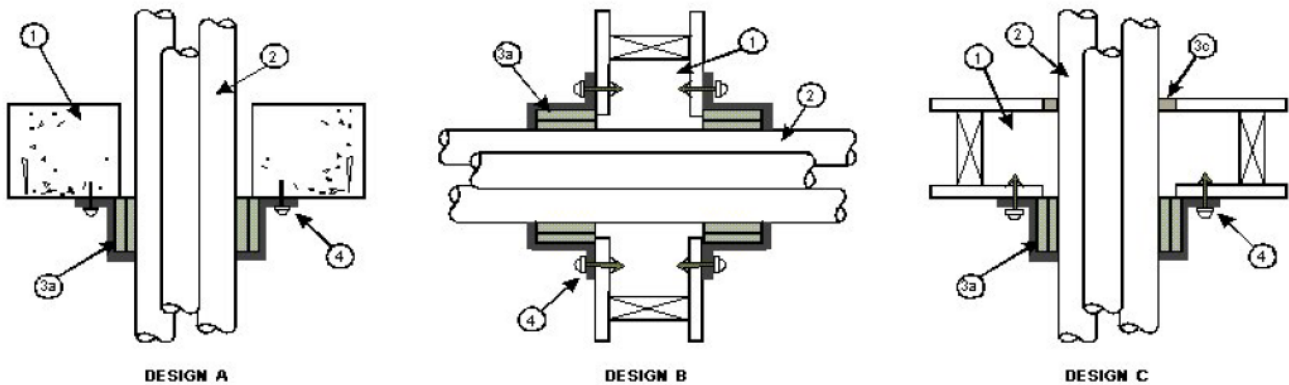


Figure 1. Penetration Detail

**1. FLOOR OR WALL ASSEMBLY:**

Design A: Code conforming 2 hour rated floor or wall assembly, nominal 2-1/2-in. minimum normal or low density cast concrete, hollow core concrete or Q-Deck. Wall may also be constructed of nominal 8-in. thick concrete blocks (filled or unfilled).

Design B: Code conforming to 1 or 2 hour rated wall, nominal 2x4 steel/wood framed gypsum wallboard, wall assembly.

Design C: Code conforming to 1 or 2 hour rated floor/ceiling assembly, framed with nominal 2x10 solid sawn or manufactured wood joists, topping optional (not shown).

- 2. PENETRATING ITEMS:** (See Table 1) PEX pipes, maximum of three (3) nominal 1-in. diameter or smaller. Use 3-in. diameter maximum hole size. Ratings will equal that of the floor or wall assembly (Item 1).

3. FIRESTOP SYSTEM COMPONENTS:

- a) **Certified Products: 3M™ Fire Barrier Ultra PPD 2.0 or 3M™ Fire Barrier Ultra RC Pack 2:** Attach to fire rated substrate, underside of floor and both sides in wall applications.
- b) **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 PPD. Install the wrap strip tightly around bundle of penetrating items continuously to form two layers. 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. Secure the collar with 1/2-in. wide stainless steel hose clamp. Fasten the collar tabs to the underside for floors or to both sides for wall applications as specified for the 3M™ Fire Barrier Ultra PPD.

c) Certified Products: Sealant

- **3M™ Fire Barrier CP 25WB+**
- **3M™ Fire Barrier 3000WT**

Apply to a thickness of 5/8 in. between the pipes and the interior face of the 3M™ firestop devices (Items 3a or 3b).

Note: Design C, apply sealant to the annular space in the wood floor membrane or the sole plate.

- 4. FASTENERS:** As detailed with 1-1/4-in. diameter fender washers.

- **Design A – Concrete:** 1/4-in. x 1-1/4-in. long steel masonry fasteners, wedge anchors or Tapcon®.
- **Design B – Gypsum:** 1/4-in. diameter hollow dry wall anchors, length as required for substrate thickness.
- **Design C – Wood:** 1-1/4-in. long dry wall screws.



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.