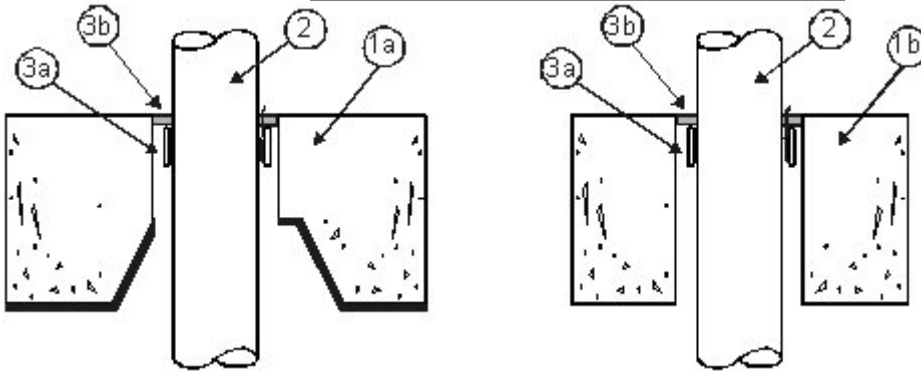


DESIGN NO. 3M/PHV 120-02

HORIZONTAL (FLOOR); RATINGS: SEE BELOW; ANNULAR SPACE - SEE ITEM 3
 TEST PRESSURE DIFFERENTIAL - 50 Pa (0.20" OF WATER)

		CAN/ULC-S115			
Penetrant	Max. Pipe ID	F	FH	FT	FTH
PVC	2"	2 Hr	2 Hr	0 Hr	0 Hr
System XFR	2"	2 Hr	2 Hr	0 Hr	0 Hr



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

2. **Penetrant** - (See also table of ratings) Nominal 2" diameter, Schedule 40, PVC and System XFR pipes for use in DWV (Drain, Waste & Vent) or Closed (Process & Supply) piping systems, ratings achieved will equal that of floor or wall assembly.

3. **Firestop System Components:**

a. *3M™ FireStrap™ or *3M™ FirePlug™: Install within opening, recessed 1/4" from the floor surface, according to the manufacturers instructions. For Hollow Core Concrete install on the underside flush with the bottom surface, and apply sealant (Item 3b) on floor side, 1/2" thickness over 1" thickness of tightly packed, 4 PCF, mineral wool, recessed 1/2" from the floor surface, according to the manufacturers 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 ID	Hole Size
1-1/2"	3"
2"	3"

b. **Sealant:** *3M™ Fire Barrier CP-25WB+ Caulk, *3M™ Fire Barrier IC 15WB+ Sealant, or *3M™ FireDam 150+ Caulk, applied to seal the annular space between the opening and the firestop device (Item 3a), to a 1/4" thickness flush with the floor or wall surface. Firestop system is applied to both sides for wall applications.

Note: Metric conversion factor, inches x 25.4 = mm.

*Components bearing the Warnock Hersey Certification Mark.