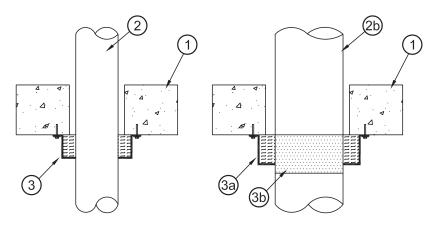
3M CANADA CO. – London, On Canada DESIGN NO. 3M/PHV 120-03

July 26, 2006

HORIZONTAL OR VERTICAL (FLOOR OR WALL), RÅTINGS – SEE BELOW, ANNULAR SPACE – 1/4" MAXIMUM TEST PRESSURE DIFFERENTIAL – 50 Pa (0.20" OF WATER)

Penetrant	Pipe Size	CAN/ULC-S115 CAN4-S115 F, FH, FT, FTH	ASTM-E814 F, T
PVC	1-1/2" - 6"	2 Hr	2 Hr
System XFR	1-1/2" - 6"	2 Hr	2 Hr
CPVC	1-1/2" - 4"	2 Hr	2 Hr
ccABS	1-1/2" - 4"	2 Hr	2 Hr
ABS	1-1/2" - 4"	2 Hr	2 Hr
FRPP	1-1/2" - 4"	2 Hr	2 Hr
PVC - Thin Wall	2"	2 Hr	2 Hr



- 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. Wall may also be constructed of nominal 8" thick concrete blocks (filled or unfilled).
 Hollow Core Concrete (Not Shown): Seal the annular space at pipe penetration on the floor side with a 1/4" thickness of *3MTM CP-25WB+ Caulk, *3MTM Fire Barrier IC 15 WB+ Sealant or *3MTM FireDamTM 150+ Caulk, flush with floor surface. Caulk is applied over 1" thickness of mineral wool.
- 2. **Penetrant:** (See table of ratings) Nominal 4" diameter, Schedule 40, ccABS, ABS, PVC, System XFR, CPVC and FRPP pipes for use in DWV (Drain, Waste and Vent) or Closed (Process and Supply) piping systems, and PVC Thin Wall Vacuum Tubing (nominal 2" diameter), ratings achieved will equal that of floor or wall assembly.
 - b) Nominal 6" diameter, Schedule 40, PVC and System XFR pipe.
- 3. **Firestop System Component:** *3MTM InteramTM Ultra PPD or *3MTM Fire Barrier Ultra RC Pack: Sized appropriately for pipe diameter, secured with *3MTM UltrafastTM Anchors or steel masonry anchors 1/4" diameter x 1-1/4" long over fender washers. To reduce opening size backfill annular space with a non- shrink grout. Use *3MTM InteramTM Ultra PPD-1.5 for PVC Thin Wall Vacuum Tubing (nominal 2" diameter).
 - a) *3MTM InteramTM PPD-6: Installed onto the pipe (Item 2b) over aluminum foil tape (Item 3b), secured with steel masonry anchors 1/4" diameter x 1-1/4" long over fender washers.

3MTM InteramTM Ultra PPD Size Chart

Device	Nominal Pipe ID	Max. Hole Size
PPD-1.5	1-1/2"	2-1/2"
PPD-2	2"	3"
PPD-3	3"	4"
PPD-4	4"	5"
PPD-6	6"	7"

3MTM Ultra RC Pack Size Chart

Device	Nominal Pipe ID	Max. Hole Size
RC Pack 2	2"	3"
RC Pack 3	3"	4"
RC Pack 4	4"	5"

b) Aluminum Foil Tape: Wrap pipe with one layer of tape covering 4" of pipe length.

**Sealant (Optional): *3MTM CP-25WB+ Caulk, *3MTM Fire Barrier IC 15 WB+ Sealant or *3MTM

FireDam™ 150+ Caulk to fill the annular space at the pipe penetration as a smoke seal.

CPVC Pipe - Use only *3MTM Fire Barrier IC 15 WB+ Sealant.

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

*Components bearing the Warnock Hersey Certification Mark.

This material was extracted and drawn by 3M Fire Protection Products from the 2006 Warnock Hersey Directory of Listed Products

^{**}May be used, however, is not require to achieve ratings.