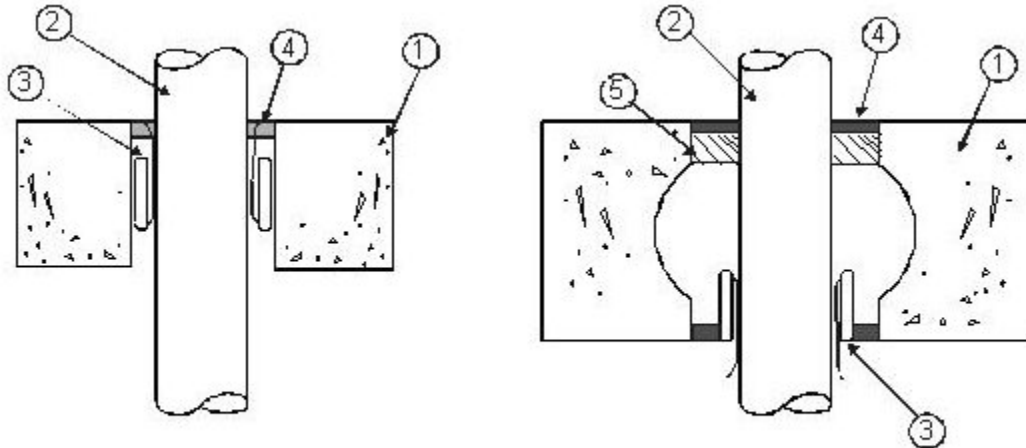


DESIGN NO. 3M/PHV 120-08

HORIZONTAL OR VERTICAL (FLOOR OR WALL), RATINGS - SEE BELOW, HOLE SIZE - SEE ITEM 3
TEST PRESSURE DIFFERENTIAL - 50 Pa (0.20" OF WATER)

Penetrant	Max. Pipe ID	CAN/ULC-S115 F, FH, FT, FTH
PVC	3"	2 Hr
ccABS	3"	2 Hr
ABS	3"	2 Hr
PVC - Thin Wall	2"	2 Hr



Hollow Core Concrete Floor Applications

1.	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).								
2.	Penetrant: (See table of ratings) Schedule 40, ccABS, ABS, PVC pipes for use in DWV (Drain, Waste & Vent) or Closed (Process & Supply) piping systems and PVC-Thin Wall Vacuum Tubing (nominal 2" diameter), ratings achieved will equal that of floor or wall assembly.								
3.	<p>Firestop System Components: * 3M™FireStrap™ : Install within opening, recessed 1-1/4" from either surface for solid concrete floor applications, according to the manufacturers instructions. For Hollow Core Concrete install on the underside, flush with the bottom surface, according to the manufacturers instructions. For Walls install firestop system flush to the surface on both sides. To reduce hole size to the size listed, back fill with *3M™ Fire Barrier Mortar</p> <p>Use 3M™Firestrap™ 1-1/2" for PVC - Thin Wall Vacuum Tubing (nominal 2" diameter).</p> <table border="1"> <tr> <th>Pipe ID</th><th>Hole Size</th></tr> <tr> <td>1-1/2"</td><td>2-1/2"</td></tr> <tr> <td>2"</td><td>3"</td></tr> <tr> <td>3"</td><td>4-1/2"</td></tr> </table>	Pipe ID	Hole Size	1-1/2"	2-1/2"	2"	3"	3"	4-1/2"
Pipe ID	Hole Size								
1-1/2"	2-1/2"								
2"	3"								
3"	4-1/2"								
4.	Sealant: *3M™ CP-25WB+ Caulk, *3M™ Fire Barrier IC 15 WB+ Sealant or *3M™ FireDam FD-150+ Caulk, applied to 1/2" thickness flush with the floor or wall surface. Firestop System is applied to both sides for wall applications.								
5.	Forming Material: Minimum 1" thickness of mineral wool, 4 pcf, tightly packed around the pipe, recessed 1/2" from the floor or wall surface.								

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

*Components bearing the Warnock Hersey Certification Mark.