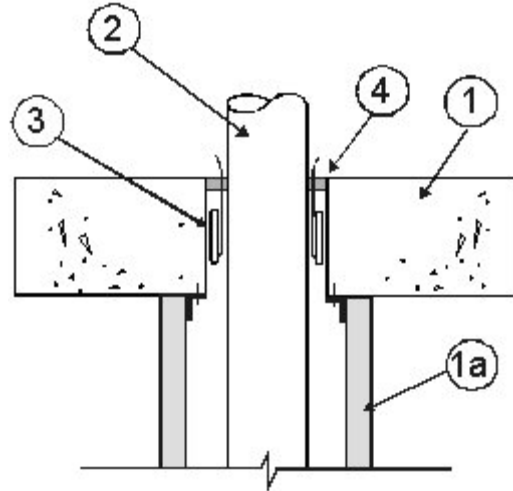


DESIGN NO. 3M/PH 120-16
 HORIZONTAL (FLOOR); RATINGS - SEE BELOW; HOLE SIZE - SEE ITEM 3
 TEST PRESSURE DIFFERENTIAL - 50 Pa (0.20" OF WATER)

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



1. **Floor Assembly:** Code conforming 2 hour fire-rated floor assembly, nominal 4-1/2" thickness, normal or low density cast concrete.
 a) **Wall Assembly:** Gypsum wallboard assembly, constructed with rated or non-rated wallboard, nominal 3-1/2" deep steel studs. Steel ceiling track is secured to the underside of the floor assembly.
2. **Penetrant:** (See table above) Nominal 3" diameter or smaller, Schedule 40, ccABS, ABS, PVC pipes for use in DWV (Drain, Waste & Vent) or Closed (Process & Supply) piping systems. Penetrants must be contained within a wall assembly, ratings achieved will equal that of floor assembly.
3. **Firestop System Components:** *3M FireStrap™: Install within opening, recessed 1-1/4" from either surface, according to the manufacturer's instructions. To reduce hole diameter to the size listed, back fill with *3M™ Fire Barrier Mortar.

Pipe ID	Hole Diameter
1-1/2"	2-1/2" to 3"
2"	3" to 3-1/2"
3"	4-1/2" to 5"
4. **Sealant:** *3M™ Fire Barrier CP-25WB+ Caulk, *3M™ Fire Barrier IC 15WB+ Sealant or *3M™ FireDam 150+ Caulk, applied to 1/2" thickness flush with the floor surface.

Note: Metric conversion factor, inches x 25.4 = mm.
 *Components bearing the Warnock Hersey Certification Mark.