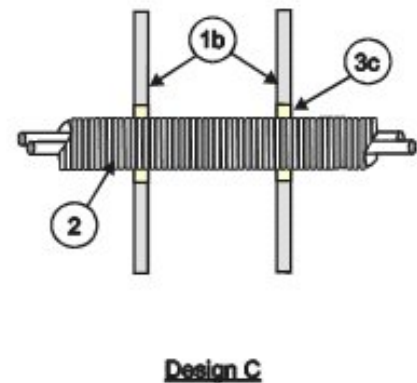
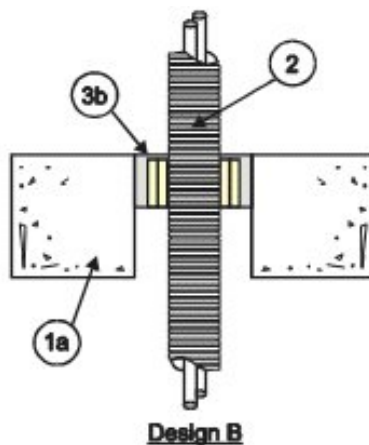
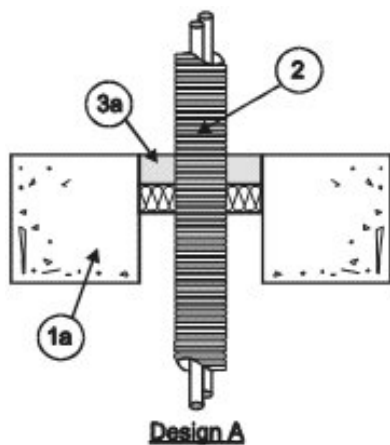


DESIGN NO. 3M/PHV 120-13
HORIZONTAL/VERTICAL (FLOOR/WALL); RATINGS: SEE TABLE BELOW; HOLE SIZE:
SEE ITEM 3
TEST PRESSURE DIFFERENTIAL - 2.5 PA (0.01" OF WATER) MINIMUM

			CAN/ULC-S115		ASTM-E814	
Penetrant	Design	Max. ENT Diameter	F, FH	FT, FTH	F	T
Electrical Nonmetallic Tubing (ENT)	A	1"	2 Hr	2 Hr	2 Hr	2 Hr
Electrical Nonmetallic Tubing (ENT)	B	2"	2 Hr	2 Hr	2 Hr	2 Hr
Electrical Nonmetallic Tubing (ENT)	C	1"	1 Hr	0 Hr	1 Hr	0 Hr
Electrical Nonmetallic Tubing (ENT)	C	1"	2 Hr	0 Hr	2 Hr	0 Hr



- Floor or Wall Assembly:**
Design A & B: Code conforming 2 HR rated floor or wall assembly, nominal 4-1/2" minimum normal or low density cast concrete, or hollow core concrete. Wall may also be constructed of nominal 8" thick concrete blocks (filled or unfilled)
Design C: Code conforming 1 or 2 HR rated wall, nominal 2" x 4" steel/wood framed gypsum wallboard, wall assembly.
- Penetrant:** (See also table of ratings) Electrical Nonmetallic Tubing (ENT) - Corline®, PVC corrugated wall tubing, ratings achieved will equal that of floor or wall assembly.
- Firestop System Components:**
Design A: apply 1" thickness of *3M™ Fire Barrier CP-25WB+ Caulk over 1" thickness Mineral Wool 4 pcf, forming material.
Design B: apply 2 layers of *3M™ Fire Barrier FS-195+ Wrap Strip around tubing, secure with reinforced fiber tape or tie wire, fill remaining annular space to a 2" depth with * 3M™ Fire Barrier CP-25WB+ Caulk.
Design C: apply *3M™ Fire Barrier CP-25WB+ Caulk to seal annular space, for 1 hour assemblies 5/8" thickness and for 2 hour assemblies 1-1/4" thickness.

	Pipe ID	Annular Space
Design A	1/2" - 1"	1/2" - 5/8"
Design B	1-1/2" - 2"	1"
Design C	1"	0" - 7/8"

Wall Assemblies: apply firestop detail to both sides of wall.

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

*Components bearing the Warnock Hersey Certification Mark