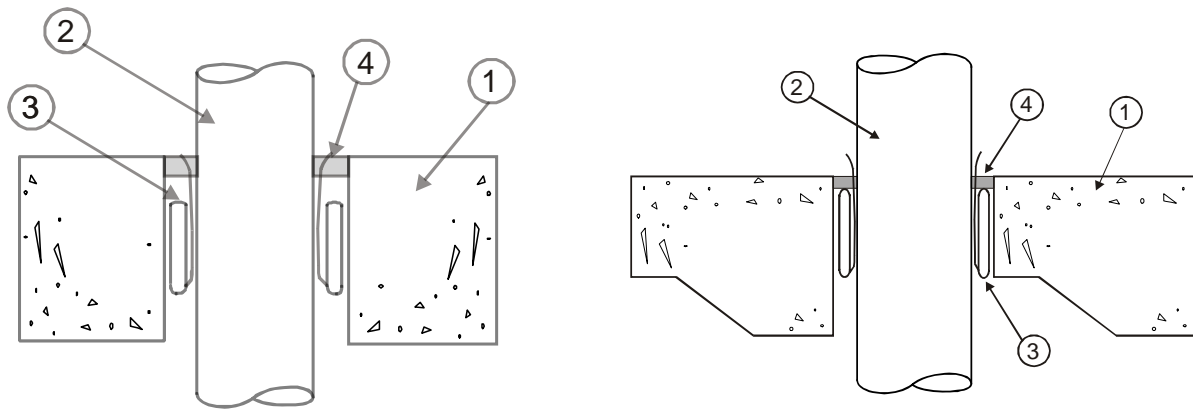


HORIZONTAL or VERTICAL (FLOOR or WALL)  
 RATINGS - See Below  
 HOLE SIZE - See Item 3  
 TEST PRESSURE DIFFERENTIAL - 2.5 Pa (0.01 in. of water)

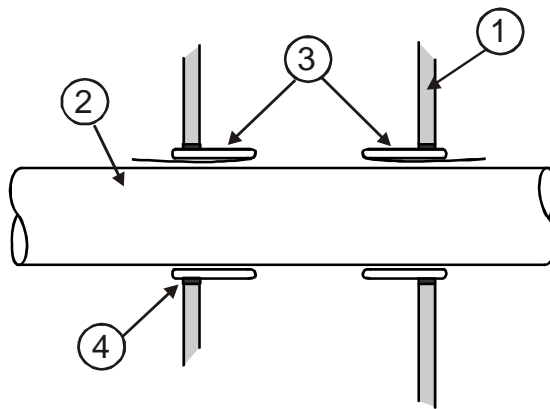
Design conforms to NBC 1995, reference clause 3) of 3.1.5.15 “Combustible Piping Materials”.

Penetrant	Design	Maximum Pipe ID	ULC-S115-95 CAN4-S115-M F& FH, FT& FTH
FRPP	A	3"	2 HR
FRPP	B	3"	2 HR
FRPP	C	3"	1 HR
FRPP	C	3"	2 HR



**DESIGN A**

**DESIGN B**



**DESIGN C**

1. **Floor or Wall Assembly:**

**Design A:** Code conforming 2 HR rated floor or wall assembly, nominal 4-1/2" thick, 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 B:** Code conforming 2 HR rated floor assembly, nominal 2-1/2" thick, Q Deck or Fluted Deck, normal or low density cast concrete.

**Design C:** Code conforming 1 or 2 HR fire-rated gypsum wallboard assembly, nominal 2" x 4" steel/wood framed gypsum wallboard, wall assembly.

2. **Penetrant :** (See also table of ratings) - Schedule 40, FRPP (Fire-Rated Polypropylene Pipe), ratings achieved will equal that of floor or wall assembly.

3. **Firestop System Components:**

**Design A:** \*IPEX Firepro™ System 2- Install within opening, recessed 1-1/4" from either surface, according to the manufacturers instructions. For walls apply firestop system to both sides. To reduce opening size use \*3M™ Fire Barrier Mortar or non-shrink grout. Firestop is installed on both sides of the wall.

**Design B:** \*IPEX Firepro™ System 2- Install within opening 1/2" below the floor surface of the concrete according to the manufacturers instructions.

**Design C:** \*IPEX Firepro™ System 2- Install with 1/4" of the firestop exposed outside the surface of the gypsum wall assembly according to the manufacturers instructions. Firestop is installed on both sides of the wall.

Pipe ID	Hole Size
1-1/2"	2-1/2"
2"	3"
3"	4-1/2"

4. **Sealant** - \*3M™ CP-25WB+ Caulk to fill the annular space at the pipe penetration as a smoke seal.

**Note:** metric conversion factor, inches x 25.4 = mm

\*Component bearing the Warnock Hersey Certification Mark