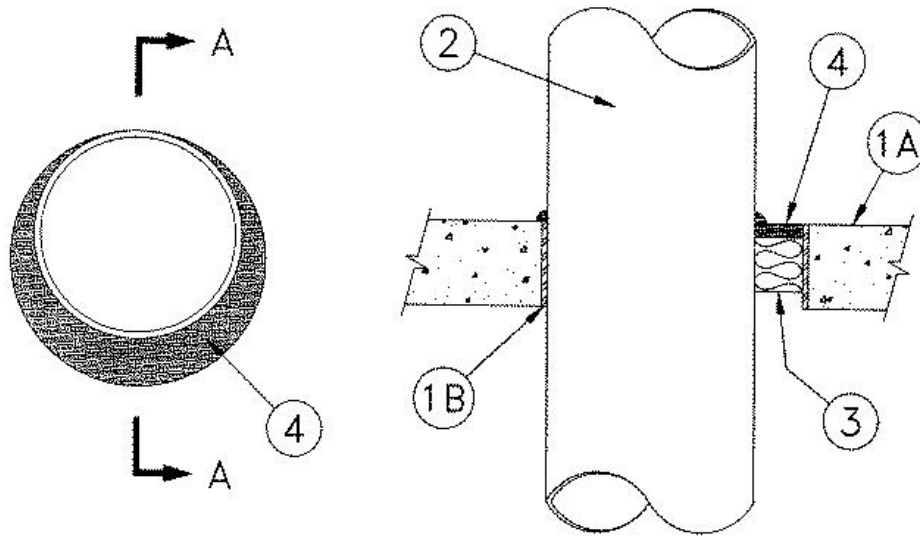


ANSI/UL2079	CAN/ULC S115
F Rating 3 Hr	F Rating — 3 Hr
T Rating — 0 Hr	FT Rating — 0 Hr
	FH Rating — 3 Hr
	FTH Rating — 0 Hr



SECTION 'A-A'

1A. Floor or Wall Assembly — Min 4-1/2 in. thick reinforced normal weight (**150** pcf) concrete. Wall may also be constructed of any UL Classified **Concrete Blocks***. Max diam of opening is 26-1/2 in.

See **Concrete Blocks** (CAZT) category in the Fire Resistance Rating Directory for names of manufacturers.

1B. Metallic Sleeve (optional) — Nom 16 in. (or smaller), Schedule 10 (or heavier) steel pipe sleeve, cast or grouted into floor or wall assembly. Sleeve is not permitted when nominal diameter of penetrating pipe (Item 2) is above 12 in.

2. Through Penetrants — One metallic pipe or tubing to be installed concentrically or eccentrically into opening such that the annular space between the pipe and the periphery of the opening is min 0 in. (point of contact) to max 2-1/2 in. Pipe to be firmly supported on both sides of opening. The following types and sizes of pipes may be used:

- (a) Nom 24 in. diam (or smaller) Schedule 30 (or heavier) steel or iron pipe.
- (b) Nom 4 in. diam (or smaller) electrical metallic tubing.

3. Packing Metallic — Mineral wool insulation of min 4 pcf firmly pressed into opening as a permanent form. Insulation material to be recessed by min depth of 1/2 in. from top surface of floor or both surfaces of wall.

4. Fill, Void or Cavity Materials* — Caulk — Min 1/2 in. thickness of fill material applied within the annulus, flush with top surface of floor or both surfaces of wall. A min 1/4 in. crown of the caulking material shall be applied around the entire circumference of the pipe at the level of the floor surface or both wall surfaces.

RECTORSEAL — FlameSafe® **FS900+**, **Metacaulk MC 150+** and Biostop BF **150+**

*,+ Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

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