

ULC System No. SP324

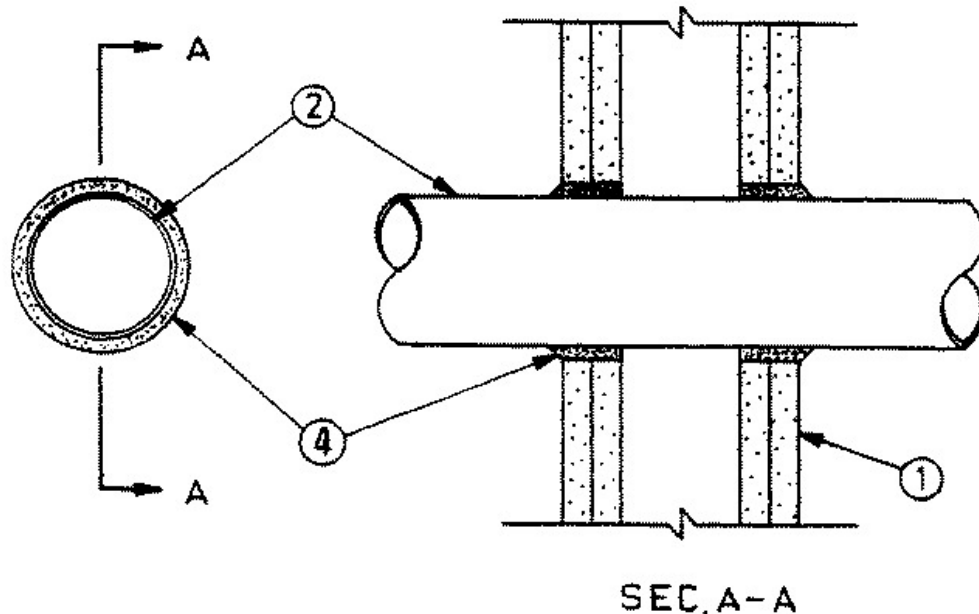
January 12, 2004

(For Vertical Separation)

F Rating - 2 h

FH Rating - 0 and 2 h (See Item 2)

FT and FTH Ratings - 0, 1-1/2 and 2 h (See Item 2)



1. Wall Assembly — The fire-rated gypsum wallboard and stud assembly shall be constructed of the materials and in the manner described in the individual wall or partition design in the ULC List of Equipment and Materials, Fire Resistance, and shall include the following construction features:

(a) **Studs** — Wall framing consisting of minimum 63 mm wide by 31 mm deep channel, steel studs with 6 mm lip on each flange tip formed from minimum 0.6 mm thick galvanized steel. Steel studs cut 19 mm less in length than the height of the assembly and secured to channel-shaped galvanized steel floor and ceiling tracks with 13 mm long self-drilling, self-tapping screws on both sides of studs. Steel stud spacing not to exceed 600 mm OC.

(b) **Gypsum Wallboard** — Minimum 12.7 mm thick gypsum wallboard installed vertically in two layers on both sides of stud framing with joints of each layer centred over studs. Inner layer joints on opposite sides of wall staggered one stud. Outer layer joints staggered one stud from inner layer joints.

2. Pipes and Cables — All pipes and cables rigidly supported and centred in the opening through the gypsum wallboard so as to maintain a 6.4 mm maximum annular space between the edges of each opening and penetrating item.

(a) Nominal 30 mm OD (maximum) steel conduit with minimum 1.5 mm wall thickness.

(b) Nominal 275 mm OD (maximum) Schedule 40 steel pipe, or cast or ductile iron pipe.

(c) Nominal 120 mm OD (maximum) Schedule 40 steel pipe, or cast or ductile iron pipe.

(d) Nominal 105 mm OD (maximum) copper pipe with minimum 2.5 mm wall thickness.

(e) Nominal 114 mm OD (maximum) galvanized steel conduit with minimum 2.4 mm wall thickness.

(f) Nominal 80 mm OD (maximum) copper or steel pipe, minimum 1.78 mm wall thickness, insulated with Pipe Insulation (Item 3).

(g) One 500 MCM (or smaller) COREFLEX II RA90 (XLPE) FT4 cable.

(h) One 24 AWG 100 pair (or smaller) CSA IWC FT4, 18 mm OD telephone cable.

(i) One CAROL C1160 RG 11/U Type USA, 10.3 mm OD (or smaller) coaxial cable.

Type of Penetrating Item	Ratings, hr	
	FH	FT and FTH
Steel conduit (Item 2a)	2	1-1/2
Coaxial cable (Item 2i)	2	2
Insulated pipe (Item 2f)	2	0
500 MCM cable (Item 2g)	2	0
24 AWG cable (Item 2h)	2	0
Other penetrating items	0	0

3. **Pipe Insulation** — Copper or steel pipe (Item 2f) to be wrapped with minimum 25 mm thick ULC labelled pipe insulation, nominal density 56 kg/m³ (Guide No. 40 U18.15.13). No pipe insulation joints to be closer than 300 mm to wall surface.

4. **Firestop System Component** — (not shown) - (Guide No. 40 U19.13). "A/D Firebarrier Silicone Sealant" caulked into the annular space to a minimum depth of 25 mm on both sides of assembly. Additional sealant applied such that a minimum 6.4 mm crown is formed around the circumference of the penetrating item.

A/D FIRE PROTECTION SYSTEMS INC