

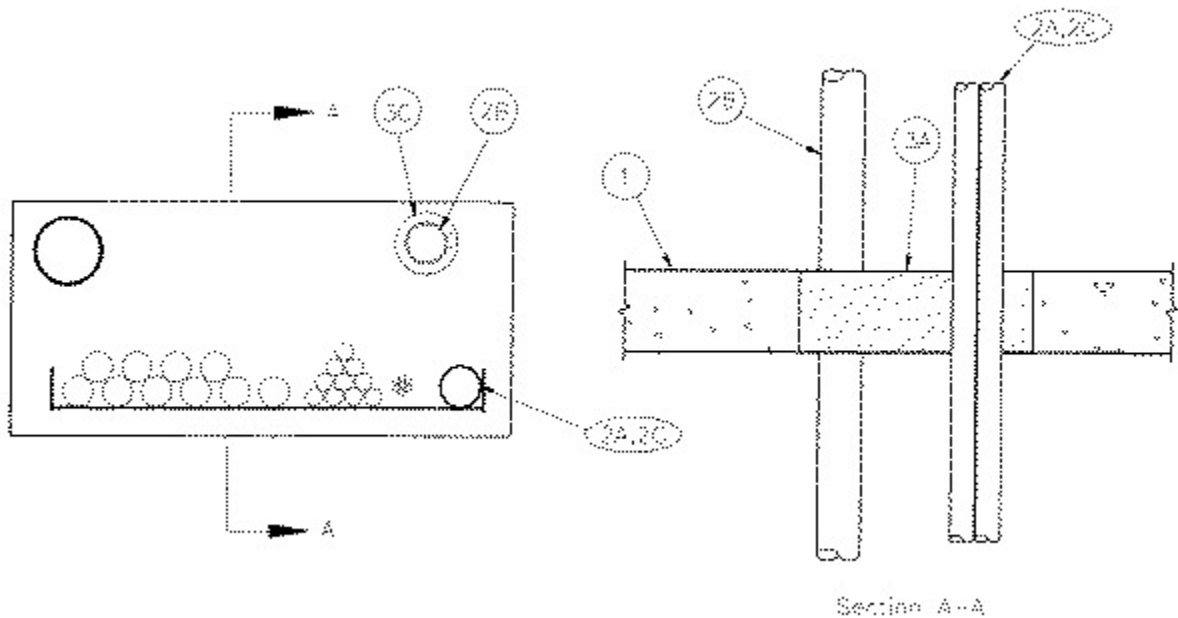
## ULC System No. SP396

October 03, 2005

(For Horizontal or Vertical Separations)

F and FH Ratings - 2 h

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



**1. Wall or Floor Assembly** — Min depth or thickness as required for grade of fire separation but not less than 114 mm. Normal-density ( $2400 \pm 50 \text{ kg/m}^3$ ) or low-density ( $1760 \pm 50 \text{ kg/m}^3$ ) concrete floor or wall. Wall can also be constructed of min 200 mm concrete block. Max size of opening 300 mm by 600 mm. For opening in concrete block wall, concrete or mortar shall be used to create a solid surround to the opening.

**2. Pipes, Cables and Cable Tray** — All penetrating items to be reliably supported.

(a) Max size 90 mm by 450 mm steel ladder cable tray spaced min 25 mm from perimeter of opening. Max cable and conduit loading not to exceed 50% by area of cable tray and made up of the following groupings:

(i) A max of 10 (ten) 500 MCM COREFLEX II RA90 (XLPE) FT4 cable (or smaller).

(ii) Individual or bundles of a max of 7 (seven) 24 AWG, 100 pair telephone CSA Type IWC cables; max OD of 18 mm. A 13 mm min space between bundles or other penetrating items.

(iii) Individual or bundles of a max of 7 (seven) CAROL C1160 RG 11/U coaxial cables; max 10.3 mm OD. A 13 mm min space between bundles or other penetrating items.

(iv) Max of one 55 mm OD, 1.75 mm min wall thickness steel conduit.

(b) Max of one nom 55 mm OD (or smaller) steel conduit with min 1.75 mm wall thickness centred in an opening within the mortar compound (Item 3). Size of opening to be such that an annular space around penetrating item is max 6.4 mm wide.

(c) Nom 105 mm OD (max) copper or steel pipe, or steel conduit, with min 2.39 mm wall thickness spaced 25 mm from edge of opening and 50 mm min from other penetrating items.

Type of Penetrating Item	FT and FTH Ratings, h
Coaxial cable (Item 2a(iii))	1-1/2
Steel conduit (Item 2a(iv))	1
Other penetrating items	0

· **3. Firestop System Components — XHJZC (Guide No. 40 U19.13).**

(a) Type "A/D FIREBARRIER Mortar" compound prepared by mixing mortar powder with water at a ratio of 1 bag (7 kg) of powder to 2.5 kg of water in accordance with the manufacturer's instructions. The mortar compound is trowelled into the opening to a min thickness of 114 mm flush with wall surface.

(b) Type "A/D FIREBARRIER Mineral Wool" to be compressed 33% (min) between pipe (Item 2b) and edge of opening. Min depth of 100 mm. Min 6.4 mm deep space to be left above mineral wool for sealant (Item 3c).

(c) Type "A/D FIREBARRIER Silicone Sealant" applied over mineral wool (Item 3b) to a min depth of 6.4 mm on both sides of the assembly at pipe (Item 2b) repenetration.

**A/D FIRE PROTECTION SYSTEMS INC**