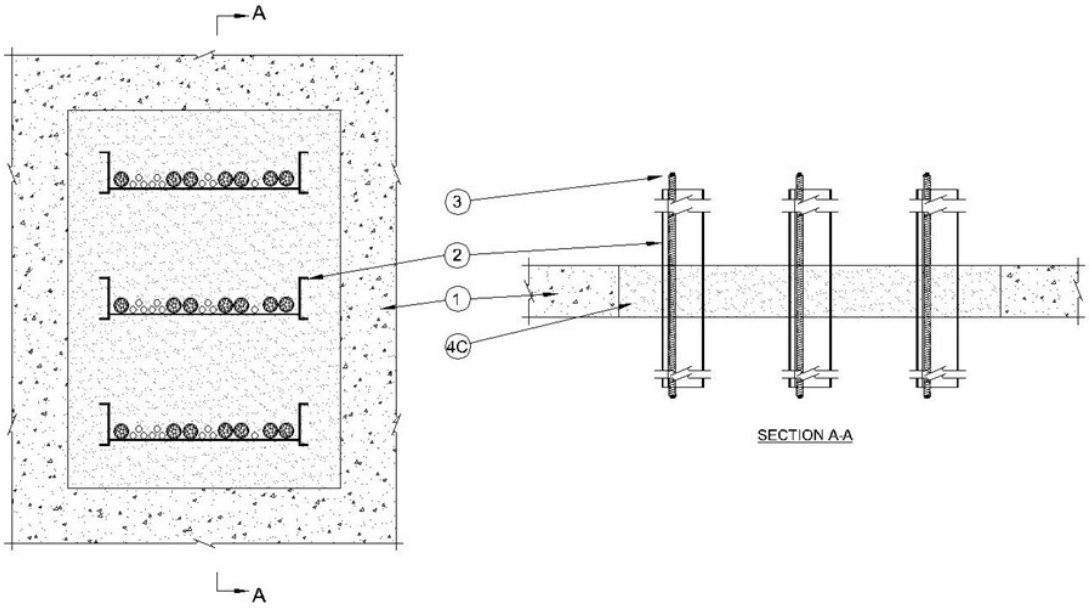
| ANSI/UL1479 (ASTM E814) | CAN/ULC S115 |
|---|---|
| F Rating — 3 Hr | F Rating — 3 Hr |
| T Rating — 0 Hr | FT Rating — 0 Hr |
| | FH Rating — 3 Hr |
| | FTH Rating — 0 Hr |




1. **Floor or Wall Assembly —** Min 6 in. (152 mm) thick reinforced normal weight (100-150 pcf or 1600-2400 kg/m$^3$) concrete. Wall may also be constructed of any UL Classified **Concrete Blocks*.** Max area of opening is 1280 sq in. (0.826 m$^2$) with max dimension of 40 in. (1.01 m).
See **Concrete Blocks** (CAZT) category in the Fire Resistance Directory for names of manufacturers.

2. **Cable Tray* —** Max 24 in. (610 mm) wide by max 4 in. (102 mm) deep open ladder cable tray with channel-shaped side rails formed of min No. 16 MSG (1.52 mm) thick steel with 1 in. (25 mm) wide rungs spaced 9 in. (229 mm) OC or 0.090 in. (2.29 mm) thick aluminum and with 1 in. (25 mm) wide rungs spaced 9 in. (229 mm) OC. Max three cable trays to be installed in the opening with a separation of 8 in. (203 mm) between cable trays. The annular space between the cable tray and the periphery of the opening shall be min 4 in. (102 mm) to max 8 in. (203 mm) Cable trays to be rigidly supported on both sides of floor or wall assembly.

3. **Cables —** Aggregate cross-sectional area of cables in cable trays to be max 40 percent of the cross-sectional area of the cable tray based on a max 3 in. (76 mm) cable loading depth within the cable tray. Any combination of the following types and sizes of copper conductor cables may be used:
A. Max 1/C - 350 kcmil (or smaller) cable with polyvinyl chloride (PVC) insulation and jacket or hypalon insulation and ethylene propylene rubber jacket.

B. Max 16/C - No. 16 AWG (or smaller) cable with PVC insulation and jacket.

C. Max 4/C - No. 12 AWG (or smaller) cable with rubber insulation and neoprene jacket.

D. Max 100 pair No. 24 AWG (or smaller) cable with PVC insulation and jacket.

4. **Firestop System —** The firestop system shall consist of the following:
A. **Forms —** (Not Shown) — Used to prevent the leakage of the fill material during the installation. Forms to rigid sheet material, cut to fit the contour of the penetrating items and fastened to the underside of the floor or both sides of the wall. Forms to be removed after the fill material has cured.

B. **Packing Material —** (Not Shown) — Pieces of mineral wool insulation firmly packed between the cables or cable tray and the forms

to prevent the leakage of the fill material while in its liquid state. Packing material may be removed after fill material is cured.

C. **Fill, Void or Cavity Material* — Mortar —** Min 6 in. (152 mm) thickness of fill material applied within the annulus flush with the top surface of the floor or with both surfaces of wall. During the installation of fill material, cables are to be pulled apart and fill material to be forced into the interstices of cables and between cables and cable tray to max extent possible. Mortar to be mixed with water at a rate of 1.0 part dry mixture to 1.0 part water by weight in accordance with the installation instructions supplied with the product.
**RECTORSEAL** — FlameSafe ® Mortar or Metacaulk Fire Rated Mortar

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