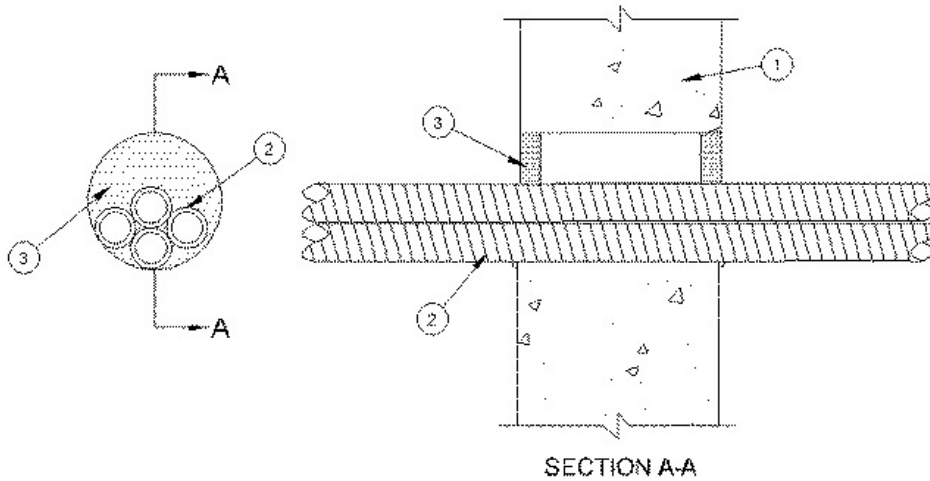


| ANSI/UL1479 (ASTM E814) | CAN/ULC S115 |
|-------------------------|--------------------|
| F Ratings - 2 Hr | F Ratings - 2 Hr |
| T Ratings - 0 Hr | FT Ratings - 0 Hr |
| | FH Ratings - 2 Hr |
| | FTH Ratings - 0 Hr |



1. Wall Assembly — Min 6 in. thick reinforced lightweight or normal weight (100-150 pcf) concrete. Wall may also be constructed of any UL Classified **Concrete Blocks***. Max diam of opening is 6 in.

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

2. Through Penetrants — One or more nom 1-1/2 in. diam (or smaller) flexible steel conduits to be installed within the opening. Max diam of through penetrant bundle shall be 4 in. The space between the through penetrants shall be a min of 0 in. (point contact) to a max of 1/4 in. The annular space between the through penetrants and periphery of opening shall be min 0 in. (point contact) to max 2 in. Conduit to be rigidly supported on both sides of wall assembly.

See **Flexible Metal Conduit** (DXUZ) category in the Electrical Construction Materials Directory for names of manufacturers.

3. Fill, Void or Cavity Material* — Sealant — Min 5/8 in. thickness of fill material applied within annulus, flush with both surfaces of wall. At the point contact location between through penetrant and concrete, a min 3/8 in. diam bead of fill material shall be applied at the concrete/through penetrant interface on both surfaces of wall. Additional sealant shall be forced into interstices of through penetrants to max extent possible.

RECTORSEAL — FS900+ Sealant, [Metacaulk MC 150+](#), 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.

Reprinted from the Online Certifications Directory with permission from UL. ©UL LLC