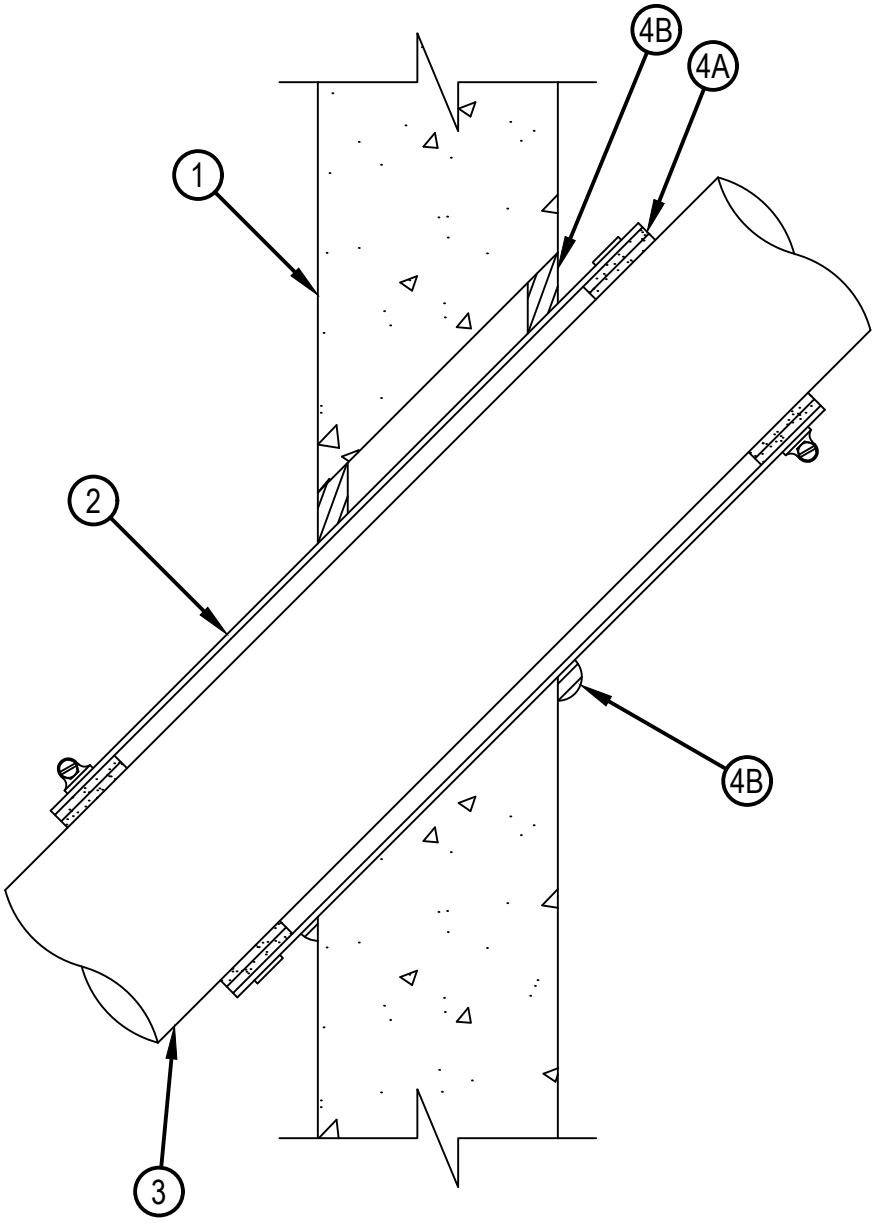
CANADA ONLY

Classified by
Underwriters Laboratories, Inc.
to CAN/ULC-S115

# System No. W-J-2400

**F Rating — 2 Hr**
**FT Rating — 1 Hr**
**FH Rating — 0 Hr**
**FTH Rating — 0 Hr**




Hilti Firestop Systems

# System No. W-J-2400

System tested with a pressure differential of 50 Pa between the exposed and the unexposed surfaces with the higher pressure on the exposed side.

1. Wall Assembly —Min 127 mm (5 in.) thick reinforced lightweight or normal weight (1600-2400 kg/m3 or 100-150 pcf) concrete Wall may also be constructed of any UL Classified Concrete Blocks*. Max dimensions of oval opening are 152 mm (6 in.) wide and 222 mm (8-3/4 in.) tall.
   See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. Steel Sleeve —After to the installation of the through penetrant (Item 3) and wrap strip (Item 4A), nom 133 mm (5-1/4 in.) diam cylindrical sleeve fabricated from 0.4mm (0.016 in.) thick (No 28 gauge) galv sheet steel and having a min 25 mm (1 in.) lap along longitudinal seam. Sleeve to extend 51 mm (2 in.) min beyond each surface of wall. The sleeve shall be compressed around the pipe (Item 3) and wrap strip (Item 4A) using 13 mm (1/2 in.) wide by 0.7 mm (0.028 in.) thick stainless steel hose clamps fastened at the center of each wrap strip. The annular space between the sleeve the periphery of the opening shall be a min 0 mm. (point contact) to max 38 mm (1-1/2 in.).
3. Through-Penetrants —One nonmetallic pipe to be installed concentrically or eccentrically within the firestop system. Pipe may be installed at an angle not greater than 45 degrees from perpendicular. Pipe to be rigidly supported on both sides of wall assembly. The following types and sizes of nonmetallic pipes may be used:
   A. XFR Polyvinyl Chloride Pipe (XFR-PVC) — Nom 102 mm (4 in.) diam (or smaller) Schedule 40 PVC-XFR solid core pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
4. Firestop System —The firestop system shall consist of the following:
   A. Fill, Void or Cavity Material - Wrap Strip —Nom 4.8 mm (3/16 in.) thick by 44 mm (1-3/4 in.) wide intumescent wrap strip installed in two adjacent single -layer stacks with ends butted together on each side of the wall. Wrap strips are installed around the pipe such that the ends of the wrap strip closest to the wall is located 51 mm (2 in.) from the wall surface on each side.
      HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 648-E Wrap Strip W45 1-3/4”
   B. Fill, Void or Cavity Material - Sealant* —Min 16 mm (5/8 in.) thickness of fill material applied within annulus between periphery of the opening and the steel sleeve, flush with each surface of wall. A min 13 mm (1/2 in.) bead of fill material shall be applied at the concrete and steel sleeve interface on the exterior of the wall.
      HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE MAX Intumescent Sealant

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