



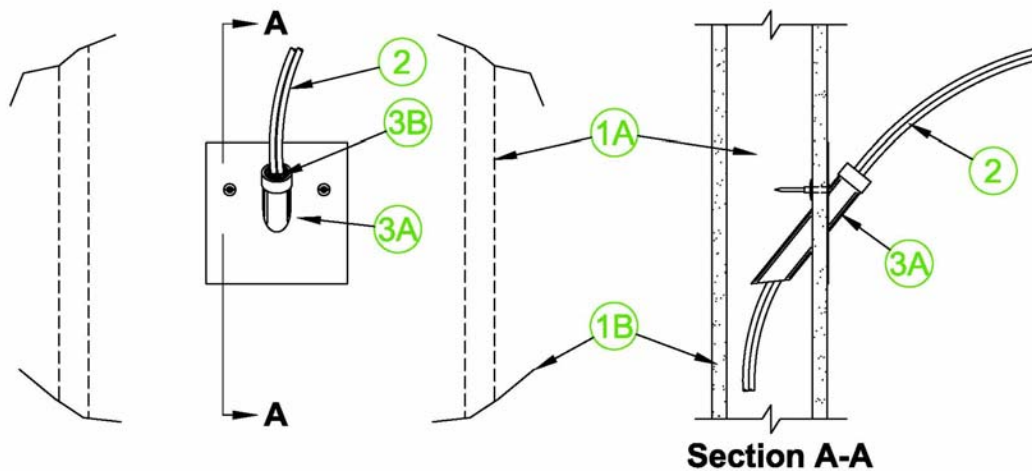
Unique Fire Stop Products

UL System W-L-3230

Membrane Penetrator - Sheet Rock 1 and 2 Hr System

UL Guide XHEZ
Through-Penetration Firestop Systems

System No. W-L-3230
June 28, 2004
F Rating - 1 and 2 Hr (See Item 1)
T Rating - 1/4 Hr



1. **Wall Assembly** — The 1 or 2 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300 or U400 Series Wall or Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

A. **Studs** — Wall framing shall consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. lumber spaced max 16 in. OC. Steel studs to be min 3-1/2 in. wide and spaced max 24 in. OC.

B. **Gypsum Board*** — 5/8 in. thick, 4 ft wide with square or tapered edges. The gypsum board type, thickness, number of layers, fastener

type and sheet orientation shall be as specified in the individual U300 or U400 Series Designs in the UL Fire Resistance Directory.

Note: The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.

2. **Cables** — Aggregate cross-sectional area of cables in membrane penetrator (Item 3A) not to exceed 0.4 sq in. Cables to be rigidly supported within 24 in. of wall assembly. Any combination of the following types and sizes of cables may be used:

A. Max 100 pair No. 24 AWG (or smaller) copper conductor cable with polyvinyl chloride (PVC) jacketing and insulation.

B. Max RG59/U (or smaller) coaxial cable with fluorinated ethylene insulation and jacketing.

C. Max 62.5/48 fiber optic cable with PVC insulation and jacketing.

D. Max 4 pair No. 24 AWG (or smaller) copper conductor Category 5 data cable with Hylar insulation and jacket.

3. **Firestop System** — The firestop system shall consist of the following:

A. **Firestop Device*** — Nom 1 in. diam angled steel conduit in a steel mounting plate provided with plastic tipped molly bolts and a plastic bushing. Device shall be driven through gypsum board and secured to wall assembly in accordance with the accompanying installation instructions.

UNIQUE FIRE STOP PRODUCTS INC - Membrane Penetrator

B. **Fill, Void or Cavity Material* - Putty** — Nom 1/4 in. diam continuous bead applied to form gasket between back of firestop device mounting plate and wall surface around perimeter of conduit prior to installation of molly bolts. Min 1 in. thickness of fill material applied within the steel conduit device, flush with end protruding from wall.

UNIQUE FIRE STOP PRODUCTS INC - Fill Kit (putty)

* Bearing the UL Classification Mark