System No. W-L-3212
August 13, 2008
F Ratings — 1 and 2 Hr (See Item 1)
T Ratings — 0 and 3/4 Hr (See Item 1)
(UL/cUL)

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 may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (52 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 2-1/2 in. (64 mm) wide and spaced max 24 in. (610 mm) OC.
   B. Gypsum Board* — One or two layers of nom 5/8 in. (16 mm) thick gypsum board, as specified in the individual Wall and Partition Design. Max diam of opening is 4-1/2 in. (114 mm).

2. Steel Sleeve — Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing (EMT) or Schedule 5 (or heavier) steel pipe friction-fit into wall assembly. Sleeve installed such that the ends project 1-1/2 to 2 in. (38 to 51 mm) beyond each side of the wall.

3. Cables — Aggregate cross-sectional area of cables in sleeve to be max 56 percent of the cross-sectional area of the sleeve. Tight bundle of cables to be concentrically or eccentrically within the steel sleeve. The annular space within the firestop system shall be a min of ¼ in. (6 mm) to a max of 1-1/2 in. (38 mm). Cables to be rigidly supported on both sides of the wall. Any combination of the following types and sizes of cables may be used:
   A. Max 200 pair No. 24 AWG (or smaller) copper conductor with polyvinyl chloride (PVC) insulation and jacketing material.
   B. Max 1/C No. 350 kcmil (or smaller) copper conductor cable with cross-linked polyethylene (XLPE) jacket.
   C. Max 7/C No. 12 AWG (or smaller) copper conductor power and control cables with XLPE or PVC insulation with XLPE or PVC jacket.
   D. Max 3/C No. 3/0 AWG (or smaller) copper or aluminum conductor SER cables with PVC insulation and jacket.
   E. Max 3/C No. 2/0 AWG (or smaller) copper conductor PVC jacketed aluminum clad or steel clad TEK cable.
   F. Max 110/125 fiber optic (F.O.) cable with PVC insulation and jacket.

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G. Max 3/C with ground No. 8 AWG (or smaller) copper conductor NM cable (Romex) with PVC insulation and jacket.

H. Max RG/U coaxial cable with fluorinated ethylene insulation and jacket.

I. Max 4 pair No. 24 AWG (or smaller) copper conductor data cable with Mylar jacket and insulation.

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

A. **Packing Material** — Min 1 in. (25 mm) thickness of min 4 pcf (64 kg/cu meter) mineral wool batt insulation tightly packed into opening as a permanent form. Packing material recessed from each end of sleeve as required to accommodate the required thickness of fill material.

B. **Fill, Void or Cavity Material* - Caulk** — Min 1/2 in. (13 mm) thickness of fill material applied within the annulus, flush with each end of sleeve. Caulk to be forced into interstices of cable group to max extent possible. A min 1/4 in. (6 mm) diam bead of caulk shall be applied at the gypsum board/steel sleeve interface on both sides of the wall.

   **TREMCO INC** — TREMstop Acrylic, TREMstop Intumescent Acrylic, TREMstop IA+, Fyre-Sil or Fyre-Caulk

*Bearing the UL Classification Mark