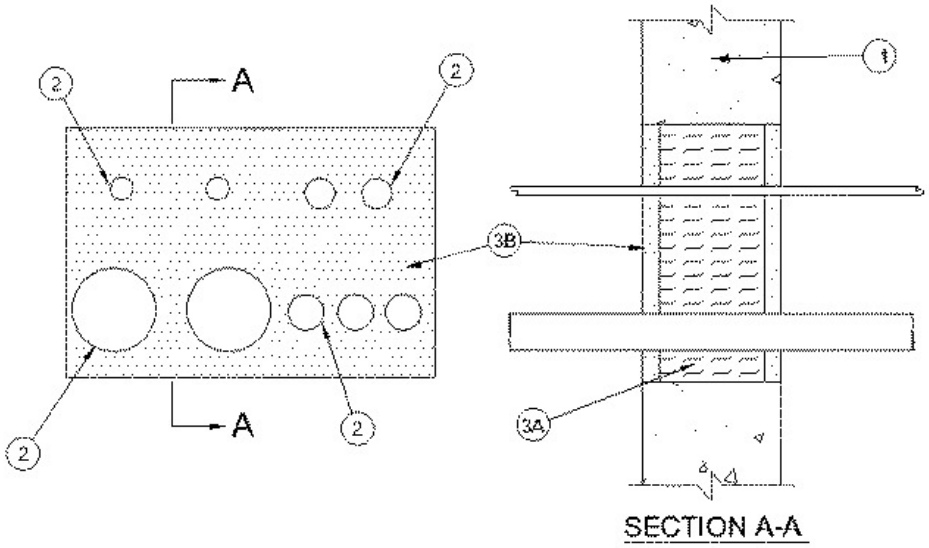
F Rating — 2 Hr
T Ratings — 1/4, 1/2 or 3/4 Hr (See Item 2)



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 area of opening is 200 sq in. with a max dimension of 20 in.
See **Concrete Blocks** (CAZT) category in the Fire Resistance Directory for names of manufacturers.

2. **Through Penetrants —** Any combination of the following metallic penetrants to be installed within the firestop system. The annular space between penetrants shall be min 1/4 in. to max 3-1/2 in. and between penetrants and periphery of opening shall be min 1/4 in. to max 2-1/2 in. Penetrants to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of condiut or metal clad cable may be used:

A. **Conduit —** Nom 4 in. diam (or smaller) electrical metallic tubing . Max two 4 in. diam conduits and max three 2 in. diam conduits per opening. **When 3 or 4 in diam EMT is used, T Rating is 1/2 hr. When 2 in. diam (or smaller) EMT is used, T Rating is 3/4 hr.**

B. **Metal Clad Cable+ —** Nom 2 in. diam (or smaller) 4 conductor 2/0 AWG steel or aluminum Metal Clad Cable+ with or without PVC jacket. Max two metal clad cables per opening. **When metal clad cable is used, T Rating is 1/2 hr.**
See **Through-Penetrating Products** (XLHY) category in Vol. 2 of the Fire Resistance Directory for names of manufacturers.

C. **Flexible Metal Conduit —** Nom 1-1/2 in. diam (or smaller) steel or aluminum **Flexible Metal Conduit+**. Max two flexible metal conduits per opening. **When flexible metal conduit is used, T Rating is 1/4 hr.**
See **Flexible Metal Conduit** (DXUZ) category in the Electrical Construction Materials Directory for names of manufacturers.

T Rating of firestop system is equal to the lowest T Rating of any penetrant used.

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

A. **Packing Material —** Min 4-3/4 in. thickness of min 4 pcf mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from both surfaces of wall as required to accommodate the required thickness of fill material.

B. **Fill, Void or Cavity Material* - Caulk —** Min 5/8 in. thickness of fill material applied within the annulus, flush with both surfaces of wall.
RECTORSEAL — Metacaulk 1000

*,+ 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