



Classified by  
Underwriters Laboratories, Inc.  
to UL 1479

## System No. C-AJ-2141

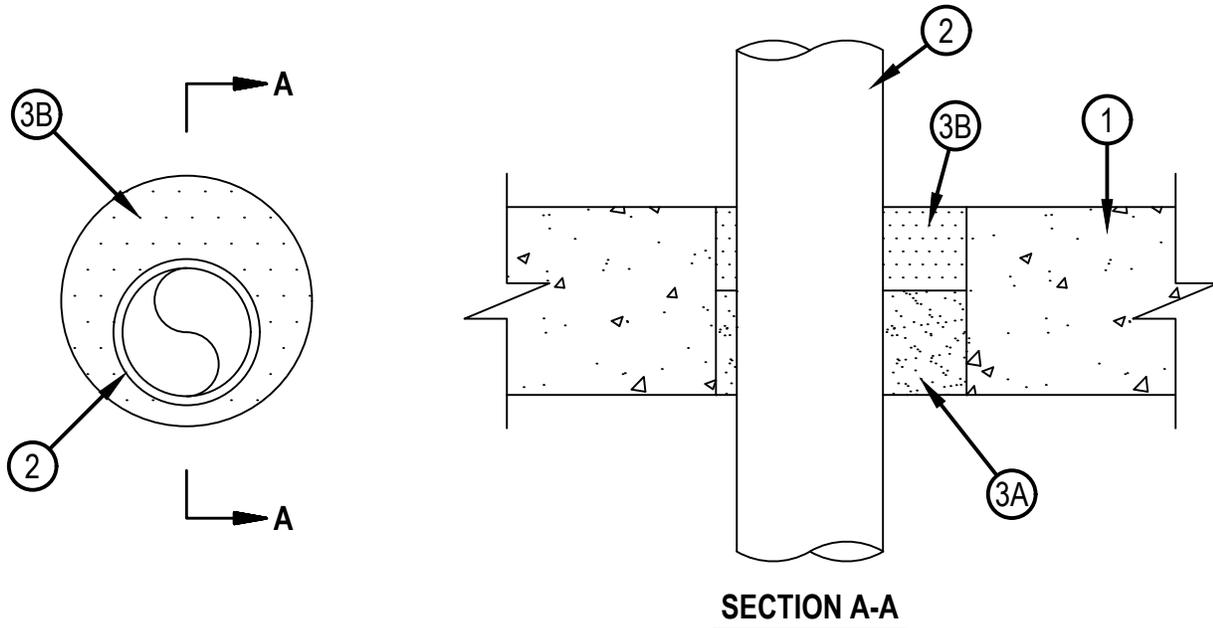
F Rating — 3 Hr

T Rating — 2 Hr

L Rating At Ambient — Less Than 1 CFM/Sq Ft

L Rating At 400 F — 4 CFM/Sq ft

CAJ 2141



1. Floor or Wall Assembly — Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m<sup>3</sup>) concrete. Wall may also be constructed of any UL Classified Concrete Blocks\*. Max diam of opening is 6 in. (152 mm).  
See Concrete Blocks\* (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. Through Penetrants — One nonmetallic pipe or conduit to be installed either concentrically or eccentrically within the firestop system. The annular space between the pipe or conduit and the periphery of the opening shall be min 1/2 in. (13 mm) to max 2 in. (51 mm). The pipe or conduit to be rigidly supported on both sides of floor or wall. The following types and sizes of pipes or conduits may be used:
  - A. Polyvinyl Chloride (PVC) Pipe — Nom 3 in. (76 mm) diam (or smaller) Schedule 40 PVC pipe for use in closed (process or supply) piping systems.
3. Firestop System — The firestop system shall consist of the following:
  - A. Forming Material\* — Min 2-1/2 in. (64 mm) thickness of forming material foamed into opening as a permanent form. Forming material to be recessed from top surface of floor or from both surfaces of wall as required to accommodate the required thickness of fill material.  
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CF812 or CF-AS CJP Foam Sealant
  - B. Fill, Void or Cavity Material\* — Sealant — Min 2 in. (51 mm) thickness of fill material applied with annulus flush with top surface of floor or within both surfaces of 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.



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