

**Section 5**  
**How to Use the**  
**Firetemp™ UL Listings**

# Section 5 - How to Use the Firetemp™ UL Listings

## How To Use The Firetemp™ Listings

### 1. Firetemp™ Listings

The product selection cross-reference indexes on the following pages contain firestopping applications for which Firetemp™ products have been tested and received accredited UL listings.

They are separated into five categories:

Index 1 - Type of Penetration /Type of Construction/UL Number

Index 2 - Type of Penetration /Type of Construction/UL Number, by Hourly Rating

Index 3 - Alphabetical UL Number Listing

Index 4 - Alphabetical UL Number Listing, by Hourly Rating

Index 5 - Alphabetical UL Number Listing - Expanded

### 2. Information needed to use the Firetemp™ listings

Gather the following information to make your Firetemp™ selection easy:

- a. What is the type of construction (concrete floor, wood wall, etc.)?
- b. What is the type of penetrating material or the type of joint?
- d. What is the size of the penetration material, in inches?
- e. What fire ratings (F and T numbers) are required?

If using Index 5, go to the desired category, find the penetrating material to be installed, confirm the size of the penetrating material and the F and T ratings. The JM Firetemp™ product for your application will be shown, along with the corresponding UL listing numbers.

### 3. Example

A typical Firetemp™ installation would be the sealing of the opening around a 2" steel pipe that passes through a concrete floor. The desired F rating is 2 hours, the T rating is 1/2 hour.

- a. Type of construction = concrete floor
- b. Type of penetrating material = steel pipe
- c. Size of penetration material = 2 inches
- d. F rating = 3 hours
- e. T rating = 1/2 hour

As shown in Index 5, the JM product that can be used for this application is Firetemp™ CI (intumescent caulk) and the UL listing number is C-AJ-1282.

## Using the UL Listing

In the example above, the UL listing we need is C-AJ-1282. This listing is shown below.

Just below the UL number C-AJ-1282 on the mechanical drawing is shown the F Rating and T Rating. In our example, we required an F rating of 3 hours and a T rating of 1/2 hour.

The mechanical drawing illustrates the specifics of the wall construction and the penetrating pipe. Each of the index numbers corresponds to a numbered paragraph on the following pages.

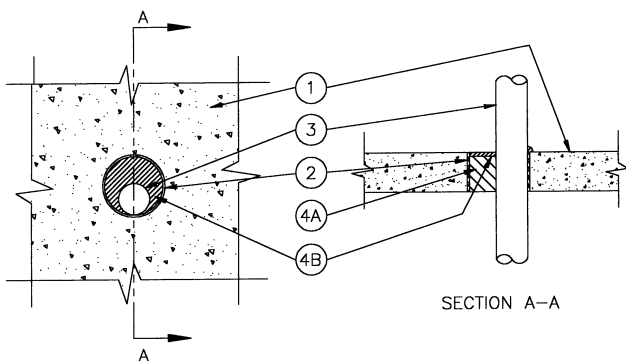
Thus, index number 1 points to the wall, itself. Paragraph 1 describes the wall criteria for this listing, as it was built for the actual firestop flame test.

Index number 2 points to the optional PVC sleeve.

Index number 3 points to the "through penetrants", which are listed in paragraph 3. In addition to the steel pipe we have used in the example, other through penetrants are listed in items 3B through 3E. It is common for a variety of penetrants to be tested concurrently in the same firestop test and for them to receive the same UL listing.

Index number 4A points to the packing material. Index numbers 4B1 and 4B2 point to the approved sealants. In paragraph 4B1 the required installation specifications for this listing are defined and the approved sealant material - Johns Manville Firetemp™ CI Caulk - is listed.

**System No. C-AJ-1282**  
**F Rating - 3 Hr**  
**T Rating - 1/2 Hr**



## System No. C-AJ-1282

1. **Floor or Wall Assembly** - Min 4-1/2 in. thick lightweight or normal weight (100-150 pcf) concrete. Wall may also be constructed of any UL Classified **Concrete Blocks\***. Max diam of opening is 3 in. See **Concrete Blocks** (CAZT) category in the Fire Resistance Directory for names of manufacturers.
  2. **Nonmetallic Sleeve** - (Optional) - Nom 3 in. diam (or smaller) Schedule 40 polyvinyl chloride (PVC) sleeve, cast or grouted into wall or floor assembly, flush with top surface of floor or both surfaces of wall assembly.
  3. **Through Penetrants** - One metallic pipe, conduit or tubing to be installed either concentrically or eccentrically within the firestop system. The annular space between pipe, conduit or tubing and sleeve or periphery of opening shall be min 0 in. (point contact) to max 7/8 in. Pipe, conduit or tubing to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of metallic pipes, conduit or tubing may be used:
    - A. **Steel Pipe** - Nom 2 in. diam (or smaller) Schedule 5 (or heavier) steel pipe.
    - B. **Iron Pipe** - Nom 2 in. diam (or smaller) cast or ductile iron pipe.
    - C. **Conduit** - Nom 2 in. diam (or smaller) steel electrical metallic tubing or rigid steel conduit.
    - D. **Copper Pipe** - Nom 2 in. diam (or smaller) Regular (or heavier) copper pipe.
    - E. **Copper Tubing** - Nom 2 in. diam (or smaller) Type L (or heavier) copper tubing.
  4. **Firestop System** - The firestop system shall consist of the following:
    - A. **Packing Material** - Min 4 in. or 4-1/4 in. thickness of min 4 pcf density mineral wool batt insulation for sealants B1 and B2, respectively, firmly packed into opening as a permanent form. Packing 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 (Item 4B).
- B1. Fill Void or Cavity Material\* - Sealant** - Min 1/2 in. thickness of fill material applied within annulus, flush with top surface of floor or both surfaces of wall. At point contact location between penetrant and sleeve or concrete, a 1/2 in. diam bead of fill material shall be applied at the sleeve or concrete/penetrant interface on the top surface of floor or both surfaces of wall.

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**B2. Fill Void or Cavity Material\* - Sealant** - Min 1/4 in. thickness of fill material applied within annulus, flush with top surface of floor or min 1/8 in. thickness of fill material applied within annulus, flush with both surfaces of wall. At point contact location between penetrant and sleeve or concrete, a 1/4 in. diam bead of fill material shall be applied at the sleeve or concrete/penetrant interface on the top surface of floor or both surfaces of wall.

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\*Bearing the UL Classification Marking