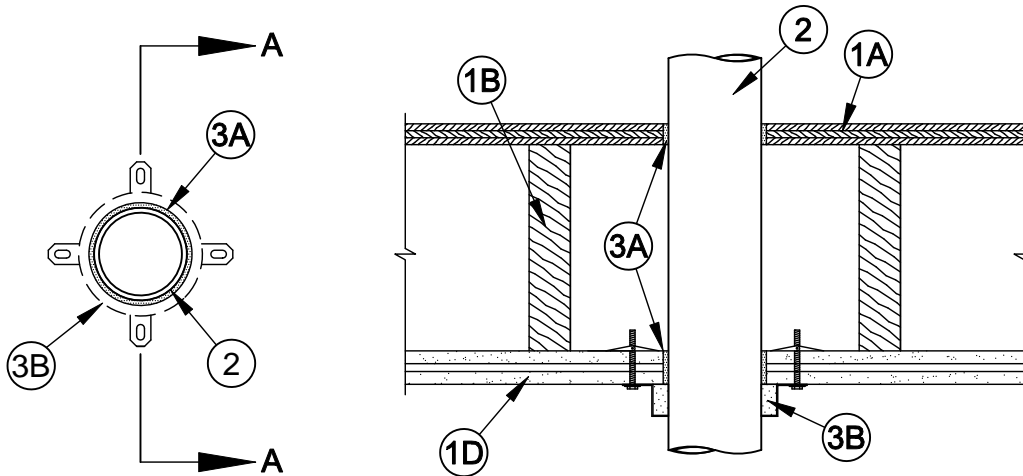




### System No. F-C-2020

F Ratings - 1 and 2 Hr (See Item 1)  
T Ratings - 1 and 2 Hr (See Item 1)  
L Rating At Ambient - 1 CFM/sq ft  
L Rating At 400 F - Less Than 1 CFM/sq ft



**Section A-A**

1. **Floor-Ceiling Assembly** - The 1 hr fire-rated solid or trussed lumber joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual L500 Series Floor-Ceiling Designs in the UL Fire Resistance Directory. The 2 hr fire-rated wood joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in Design Nos. L505, L511 or L536 in the UL Fire Resistance Directory. The F and T Ratings of the firestop system are equal to the hourly fire rating of the floor-ceiling assembly. The general construction features of the floor-ceiling assembly are summarized below:
  - A. **Flooring System** - Lumber or plywood subfloor with finish floor of lumber, plywood or **Floor Topping Mixture\*** as specified in the individual Floor-Ceiling Design. Diam of floor opening to be min 1/2 in. (13 mm) to max 1 in. (25 mm) larger than outside diameter of penetrant. Max diam of floor opening is 5 in. (127 mm).
  - B. **Wood Joists\*** - For 1 hr fire-rated floor-ceiling assemblies, nom 10 in. deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or **Structural Wood Members\*** with bridging as required and with ends firestopped. For 2 hr fire-rated floor-ceiling assemblies, nom 2 by 10 in. (51 by 254 mm) lumber joists spaced max 16 in. (406 mm) OC with nom 1 by 3 in. (25 by 76 mm) lumber bridging and with ends firestopped.
  - C. **Furring Channels** - (Not Shown) - In 2 hr fire-rated assemblies, resilient galv steel furring installed perpendicular to wood joists between first and second layers of wallboard (Item 1D). Furring channels spaced max 24 in. (610 mm) OC. In 1 hr fire-rated assemblies, resilient galv steel furring installed perpendicular to wood joists between wallboard and wood joists as specified in the individual Floor-Ceiling Design. Furring channels spaced max 24 in. (610 mm) OC.
  - D. **Gypsum Board\*** - Nom 4 ft (1.22 m) wide by 5/8 in. (16 mm) thick as specified in the individual Floor-Ceiling Design. First layer of wallboard secured to wood joists or furring channels as specified in the individual Floor-Ceiling Design. Second layer of wallboard (2 hr fire-rated assembly) screw-attached to furring channels as specified in the individual Floor-Ceiling Design. Diam of ceiling opening to be min 0 in. (0 mm, continuous point contact) to max 1/2 in. (13 mm) larger than outside diameter of penetrant. Max diam of ceiling opening is 5 in. (127 mm).



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2. **Through Penetrants** - One nonmetallic pipe or conduit to be installed approximately midway between wood joists and centered within the firestop system. Diam of openings hole-sawed through flooring system to be min 1/2 in. (13 mm) to max 1 in. (25 mm) larger than outside diameter of penetrant. Diam of opening hole-sawed through gypsum board ceiling to be min 0 in. (0 mm, continuous point contact) to max 1/2 in. (13 mm) larger than outside diameter of penetrant. Pipe or conduit to be rigidly supported on both sides of the floor-ceiling assembly. The following types and sizes of nonmetallic pipes or conduits may be used:
- A. **Polyvinyl Chloride (PVC) Pipe** - Nom 4 in. (102 mm) diam (or smaller) Schedule 40 solid core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system.
  - B. **Rigid Nonmetallic Conduit+** - Nom 4 in. (102 mm) diam (or smaller) Schedule 40 PVC conduit installed in accordance with Article 347 of the National Electrical Code (NFPA No. 70).
  - C. **Chlorinated Polyvinyl Chloride (CPVC) Pipe** - Nom 4 in. (102 mm) diam (or smaller) SDR13.5 or Schedule 80 CPVC pipe for use in closed (process or supply) piping systems.
3. **Firestop System** - The firestop system shall consist of the following:
- A. **Fill, Void or Cavity Material\* - Sealant** - Fill material forced into annulus to fill space to max extent possible, flush with top surface of floor and bottom surface of ceiling.  
**SPECIFIED TECHNOLOGIES INC** - SpecSeal Series SSS Sealant, SpecSeal LCI Sealant or Type WF300 Caulk
  - B. **Firestop Device** - Galv steel collar lined with an intumescent material sized to fit the specific diam of the through-penetrant. Device shall be installed around through-penetrant in accordance with the accompanying installation instructions. Device incorporates anchor tabs for securement to finished gypsum wallboard ceiling by means of 3/16 in. (5 mm) diam by 3-1/2 in. (89 mm) long steel toggle bolts in conjunction with 1/4 in. by 1-1/4 in. (6 by 32 mm) diam steel fender washers.  
**SPECIFIED TECHNOLOGIES INC** - SpecSeal Firestop Collar or SpecSeal LCC Firestop Collar

+Bearing the UL Listing Mark

\*Bearing the UL Classification Marking



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