

SECTION A-A

2. Through Penetrants ~ One nonmetallic pipe, conduit or tubing to be centered within the firestop system. The max diam of the through penetrant and annular space within the firestop system is dependent upon the type of fill material (Item 3). Pipe, conduit or tubing to be rigidly supported on both sides of the wall assembly. The following types and sizes of nonmetallic pipes, conduits or tubing may be used:
- A. Polyvinyl Chloride (PVC) Pipe — Nom 2 in. diam (or smaller) Schedule 40 solid core PVC pipe for use in closed (process or supply) piping systems.
 - B. Chlorinated Polyvinyl Chloride (CPVC) Pipe — Nom 2 in. diam (or smaller) SDR17 CPVC pipe for use in closed (process or supply) piping systems.
 - C. Rigid Nonmetallic Conduit+ — Nom 2 in. diam (or smaller) Schedule 40 PVC conduit installed in accordance with Article 347 of the National Electrical Code (NFPA No. 70).
 - D. Electrical Nonmetallic Tubing (ENT)+ — Nom 1 in. diam (or smaller) PVC tubing installed in accordance with Article 331 of the National Electrical Code (NFPA No. 70).
3. Fill, Void or Cavity Material* — Sealant — In 2 hr fire rated assemblies, min 1-1/4 in. thickness of fill material applied within the annulus, flush with both surfaces of wall. In 1 hr fire rated assemblies, min 5/8 in. thickness of fill material applied within the annulus, on both surfaces of wall. Additional fill material to be installed such that a min 5/8 in. thick crown is formed around the penetrating item and lapping a min 1 in. beyond the periphery of the opening.
- The max diam of the through penetrant and annular space within the firestop system is dependent upon the type of fill material as tabulated below:

W R GRACE & CO - CONN
CONSTRUCTION PRODUCTS DIV --FSP 1100 Putty or FS
1900 Sealant.

Fire Tests	UL System	Test Criteria	Description
Fluted Steel Deck Assembly	F-A-1020*	<p>F-Rating 3 Hr.</p> <hr/> <p>T-Rating 0 Hr.</p>	<p>1. 2" steel fluted deck, minimum 3-1/2" thickness concrete topping. The annular space range shall be minimum 1/4" to maximum 1-5/8" for this firestop system.</p> <p>2. Metallic pipe:</p> <ul style="list-style-type: none"> A Steel pipe: 8" diameter (or smaller) Schedule 40 (or heavier) steel. B Iron pipe: 8" diameter (or smaller) cast or ductile iron. C Copper pipe: 4" diameter (or smaller) regular (or heavier) copper. D Copper tubing: 4" diameter (or smaller) Type L (or heavier) copper tubing. E Conduit: 4" diameter (or smaller) steel conduit or EMT. <p>3. Forming material: Minimum 4" thick mineral wool insulation (minimum 4.0 pcf) firmly packed into the opening as a permanent form.</p> <p>4. Type A: Minimum 1/2" thick sealant applied within the opening, flush with the top surface of the floor.</p>

1 FLOOR REPAIR DETAILS
G001 3'-1'-0"

Veterans Administration

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