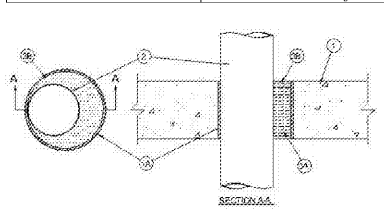


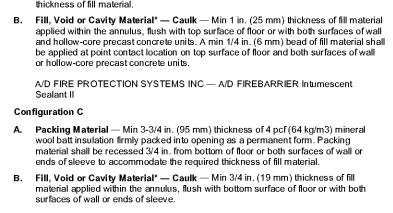
UL Design No. C-AJ-1557

March 21, 2019

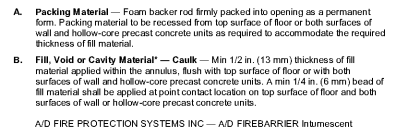
ANSIUL1479 (ASTM E814)	FT Rating — 2 and 3 Hr (See Item 3)	CONULC S115	FT Rating — 2 and 3 Hr (See Item 3)
F Rating — 0 Hr	FH Rating — 2 and 3 Hr (See Item 3)	FT Rating — 0 Hr	FH Rating — 2 and 3 Hr (See Item 3)
T Rating — 0 Hr		FT Rating — 0 Hr	



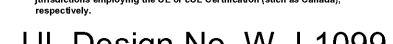
Configuration B
A. Packing Material — Foam backer rod firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor or both surfaces of wall and hollow-core precast concrete units as required to accommodate the required thickness of fill material.
B. Fill, Void or Cavity Material — Caulk — Min 1 in. (25 mm) thickness of fill material applied within the annulus, flush with top surface of floor or with both surfaces of wall and hollow-core precast concrete units. A min 1/4 in. (6 mm) bead of fill material shall be applied at point contact location on top surface of floor and both surfaces of wall and hollow-core precast concrete units.
 A/D FIRE PROTECTION SYSTEMS INC. — AD FIREBARRIER Intumescent Sealant II



Configuration C
A. Packing Material — Min 3/4 in. (95 mm) thickness of 4 pcf (64 kg/m³) mineral wool batt insulation, firmly packed into opening as a permanent form. Packing material shall be recessed 3/4 in. from bottom of floor and both surfaces of wall or ends of sleeve to accommodate the required thickness of fill material.
B. Fill, Void or Cavity Material — Caulk — Min 3/4 in. (19 mm) thickness of fill material applied within the annulus, flush with top surface of floor or with both surfaces of wall or ends of sleeve.
 A/D FIRE PROTECTION SYSTEMS INC. — AD FIREBARRIER Intumescent Sealant II



Configuration D
A. Packing Material — Foam backer rod firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor or both surfaces of wall and hollow-core precast concrete units as required to accommodate the required thickness of fill material.
B. Fill, Void or Cavity Material — Caulk — Min 1/2 in. (13 mm) thickness of fill material applied within the annulus, flush with top surface of floor or with both surfaces of wall and hollow-core precast concrete units. A min 1/4 in. (6 mm) bead of fill material shall be applied at point contact location on top surface of floor and both surfaces of wall or hollow-core precast concrete units.
 A/D FIRE PROTECTION SYSTEMS INC. — AD FIREBARRIER Intumescent Sealant II

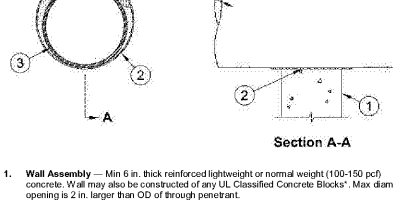


* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

UL Design No. W-J-1099

December 04, 2002

F Rating — 2 Hr
 T Ratings — 0, 1/2, 3/4 and 1 Hr (See Item 3)



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 Block*. Max diam of opening is 1.5 in. larger than OD of through penetrant.
 See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.

2. Steel Sleeve — Cylindrical sleeve fabricated from 0.0125 in. thick (30 gauge) galv sheet steel and having a min 2 in. lap along the longitudinal seam. Length of the sleeve to be equal to or max 6 in. greater than the thickness of the wall. Sleeve installed by confining the sleeve to a diam smaller than the through opening, inserting the sleeve through the opening and releasing the coil to let it uncoil against the circular opening in concrete. The ends of the sleeve shall be flush with or extend a max 3 in. beyond each surface of the wall.
 As an alternate, steel sleeve may consist of nom 14 in. diam (or smaller) Schedule 5 (or heavier) steel pipe sleeve cast or grouted into concrete. The ends of the steel sleeve shall be flush with or extend a max 3 in. beyond each surface of the wall.

3. Through Penetrant — One metallic pipe, conduit or tube to be installed eccentrically or concentrically within the firestop system. The annular space between the pipe, conduit or tube and the steel sleeve shall be min 0 in. (point contact) to max 2 in. (25 mm) of metallic pipe, conduit or tube may be used.
A. Steel Pipe — Nom 12 in. diam (or smaller) Schedule 5 (or heavier) steel pipe.
B. Iron Pipe — Nom 12 in. diam (or smaller) cast or ductile iron pipe.
C. Conduit — Nom 6 in. diam (or smaller) rigid steel conduit, nom 4 in. diam (or smaller) steel electrical metallic tubing (EMT) or nom 4 in. diam (or smaller) flexible steel conduit.
D. Copper Pipe — Nom 4 in. diam (or smaller) Regular (or heavier) copper pipe.
E. Copper Tube — Nom 4 in. diam (or smaller) Type L (or heavier) copper tube.

4. Firestop System — The F Rating of the firestop system is dependent upon the min thickness of the wall, type and max nom diam of the through penetrant, min and max annular space within the firestop system and the firestop configuration as shown in the table below:

Type of Penetrant	Max Diam of Penetrant, in. (mm)	Use of Steel Sleeve	Min. Max Annular In. (mm)	Fire-stop Configuration	F Rating Hr
Steel or iron pipe, steel conduit, or EMT	2 in.	Optional	0, 2 (0, 51)	A	3
Steel or iron pipe, steel conduit, or EMT	8 in.	Optional	0, 2 (0, 51)	A	3
Steel or iron pipe	12 in.	Optional	0, 2 (0, 51)	A	3
Copper pipe or tube	4 in.	Optional	0, 2 (0, 51)	A	3

3A. Through Penetrating Product — Flexible Metal Piping — Min 3/4 in. (19 mm) diam (or smaller) flexible metal piping to be installed eccentrically within the firestop system. The annular space between the pipe, conduit or tube and the steel sleeve shall be min 0 in. (point contact) to max 2 in. (25 mm) of metallic pipe, conduit or tube may be used. The firestop system shall be installed in accordance with the firestop system as shown in the table below:

Min Thickness of Wall, in. (mm)	Type of Through Penetrant	Max Nom Diam of Penetrant, in. (mm)	Use of Steel Sleeve	Min. Max Annular In. (mm)	Fire-stop Configuration	F Rating Hr
4-3/4 (121)	Steel Pipe & Iron Pipe	12 (305)	Optional	0, 2 (0, 51)	A	3
4-3/4 (121)	Steel Conduit, Copper Tube & Copper Pipe	6 (152)	Optional	0, 2 (0, 51)	A	3
4-3/4 (121)	Steel EMT	4 (102)	Optional	0, 2 (0, 51)	A	3
4-1/2 (114)	Steel Pipe & Iron Pipe	12	Not Applicable	0, 2 (0, 51)	A	2
4-1/2 (114)	Steel Conduit, Copper Tube & Copper Pipe	6 (152)	Not Applicable	0, 2 (0, 51)	A	2
4-1/2 (114)	Steel EMT	4 (102)	Not Applicable	0, 2 (0, 51)	A	2
5-1/4 (135)	Steel Pipe & Iron Pipe	8 (203)	Optional	0, 2 (0, 51)	C	3
5-1/4 (135)	Steel Conduit, Copper Tube & Copper Pipe	4 (102)	Optional	0, 2 (0, 51)	C	3
4-1/2 (114)	Steel Pipe & Iron Pipe	8 (203)	Not Applicable	0, 7/8 (0, 22)	D	2
4-1/2 (114)	Steel Conduit, Copper Tube, Copper Pipe & Steel EMT	4 (102)	Not Applicable	0, 7/8 (0, 22)	D	2

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

3B. Through Penetrating Product — Flexible Metal Piping — Min 3/4 in. (19 mm) diam (or smaller) flexible metal piping to be installed eccentrically within the firestop system. The annular space between the pipe, conduit or tube and the steel sleeve shall be min 0 in. (point contact) to max 2 in. (25 mm) of metallic pipe, conduit or tube may be used. The firestop system shall be installed in accordance with the firestop system as shown in the table below:

Min Thickness of Wall, in. (mm)	Type of Through Penetrant	Max Nom Diam of Penetrant, in. (mm)	Use of Steel Sleeve	Min. Max Annular In. (mm)	Fire-stop Configuration	F Rating Hr
4-3/4 (121)	Steel Pipe & Iron Pipe	12 (305)	Optional	0, 2 (0, 51)	A	3
4-3/4 (121)	Steel Conduit, Copper Tube & Copper Pipe	6 (152)	Optional	0, 2 (0, 51)	A	3
4-3/4 (121)	Steel EMT	4 (102)	Optional	0, 2 (0, 51)	A	3
4-1/2 (114)	Steel Pipe & Iron Pipe	12	Not Applicable	0, 2 (0, 51)	A	2
4-1/2 (114)	Steel Conduit, Copper Tube & Copper Pipe	6 (152)	Not Applicable	0, 2 (0, 51)	A	2
4-1/2 (114)	Steel EMT	4 (102)	Not Applicable	0, 2 (0, 51)	A	2
5-1/4 (135)	Steel Pipe & Iron Pipe	8 (203)	Optional	0, 2 (0, 51)	C	3
5-1/4 (135)	Steel Conduit, Copper Tube & Copper Pipe	4 (102)	Optional	0, 2 (0, 51)	C	3
4-1/2 (114)	Steel Pipe & Iron Pipe	8 (203)	Not Applicable	0, 7/8 (0, 22)	D	2
4-1/2 (114)	Steel Conduit, Copper Tube, Copper Pipe & Steel EMT	4 (102)	Not Applicable	0, 7/8 (0, 22)	D	2

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

3C. Through Penetrating Product — Flexible Metal Piping — Min 3/4 in. (19 mm) diam (or smaller) flexible metal piping to be installed eccentrically within the firestop system. The annular space between the pipe, conduit or tube and the steel sleeve shall be min 0 in. (point contact) to max 2 in. (25 mm) of metallic pipe, conduit or tube may be used. The firestop system shall be installed in accordance with the firestop system as shown in the table below:

Min Thickness of Wall, in. (mm)	Type of Through Penetrant	Max Nom Diam of Penetrant, in. (mm)	Use of Steel Sleeve	Min. Max Annular In. (mm)	Fire-stop Configuration	F Rating Hr
4-3/4 (121)	Steel Pipe & Iron Pipe	12 (305)	Optional	0, 2 (0, 51)	A	3
4-3/4 (121)	Steel Conduit, Copper Tube & Copper Pipe	6 (152)	Optional	0, 2 (0, 51)	A	3
4-3/4 (121)	Steel EMT	4 (102)	Optional	0, 2 (0, 51)	A	3
4-1/2 (114)	Steel Pipe & Iron Pipe	12	Not Applicable	0, 2 (0, 51)	A	2
4-1/2 (114)	Steel Conduit, Copper Tube & Copper Pipe	6 (152)	Not Applicable	0, 2 (0, 51)	A	2
4-1/2 (114)	Steel EMT	4 (102)	Not Applicable	0, 2 (0, 51)	A	2
5-1/4 (135)	Steel Pipe & Iron Pipe	8 (203)	Optional	0, 2 (0, 51)	C	3
5-1/4 (135)	Steel Conduit, Copper Tube & Copper Pipe	4 (102)	Optional	0, 2 (0, 51)	C	3
4-1/2 (114)	Steel Pipe & Iron Pipe	8 (203)	Not Applicable	0, 7/8 (0, 22)	D	2
4-1/2 (114)	Steel Conduit, Copper Tube, Copper Pipe & Steel EMT	4 (102)	Not Applicable	0, 7/8 (0, 22)	D	2

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

3D. Through Penetrating Product — Flexible Metal Piping — Min 3/4 in. (19 mm) diam (or smaller) flexible metal piping to be installed eccentrically within the firestop system. The annular space between the pipe, conduit or tube and the steel sleeve shall be min 0 in. (point contact) to max 2 in. (25 mm) of metallic pipe, conduit or tube may be used. The firestop system shall be installed in accordance with the firestop system as shown in the table below:

Min Thickness of Wall, in. (mm)	Type of Through Penetrant	Max Nom Diam of Penetrant, in. (mm)	Use of Steel Sleeve	Min. Max Annular In. (mm)	Fire-stop Configuration	F Rating Hr
4-3/4 (121)	Steel Pipe & Iron Pipe	12 (305)	Optional	0, 2 (0, 51)	A	3
4-3/4 (121)	Steel Conduit, Copper Tube & Copper Pipe	6 (152)	Optional	0, 2 (0, 51)	A	3
4-3/4 (121)	Steel EMT	4 (102)	Optional	0, 2 (0, 51)	A	3
4-1/2 (114)	Steel Pipe & Iron Pipe	12	Not Applicable	0, 2 (0, 51)	A	2
4-1/2 (114)	Steel Conduit, Copper Tube & Copper Pipe	6 (152)	Not Applicable	0, 2 (0, 51)	A	2
4-1/2 (114)	Steel EMT	4 (102)	Not Applicable	0, 2 (0, 51)	A	2
5-1/4 (135)	Steel Pipe & Iron Pipe	8 (203)	Optional	0, 2 (0, 51)	C	3
5-1/4 (135)	Steel Conduit, Copper Tube & Copper Pipe	4 (102)	Optional	0, 2 (0, 51)	C	3
4-1/2 (114)	Steel Pipe & Iron Pipe	8 (203)	Not Applicable	0, 7/8 (0, 22)	D	2
4-1/2 (114)	Steel Conduit, Copper Tube, Copper Pipe & Steel EMT	4 (102)	Not Applicable	0, 7/8 (0, 22)	D	2

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

3E. Through Penetrating Product — Flexible Metal Piping — Min 3/4 in. (19 mm) diam (or smaller) flexible metal piping to be installed eccentrically within the firestop system. The annular space between the pipe, conduit or tube and the steel sleeve shall be min 0 in. (point contact) to max 2 in. (25 mm) of metallic pipe, conduit or tube may be used. The firestop system shall be installed in accordance with the firestop system as shown in the table below:

Min Thickness of Wall, in. (mm)	Type of Through Penetrant	Max Nom Diam of Penetrant, in. (mm)	Use of Steel Sleeve	Min. Max Annular In. (mm)	Fire-stop Configuration	F Rating Hr
4-3/4 (121)	Steel Pipe & Iron Pipe	12 (305)	Optional	0, 2 (0, 51)	A	3
4-3/4 (121)	Steel Conduit, Copper Tube & Copper Pipe	6 (152)	Optional	0, 2 (0, 51)	A	3
4-3/4 (121)	Steel EMT	4 (102)	Optional	0, 2 (0, 51)	A	3
4-1/2 (114)	Steel Pipe & Iron Pipe	12	Not Applicable	0, 2 (0, 51)	A	2
4-1/2 (114)	Steel Conduit, Copper Tube & Copper Pipe	6 (152)	Not Applicable	0, 2 (0, 51)	A	2
4-1/2 (114)	Steel EMT	4 (102)	Not Applicable	0, 2 (0, 51)	A	2
5-1/4 (135)	Steel Pipe & Iron Pipe	8 (203)	Optional	0, 2 (0, 51)	C	3
5-1/4 (135)	Steel Conduit, Copper Tube & Copper Pipe	4 (102)	Optional	0, 2 (0, 51)	C	3
4-1/2 (114)	Steel Pipe & Iron Pipe	8 (203)	Not Applicable	0, 7/8 (0, 22)	D	2
4-1/2 (114)	Steel Conduit, Copper Tube, Copper Pipe & Steel EMT	4 (102)	Not Applicable	0, 7/8 (0, 22)	D	2

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

3F. Through Penetrating Product — Flexible Metal Piping — Min 3/4 in. (19 mm) diam (or smaller) flexible metal piping to be installed eccentrically within the firestop system. The annular space between the pipe, conduit or tube and the steel sleeve shall be min 0 in. (point contact) to max 2 in. (25 mm) of metallic pipe, conduit or tube may be used. The firestop system shall be installed in accordance with the firestop system as shown in the table below:

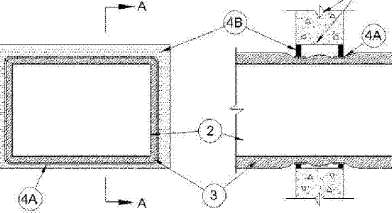
Min Thickness of Wall, in. (mm)	Type of Through Penetrant	Max Nom Diam of Penetrant, in. (mm)	Use of Steel Sleeve	Min. Max Annular In. (mm)	Fire-stop Configuration	F Rating Hr
4-3/4 (121)	Steel Pipe & Iron Pipe	12 (305)	Optional	0, 2 (0, 51)	A	3
4-3/4 (121)	Steel Conduit, Copper Tube & Copper Pipe	6 (152)	Optional	0, 2 (0, 51)	A	3
4-3/4 (121)	Steel EMT	4 (102)	Optional	0, 2 (0, 51)	A	3
4-1/2 (114)	Steel Pipe & Iron Pipe	12	Not Applicable	0, 2 (0, 51)	A	2
4-1/2 (114)	Steel Conduit, Copper Tube & Copper Pipe	6 (152)	Not Applicable	0, 2 (0, 51)	A	2
4-1/2 (114)	Steel EMT	4 (102)	Not Applicable	0, 2 (0, 51)	A	2
5-1/4 (135)	Steel Pipe & Iron Pipe	8 (203)	Optional	0, 2 (0, 51)	C	3
5-1/4 (135)	Steel Conduit, Copper Tube & Copper Pipe	4 (102)	Optional	0, 2 (0, 51)	C	3
4-1/2 (114)	Steel Pipe & Iron Pipe	8 (203)	Not Applicable	0, 7/8 (0, 22)	D	2
4-1/2 (114)	Steel Conduit, Copper Tube, Copper Pipe & Steel EMT	4 (102)	Not Applicable	0, 7/8 (0, 22)	D	2

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

UL Design No. W-J-7011

December 18, 2008

F Rating — 2 Hr
 T Rating — 3/4 Hr



1. Wall Assembly — Min 6 in. (152 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete. Wall may be constructed of any UL Classified Concrete Block*. Max area of opening is 1015 sq in. (0.66 m²) with a max single dimension of 36 in. (0.89 m).
 See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.

2. Steel Duct — Max 24 by 30 in. (610 by 762 mm) No. 26 gauge (or heavier) steel duct to be installed within the opening. Min clearance between the duct and the edge of opening in wall is 1-1/2 in. (38 mm). Steel duct to be rigidly supported on both sides of the wall assembly.

3. Batt and Blankets — Nom 1-1/2 in. (38 mm) thick light density (min 3/4 pcf or 12 kg/m³) glass fiber blanket insulation jacketed on the outside with a foil-covered kraft facing. Longitudinal and transverse joints sealed with foil-scrim-kraft tape. During the installation of the blanket insulation, blankets to be compressed approx 50 percent in thickness such that the annular space within the firestop system shall be min 1/2 in. (13 mm) to max 2 in. (51 mm).
 See Batts and Blankets (BKNV) category in the Building Materials Directory for names of manufacturers. Any batt or blanket meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.

4. Firestop System — The firestop system shall consist of the following:
A. Fill, Void or Cavity Material — Wrap Strap — Nom 1/8 or 3/16 in. (3.2 or 4.8 mm) thick intumescent material faced on both sides with a plastic film, supplied in 2 in. (51 mm) wide strips or 14 in. (355 mm) thick intumescent material faced on both sides with a plastic film, supplied in 1-1/2 in. (38 mm) wide strips. Single layer of wrap strap wrapped around to compress the duct insulation (Item 3) with the ends butted and held in place by means of two layers of foil tape. Wrap strap installed such that 1/4 in. (6 mm) of the wrap strap protrudes from the wall. One set of wrap straps to be installed on each side of the wall.
 SPECIFIED TECHNOLOGIES INC. — SpecSeal RED Wrap Strap; SpecSeal BLU Wrap Strap or SpecSeal WRP Wrap Strap
B. Fill, Void or Cavity Material — Sealant — Min 5/8 in. (16 mm) thickness of fill material applied within annulus, flush with both surfaces of the wall. A min 1/4 in. (6 mm) bead of fill material shall be applied at the wrap strap/insulated through-penetrant interface on both sides of the wall.
 SPECIFIED TECHNOLOGIES INC. — SpecSeal Series SSS Sealant or SpecSeal LCI Sealant

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

5. Through Penetrant — One or more pipes, conduits or tubing to be installed eccentrically or concentrically within the firestop system. The annular space between the pipe, conduit or tubing and the steel duct shall be min 0 in. (point contact) to max 2 in. (25 mm) of metallic pipe, conduit or tubing may be used. The following types and sizes of pipes, conduits and tubes may be used:
A. Steel Pipe — Nom 4 in. diam (or smaller) Schedule 5 (or heavier) steel pipe.
B. Iron Pipe — Nom 4 in. diam (or smaller) cast or ductile iron pipe.
C. Conduit — Nom 4 in. diam (or smaller) rigid steel conduit, nom 4 in. diam (or smaller) steel electrical metallic tubing (EMT) or nom 4 in. diam (or smaller) flexible steel conduit.
D. Copper Pipe — Nom 2 in. diam (or smaller) Regular (or heavier) copper pipe.
E. Copper Tube — Nom 2 in. diam (or smaller) Type L (or heavier) copper tube.
F. Polyvinyl Chloride (PVC) Pipe — Nom 2 in. diam (or smaller) Schedule 40 solid or cellular core PVC pipe for use in vented (drain, waste or vent) or closed (process or supply) piping systems.
G. Chlorinated Polyvinyl Chloride (CPVC) Pipe — Nom 2 in. diam (or smaller) Schedule 40 solid or cellular core CPVC pipe for use in vented (drain, waste or vent) or closed (process or supply) piping systems.
H. Rigid Nonmetallic Conduit — Nom 2 in. diam (or smaller) PVC conduit installed in accordance with Article 347 of the National Electrical Code (NFPA 70).
I. Electrical Nonmetallic Tubing (ENT) — Nom 2 in. diam (or smaller) ENT formed from PVC installed in accordance with Article 331 of the National Electrical Code (NFPA 70).
 When Item 2A, 2B, 2C or 2E is used, the T Rating is 0 hr. When Item 2F, 2G, 2H or 2I is used, the T Rating is 1-3/4 hr.

6. Pipe Coverings — One or more of the metallic pipes or tubing may be insulated with one or more of the following types of pipe coverings:
A. Pipe and Equipment Covering Materials — Nom 2 in. thick hollow cylindrical heavy density (min 3.5 pcf) glass fiber units jacketed on the outside with a foil-covered kraft service jacket. Longitudinal joints sealed with metal fasteners or factory-applied self-sealing tape. Transverse joints secured with metal fasteners or but tape applied with the product. Annular space between the insulated through penetrant and periphery of opening shall be min 0 in. (point contact) to max 2 in. (25 mm) of metallic pipe, conduit or tubing may be used. Separation between insulated or uninsulated pipes, conduits or tubing shall be min 1/2 in. to max 2 in.
 See Pipe and Equipment Covering Materials (PECM) category in the Building Materials Directory for names of manufacturers. Any covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.
B. Pipe Covering Material — Nom 2 in. thick solid sheet material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.
C. Shaping Materials — Used in conjunction with Item 4B. Foil-scrim-kraft or all service jacketing shall be wrapped around the outer circumference of the pipe, conduit or tubing. Longitudinal joints and transverse joints sealed with metal fasteners or but tape. Annular space shall be min 0 in. (point contact) to max 2 in. (25 mm).
 See Shaping Materials (SDV) category in the Building Materials Directory for names of manufacturers. Any shaping material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.
D. Tube Insulation - Plastics — Nom 3/4 in. thick acrylic