FIRESTOP SUBMITTAL PACKAGE

PROJECT:

SUBMITTED BY:





200 Evans Way · Somerville, NJ 08876 · (800) 992-1180 · (908) 526-8000 · Fax (908) 526-9623

Electrical

Wood Floor-Ceilings

PRODUCT(S)

SYSTEM DESCRIPTION

F-C-1074	Max. 4 in. steel conduit or EMT. Optional chase wall. Caulk only.	LCI Sealant
F-C-1075	Mult. max. 1 in. steel conduits or EMT. Optional chase wall. Caulk only.	LCI Sealant
F-C-2032	Max. 2 in. PVC conduit or ENMT. Optional chase wall. Caulk only.	LCI Sealant
F-C-3057	Electrical, telephone or data cables. Optional chase wall. Caulk only.	LCI Sealant
F-C-8029	Mult. metallic, nonmetallic conduits or cables. Opt. chase wall. Caulk only.	LCI Sealant

Gypsum Board Walls

SYSTEM	DESCRIPTION	PRODUCT(S)
W-L-1222	Max. 6 in. steel conduit or EMT. Caulk only.	LCI Sealant
W-L-1223	Mult. max. 2 in. steel conduits or EMT. Caulk only.	LCI Sealant
W-L-2241	Max. 2 in. PVC conduit or ENMT. Caulk only.	LCI Sealant
W-L-3169	Max. 4-1/2 in. cable bundle. Caulk only.	LCI Sealant
W-L-3171	Single electrical, telephone or data cable. Caulk only.	LCI Sealant
CLIV	Metallic or nonmetallic electrical boxes	Putty/Putty Pads

General Certificate of Conformance

Product Data Sheets

Series LCI Intumescent Sealant Series SSP Putty & Putty Pads

Material Safety Data Sheets

Series LCI Intumescent Sealant Series SSP Putty & Putty Pads



Section A-A

System No. F-C-1074

October 04, 2000 F Ratings — 1 and 2 Hr (See Item 1) T Ratings — 1/4, 1/2 and 1 Hr (See Item 2)

- 1. **Floor Ceiling Assembly** The 1 hr fire-rated wood joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual L500 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 Rating of the firestop system is equal to the fire**
 - rating of the floor-ceiling assembly. The general construction features of the floor 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 opening to be max 1 in. larger than diam of pipe. As an alternate, the opening may be square-cut with a max dimension 1 in. greater than the diam of the pipe.
 - B. Wood Joists 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.
 - C. **Gypsum Board*** Thickness, type, number of layers and fasteners as required in the individual Floor-Ceiling Design. Diam of opening to be max 1 in. greater than diam of pipe.
 - D. Furring Channel (Not Shown) In 2 hr fire-rated assemblies, resilient galv steel furring channels installed perpendicular to wood joists between base and face layers of gypsum board (Item C). Furring channels spaced max 24 in. OC with additional short lengths of furring channel installed adjacent to and max 3 in. from two opposing sides of penetrant.
- 1A. **Chase Wall** (Optional, Not Shown) The through penetrant (Item 2) may be routed through a 1 or 2 hr fire rated single, double or staggered wood stud/gypsum board chase wall. Depth of chase wall stud cavity to be min 1 in. greater than the diameter of the through penetrant (Item 2). The chase wall shall be constructed of the materials and in the manner specified in the individual U300 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
 - A. **Studs** Nom 2 by $\frac{1}{4}$ in., 2 by 6 in. or double nom 2 by 4 in. lumber studs.
 - B. Sole Plate Nom 2 by 4 in., 2 by 6 in. or parallel 2 by 4 in. lumber plates, tightly butted. Diam of opening is to be max 1 in. larger than diam of pipe. As an alternate, the opening may be square-cut with a max dimension 1 in. greater than the diam of the pipe. Plates may be discontinuous over opening, terminating at two opposing edges of opening. Max length of discontinuity is 5-1/2 in.
 - C. Top Plate The double top plate shall consist of two nom 2 by 4 in., two nom 2 by 6 in. or two sets of parallel 2 by 4 in. lumber plates, tightly butted. Diam of opening is to be max 1 in. larger than diam of pipe. As an alternate, the opening may be square-cut with a max dimension 1 in. greater than the diam of the pipe. Plates may be discontinuous over opening, terminating at two opposing edges of opening. Max length of discontinuity is 5-1/2 in.
 - D. Steel Plate When lumber plates are discontinuous, nom 1-1/2 in. wide No. 20 gauge (or heavier) galv steel plates shall be installed to connect discontinuous lumber plates and to provide a form for the fill material. Steel plates sized to lap 2 in. onto each discontinuous lumber plate and secured to lumber plates with steel screws or nails.
 - E. **Gypsum Board*** Thickness, type, number of layers and fasteners shall be as specified in the individual Wall and Partition Design.
- 2. **Through Penetrant** One metallic pipe, conduit or tubing to be installed either concentrically or eccentrically within the opening. Annular space to be min 0 in. (point contact) to max 1 in. Penetrant to be rigidly supported on both sides of floor-ceiling assembly. The following types and sizes of metallic pipe, conduit or tubing 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.

(System No. F-C-1074 Continued)

Reproduced courtesy of Underwriters Laboratories, Inc. Created or Revised: 09/24/02 Specified Technologies, Inc., Somerville, NJ (800) 992-1180 FOD-3424

(System No. F-C-1074 Continued)

- C. Conduit Nom 4 in. diam (or smaller) steel conduit, steel electrical metallic tubing or flexible steel conduit.
- D. Copper Pipe or Tube Nom 4 in. diam (or smaller) Regular (or heavier) copper pipe or Type L (or heavier) copper tube.

The T Rating is 1/4 hr when copper pipe or tube is used in 1 hr fire-rated assemblies.

The T Rating is 1/2 hr when copper pipe of tube is used in 2 hr fire-rated assemblies.

When steel pipe, iron pipe, steel conduit or flexible metal piping (Item 2A) is used, T Rating is 1 hr.

2A. **Through Penetrating Product*** — **Flexible Metal Piping** — As an alternate to Item 2, one nom 2 in. diam (or smaller) steel flexible metal pipe to be installed either concentrically or eccentrically within the firestop system. Annular space to be min 0 in. (point contact) to max 1 in. Penetrant to be rigidly supported on both sides of floor-ceiling assembly.

OMEGA FLEX INC TITEFLEX CORP A BUNDY CO WARD MFG INC

3. Fill, Void or Cavity Material* — Sealant — Min 3/4 in. thickness of fill material applied within the annulus, flush with the top surface of the floor or sole plate. Min 5/8 in. thickness of fill material applied within the annulus, flush with bottom surface of ceiling or top plate. Min 1/4 in. diam bead of fill material applied at point contact location on the top surface of floor or sole plate and at the penetrant/ceiling or top plate interface.
SPECIFIED TECHNOLOGIES INC — SpecSeal LCI Sealant

*Bearing the UL Classification Mark



Copper Pipe or Tube — Nom 1 in. diam (or smaller) Regular (or heavier) copper pipe or Type L (or heavier) copper tube.

The T Rating is 1/4 hr when copper pipe or tube is used in 1 hr fire-rated assemblies. The T Rating is 1/2 hr when copper pipe of tube is used in 2 hr fire-rated assemblies. When steel pipe, iron pipe, steel conduit or flexible metal piping (Item 2A) is used, T Rating is 1 hr.

Reproduced courtesy of Underwriters Laboratories, Inc. Created or Revised: 09/24/02 Specified Technologies, Inc., Somerville, NJ (800) 992-1180

(System No. F-C-1075 Continued)

2A. **Through Penetrating Product*** — **Flexible Metal Piping** — As an alternate to Item 2, one or more nom 1 in. diam (or smaller) steel flexible metal pipes to be installed either concentrically or eccentrically within the firestop. The space between the pipes shall be min 1/4 in. to max 1/2 in. Annular space between the pipes and the periphery of the opening shall be min 0 in. (point contact) to max 1 in. Pipes to be rigidly supported on both sides of floor-ceiling assembly.

OMEGA FLEX INC TITEFLEX CORP A BUNDY CO WARD MFG INC

3. Fill, Void or Cavity Material* — Sealant — Min 3/4 in. thickness of fill material applied within the annulus, flush with the top surface of the floor or sole plate. Min 5/8 in. thickness of fill material applied within the annulus, flush with bottom surface of ceiling or top plate. Min 1/4 in. diam bead of fill material applied at point contact location on the top surface of floor or sole plate and at the penetrant/ceiling or top plate interface.

SPECIFIED TECHNOLOGIES INC — SpecSeal LCI Sealant

*Bearing the UL Classification Mark



(System No. F-C-2032 Continued)

- G. Cross Linked Polyethylene (PEX) Tubing Nom 1 in. diam (or smaller) SDR 9 PEX tubing for use in closed (process or supply) piping systems
- H. Electrical Nonmetallic Tubing (ENT)+ Nom 2 in. diam (or smaller) PVC tubing installed in accordance with Article 331 of the National Electrical Code (NFPA No. 70).

The use of the chase wall (Item 1.1) is dependent upon the type and diam of through penetrant and type of piping system used as tabulated below:

Type of Through Penetrant	Max Diam of Through Penetrant In.	Type of Piping System	Use of Chase Wall
PVC pipe (a)	2	Closed or Vented	Optional
RNC	2	Not Applicable	Optional
CPVC pipe (a)	2	Closed or Vented	Optional
ABS pipe	1-1/2	Closed or Vented	Optional
PB pipe	1	Closed	Optional
PEX-AL-PEX tubing	1	Closed	Required
PEX tubing	1	Closed	Optional
ENT	2	Not Applicable	Optional

(a)When nom diam of pipe exceeds 1 in. and chase wall (Item 1.1) is not used , T Rating is 1/4 hr.

When 2A, 2B, 2C, 2E, 2F, 2G or 2H is used, the annular space shall be min 0 in. (point contact) to max 1-5/8 in. When 2D is used, the annular space shall be min 1/8 in. to max 1 in. unless the pipe is contained within a chase wall, in which case the minimum annular space is 0 in. (point contact).

3. Fill, Void or Cavity Material* — Sealant — Min 3/4 in. thickness of fill material applied within annulus on top surface of floor. Min 5/8 in. thickness of fill material applied within annulus on bottom surface of ceiling or lower top plate of chase wall assembly. Additional fill material to be installed such that a min 1/8 in. crown is formed around the through penetrant on bottom surface of ceiling or lower plate of chase wall assembly.

SPECIFIED TECHNOLOGIES INC — SpecSeal 100, 101, 102, 105, 120 or 129 Sealant, SpecSeal LCI +Bearing the UL Listing Mark

*Bearing the UL Classification Marking



1

FOD-3426



System No. F-C-8029 F Rating — 1 Hr T Ratings — 1/2 and 3/4 Hr (See Item 2)

- 1. **Floor-Ceiling Assembly** The 1 hr fire-rated wood joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual L500 Designs in the UL Fire Resistance Directory, as 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. Max area of rectangular opening cut in flooring is 43-1/2 sq in. with a max width dimension of 3 in. and with a max length dimension of 14-1/2 in. Longer dimension of rectangular opening to be perpendicular to wood joist direction.
 - B. Wood Joists 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.
 - C. **Gypsum Board*** Thickness, type, number of layers and fasteners as required in the individual Floor-Ceiling Design. Max area of rectangular opening cut in gypsum board ceiling is 43-1/2 sq in. with a max width dimension of 3 in. and with a max length dimension of 14-1/2 in.
- 1A. Chase Wall (Optional, Not Shown) The through penetrants (Item 2) may be routed through a 1 hr fire rated single, double or staggered wood stud/gypsum board chase wall. Depth of chase wall stud cavity to be min 1/2 in. greater than width of opening cut in sole and top plates to accommodate the through penetrants. The chase wall shall be constructed of the materials and in the manner specified in the individual U300 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
 - A. Studs Nom 2 by 4 in., 2 by 6 in. or double nom 2 by 4 in. lumber studs.
 - B. Sole Plate Nom 2 by 4 in., 2 by 6 in. or parallel 2 by 4 in. lumber plates, tightly butted. Max area of rectangular opening cut in sole plate is 43-1/2 sq in. with a max width dimension of 3 in. and with a max length dimension of 14-1/2 in.
 - C. **Top Plate** The double top plate shall consist of two nom 2 by 4 in., two nom 2 by 6 in. or two sets of parallel 2 by 4 in. lumber plates, tightly butted. Max area of rectangular opening cut in top plate is 43-1/2 sq in. with a max width dimension of 3 in. and with a max length dimension of 14-1/2 in.
 - D. **Gypsum Board*** Thickness, type, number of layers and fasteners shall be as specified in the individual Wall and Partition Design.
- 2. Through Penetrants One or more metallic or nonmetallic pipes, conduits, tubing or cables to be installed either concentrically or eccentrically within the opening. Min separation between penetrants to be 1 in. Annular space between the penetrants and the periphery of the opening shall be min 0 in. (point contact) to max 1 in. Penetrants to be rigidly supported on both sides of floor-ceiling assembly. The following types and sizes of through penetrants may be used:
 - A. Metallic Penetrants The following types and sizes of metallic pipes, conduits or tubes may be used:
 - A1. Steel Pipe Nom 2 in. diam (or smaller) Schedule 5 (or heavier) steel pipe.
 - A2. Iron Pipe Nom 2 in. diam (or smaller) cast or ductile iron pipe.
 - A3. **Copper Pipe or Tubing** Nom 2 in. díam (or smaller) Type L (or heavier) copper tube or Regular (or heavier) copper pipe.
 - A4. **Conduit** Nom 2 in. diam (or smaller) rigid steel conduit, electrical metallic tubing (EMT) or flexible steel or aluminum conduit.

B. Nonmetallic Penetrants — The following types and sizes of nonmetallic pipes, conduits or tubes may be used:

- B1. **Polyvinyl Chloride (PVC) Pipe** Nom 2 in. diam (or smaller) Schedule 40 solid or cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
- B2. Chlorinated Polyvinyl Chloride (CPVC) Pipe Nom 2 in. diam (or smaller) SDR11 CPVC pipe for use in closed (process or supply) piping systems.
- B3. **Rigid Nonmetallic Conduit (RNC)+** Nom 2 in. diam (or smaller) Schedule 40 PVC conduit installed in accordance with Article 347 of the National Electrical Code (NFPA 70).

(System No. F-C-8029 Continued)

Reproduced courtesy of Underwriters Laboratories, Inc. Created or Revised: 09/23/02 Specified Technologies, Inc., Somerville, NJ (800) 992-1180

FOD-3575

(System No. F-C-8029 Continued)

- B4. **Electrical Nonmetallic Tubing (ENT)+** Nom 2 in. diam (or smaller) PVC tubing installed in accordance with Article 331 of the National Electrical Code (NFPA 70).
- B5. Cross Linked Polyethylene (PEX) Tubing Nom 1 in. diam (or smaller) SDR 9 PEX tubing for use in closed (process or supply) piping systems.
- C. Cables Cables installed individually or in bundles with a max diam of 2 in. The following types and sizes of cables may be used:
 - C1. Max 200 pair No. 24 AWG (or smaller) copper conductor telecommunication cable with PVC insulation and jacketing.
 - Max 3/C No. 3/0 AWG (or smaller) aluminum or copper conductor SER cable with PVC insulation and jacketing.
 Max 3/C with ground No. 8 AWG (or smaller) Type NM (Romex) nonmetallic sheathed cable with PVC insulation and
 - C4. Max 7/C No. 12 AWG (or smaller) power/control cables with PVC insulation and jacketing.
 - C5. Max 4 pair No. 24 AWG (or smaller) power/control cables with PVC insulation and jacketing.
 - C6. Max RG/U coaxial cable with copper conductor and fluorinated ethylene insulation and jacket.
 - Co. Max RG/O coasial cable with copper conductor and nuorinated engine insulation and jacket.
 C7. Max 4 pair No. 18 AWG (or smaller) copper conductor instrumentation cable with PVC insulation and jacketing.
 - C8. Fiber optic cable with PVC insulation and jacketing.
 - C9. Through-Penetrating Products* Max 4/C with ground No. 2/0 AWG (or smaller) aluminum or copper conductor, aluminum or steel jacketed Metal-Clad+ or Armored-Clad+ cable.

The T Rating is 3/4 hr unless copper pipe or tube is used. When copper pipe of tube is used, the hourly T Rating is 1/2 hr.

3. Fill, Void or Cavity Material* — Sealant — Min 3/4 in. thickness of fill material applied within the annulus, flush with the top surface of the floor or chase wall sole plate. Min 5/8 in. thickness of fill material applied within the annulus, flush with bottom surface of gypsum board ceiling or chase wall top plate. Min 1/4 in. diam bead of fill material applied at point contact location on the top surface of floor or chase wall sole plate and at the penetrant/ceiling or penetrant/chase wall top plate interface.
Specified Technologies Inc. — SpecSeal LCI Sealant

* Bearing the UL Classification Marking

+Bearing the UL Listing Mark





Specified Technologies, Inc., Somerville, NJ (800) 992-1180

FOD-3451



System No. W-L-2241 October 04, 2000 F Ratings — 1 and 2 Hr (See Item 1) T Ratings — 0, 1/4, 1 and 1-3/4 Hr (See Item 2)

- 1. Wall Assembly The 1 or 2 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300 or U400 Series Wall or Partition Design in the UL Fire Resistance Directory and shall include the following construction features:
 - A. **Studs** Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. lumber spaced 16 in. OC. Steel studs to be min 3-5/8 in. wide and spaced max 24 in. OC.
 - B. Gypsum Board* Thickness, type, number of layers and fasteners as specified in the individual Wall and Partition Design. Max diam of opening is 3-3/8 in.
 - The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.
- Through Penetrant One nonmetallic pipe, conduit or tube to be installed eccentrically or concentrically within the firestop system. Pipe, conduit or tube to be rigidly supported on both sides of the wall assembly. The following types and sizes of nonmetallic pipes, conduits and tubes may be used:
 - A. **Polyvinyl Chloride (PVĆ) Pipe** Nom 2 in. diam (or smaller) Schedule 40 solid or cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems. Annular space shall be min 0 in. (point contact) to max 1 in.
 - B. Chlorinated Polyvinyl Chloride (CPVC) Pipe Nom 2 in. diam (or smaller) SDR17 CPVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems. Annular space shall be min 0 in. (point contact) to max 1 in.
 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 70). Annular space shall be min 0 in. (point contact) to max 1 in.
 - D. Electrical Nonmetallic Tubing+ Nom 2 in. diam (or smaller) PVC tubing installed in accordance with Article 331 of the National Electrical Code (NFPA 70). Annular space shall be min 0 in. (point contact) to max 1 in.
 - E. Cross Linked Polyethylene (PEX) Tubing Nom 1 in. diam (or smaller) SDR9 PEX tubing for use in closed (process or supply) piping systems. Annular space shall be min 0 in. (point contact) to max 1 in.
 - F. Acrylonitrile Butadiene Styrene (ABS) Pipe Nom 1-1/2 in. diam (or smaller) Schedule 40 solid-core or cellular core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems. Annular space shall be min 1/4 in. to max 3/4 in.

When Item 2A or 2B is used, the T Rating is 1/4 hr. When Item 2C, 2D, or 2E is used, the T Rating is 1 hr and 1-3/4 hr for 1 hr and 2 hr fire rated walls, respectively. When Item 2F is used, T Rating is 0 hr.

Fill, Void or Cavity Material* — Sealant — Min 5/8 in. thickness of fill material applied within annulus, flush with both surfaces of wall assembly. At point contact location, min 1/4 in. diam bead of fill material applied at nonmetallic pipe/gypsum board interface on both surfaces of wall.

SPECIFIED TECHNOLOGIES INC — SpecSeal LCI Sealant

*Bearing the UL Classification Marking

3



Created or Revised: 09/01/01 Specified Technologies, Inc., Somerville, NJ (800) 992-1180

FOD-3456





Online Certifications Directory

CLIV.R14288 Wall Opening Protective Materials

Page Bottom

Questions?

Previous Page

Wall Opening Protective Materials

Guide Information

SPECIFIED TECHNOLOGIES INC SUITE 2 200 EVANS WAY SOMERVILLE, NJ 08876 USA

SpecSeal Power Shield EP23 Box Inserts, for use with max 2 by 3 by 2-1/4 in. deep flush device UL Listed Metallic Outlet Boxes without internal clamps installed with steel extension rings and steel cover plates in 2 h fire rated gypsum board wall assemblies framed with min 3-5/8 in. deep steel studs and constructed of the materials and in the manner specified in the individual U400 or V400 Series Wall and Partition Designs in the Fire Resistance Directory. One 1-7/8 by 2-3/4 in. insert adhered to the interior back wall of the outlet box in accordance with the instructions supplied with the product. Installation to comply with Article 370-16 of the National Electrical Code (NFPA 70). When protective material is used within outlet boxes on both sides of the wall as directed, the horizontal separation between outlet boxes on opposite sides of the wall may be less than 24 in. provided that the boxes are not installed back-to-back.

SpecSeal Power Shield EP24 Box Inserts, for use with max 2-1/8 by 4 by 2-1/8 in. deep flush device UL Listed Metallic Outlet Boxes without internal clamps installed with steel mud rings and steel cover plates in 2 h fire rated gypsum board wall assemblies framed with min 3-5/8 in. deep steel studs and constructed of the materials and in the manner specified in the individual U400 or V400 Series Wall and Partition Designs in the Fire Resistance Directory. One 1-7/8 by 3-3/4 in. insert adhered to the interior back wall of the outlet box in accordance with the instructions supplied with the product. Installation to comply with Article 370-16 of the National Electrical Code (NFPA 70). When protective material is used within outlet boxes on both sides of the wall as directed, the horizontal separation between outlet boxes on opposite sides of the wall may be less than 24 in. provided that the boxes are not installed back-to-back.

SpecSeal Power Shield EP44 Box Inserts, for use with max 4 by 4 by 2-1/8 in. flush device UL Listed Metallic Outlet Boxes without internal clamps installed with steel mud rings and steel cover plates in 2 h fire rated gypsum board wall assemblies framed with min 3-5/8 in. deep steel studs and constructed of the materials and in the manner specified in the individual U400 or V400 Series Wall and Partition Designs in the Fire Resistance Directory. One 3-3/4 by 3-3/4 in. insert adhered to the interior back wall

R14288

of the outlet box in accordance with the instructions supplied with the product. Installation to comply with Article 370-16 of the National Electrical Code (NFPA 70). When protective material is used within outlet boxes on both sides of the wall as directed, the horizontal separation between outlet boxes on opposite sides of the wall may be less than 24 in. provided that the boxes are not installed back-to-back.

SpecSeal Putty Pads, for use with max 4-11/16 by 4-11/16 in. flush device UL Listed metallic outlet boxes installed with steel cover plates in 1 and 2 h fire rated gypsum board wall assemblies framed with min 3-1/2 in. deep wood or steel studs and constructed of the materials and in the manner specified in the individual U300, U400 or V400 Series Wall and Partition Designs in the Fire Resistance Directory. Min 3/16 in. thick moldable putty pads are to be installed to completely cover the exterior surfaces of the outlet box (except for the side of the outlet box against the stud) and completely seal against the stud within the stud cavity. An additional 3/16 in. thickness of putty to be formed around the connector securing the end of each electrical metallic tube or conduit to the box. When used with metallic outlet boxes larger than 4 by 4 in., a ball of putty is to be installed to plug the open end of each electrical metallic tube or conduit within the outlet box is optional. When moldable putty pad outlet box protective material is used on boxes on both sides of wall as directed, the horizontal separation between outlet boxes on the opposite sides of the wall may be less than 24 in. provided that the boxes are not installed back-to-back.

SpecSeal Putty Pads, for use with max 4 by 4 in. flush device UL Listed metallic outlet boxes installed with plastic cover plates in 1 h fire rated gypsum board wall assemblies framed with min 3-1/2 in. deep wood or steel studs and constructed of the materials and in the manner specified in the individual U300, U400 or V400 Series Wall and Partition Designs in the Fire Resistance Directory. Min 3/16 in. thick moldable putty pads are to be installed to completely cover the exterior surfaces of the outlet box (except for the side of the outlet box against the stud) and completely seal against the stud within the stud cavity. An additional 3/16 in. thickness of putty to be formed around the connector securing the end of each electrical metallic tube or conduit to the box. A ball of putty is to be installed to plug the open end of each electrical metallic tube or conduit within the outlet box. When moldable putty pad outlet box protective material is used on boxes on both sides of wall as directed, the horizontal separation between outlet boxes on the opposite sides of the wall may be less than 24 in. provided that the boxes are not installed back-to-back.

SpecSeal Putty Pads, for use with max 14 by 4-1/2 by 2-1/2 in. deep flush device UL Listed metallic outlet boxes installed with steel cover plates in 2 h fire rated gypsum board wall assemblies framed with min 3-1/2 in. deep steel studs and constructed of the materials and in the manner specified in the individual U400 or V400 Series Wall and Partition Designs in the Fire Resistance Directory. Min 3/16 in. thick moldable putty pads are to be installed to completely cover the exterior surfaces of the outlet box (except for the side of the outlet box against the stud) and completely seal against the stud within the stud cavity. Adjoining lengths of moldable putty pads to be overlapped approx 1/2 in. at the seam. An additional 3/16 in. thickness of putty to be formed around the connector securing the end of each Type MC cable, electrical metallic tube or conduit to the box. A ball of putty is to be installed to plug the open end of each electrical metallic tube or conduit within the outlet box.

SpecSeal Putty Pads for use with max 4 by 3-3/4 by 3 in. deep UL Listed Nonmetallic Outlet Boxes manufactured by Carlon Electrical Products and made from polyvinyl chloride, max 4 by 3-3/4 by 3 in. deep UL Listed Nonmetallic Outlet Boxes manufactured by Allied Moulded Products Inc. and made from fiber-reinforced thermosetting plastic or max 4-1/16 by 3-5/8 by 3-1/8 in. deep UL Listed Nonmetallic Outlet Boxes manufactured by Thomas & Betts Corp. and made from fiber-reinforced thermosetting plastic. Boxes shall also bear a 2 h rating under the "Outlet Boxes and Fittings Classified for Fire Resistance" category in the Fire Resistance Directory. Boxes installed with steel or plastic cover

plates. Putty pads and boxes for use in 1 and 2 h fire rated gypsum board/wood stud wall assemblies constructed of the materials and in the manner specified in the individual U300 Series Wall and Partition Designs in the Fire Resistance Directory. Outlet box secured to wood stud by means of two nailing tabs in conjunction with nails supplied with the outlet box. Min 3/16 in. thick moldable putty pads are to be installed to completely cover the exterior surfaces of the outlet box (except for the side of the outlet box against the stud) including nailing tabs and completely seal against the stud within the stud cavity. An additional 3/16 in. thickness of putty to be formed around the end of each nonmetallic sheathed cable at its connection to the box and to extend a minimum of 1 in. from the box onto the nonmetallic sheathed cable within the stud cavity. When moldable putty pad outlet box protective material is used on boxes on both sides of wall as directed, the horizontal separation between outlet boxes on opposite sides of the wall may be less than 24 in. provided that the boxes are not installed back-to-back.

Page Top	Notice of Disclaimer	Questions?	Previous Page
UL Listed and Classified	<u>UL Recognized</u>	Products Certified for	
Products	<u>Components</u>	Canada	

This page and all contents are Copyright © 2003 by Underwriters Laboratories Inc.®

The appearance of a company's name or product in this database does not in itself assure that products so identified have been manufactured under UL's Follow-Up Service. Only those products bearing the UL Mark should be considered to be Listed and covered under UL's Follow-Up Service. Always look for the Mark on the product.

UL permits the reproduction of the material contained on UL's Website subject to the following conditions: 1. The Guide Information, Designs and/or Listings (files) must be presented in their entirety and in a non-misleading manner, without any manipulation of the data (or drawings). 2. The statement "Reprinted from the Online Certifications Directory with permission from Underwriters Laboratories Inc." must appear adjacent to the extracted material. In addition, the reprinted material must include a copyright notice in the following format: "Copyright © 2003 Underwriters Laboratories Inc.®"



200 Evans Way, Suite 2 Somerville, N.J. 08876 Phone: (908) 526-8000 Fax: (908) 526-9623 Toll Free: (800) 992-1180

GENERAL CERTIFICATE of CONFORMANCE

Description: SpecSeal® Firestop Products

Included Products:

Series SSS Intumescent Sealant Series LCI Intumescent Sealant Series LC Latex Endothermic Sealant Series SSP Intumescent Putty Series EP Power Shield™ Box Insert Series SSWRED Intumescent Wrap Strips Series SSWBLU Intumescent Wrap Strips Series SSC Intumescent Firestop Collars Series LCC Intumescent Firestop Collars Series SSB Intumescent Firestop Pillows Series AS100 Elastomeric Spray Series AS200 Elastomeric Spray Series ES100 Elastomeric Sealant Series SSM Firestop Mortar Pensil Series PEN200 Silicone Foam Pensil Series PEN300 Silicone Sealant Pensil Series PEN300SL Silicone Sealant

These products are tested to the following standards where applicable:

ASTM STANDARD:

E 814	Fire Tests of Through-Penetration Fire Stops
E 119	Fire Tests of Building Construction and Materials
E 1966	Fire-Resistive Joint Systems
E 84	Surface Burning Characteristics of Building Materials
E 1399	Cyclic Movement and Measuring the Minimum and Maximum Joint Widths
	of Architectural Joint Systems

UL STANDARD

1479	Fire Tests of Through-Penetration Firestops
263	Fire Tests of Building Construction and Materials
2079	Tests for Fire-Resistance of Building Joint Systems
723	Tests for Surface Burning Characteristics of Building Materials

Chemical Content Statements:

No asbestos, PCB's or water-soluble intumescent ingredients are used or contained in these products.

February1, 2002

James P. Stahl, Jr. Technical Manager

Date



Specified Technologies, Inc. **PRODUCT DATA SHEET**

Series LCI Intumescent Sealant







CLASSIFIED FILL, VOID, OR CAVITY MATERIALS FOR USE IN THROUGH-PENETRATION FIRESTOP SYSTEMS, SEE UL DIRECTORY OF PRODUCTS CERTIFIED FOR CANADA AND UL FIRE RESISTANCE DIRECTORY

SEE UL FIRE RESISTANCE DIRECTORY

FM APPROVED

FEATURES

- **Economical** High performance without the high price!
- **Highly Intumescent**
- Expands up to 10X. **Excellent Smoke Seal**
- Safe for contact with plastics.
- Water Resistant Will not re-emulsify when dry.
- Water-Based for easy installation, cleanup, and disposal.
- Acoustically Tested Reduces noise transmission
- Safe... Low VOC's, No Solvents, Non-Halogenated

Specified Technologies, Inc.

1. PRODUCT DESCRIPTION

SpecSeal® LCI Sealant is a versatile and economical intumescent product intended for firestopping a wide array of applications in small commercial or grouped residential construction and other structures with similar applications. SpecSeal® LCI Sealant is available in a single grade that has excellent caulking properties as well as high build properties on vertical or overhead surfaces. This single grade may be caulked (standard cartridge or bulk loaded), knifed or troweled. In addition, SpecSeal® LCI does not contain PCB's or asbestos.

SpecSeal® LCI Sealant is storage stable (when stored according to the manufacturer's recommendations), is asbestos free and will not separate or shrink when dried. SpecSeal® LCI Sealant will adhere to all common construction and penetrant materials and contains no solvents that might adversely effect plastic pipes or cable jackets.

2. APPLICATIONS

See Table A for a summary application list.

SpecSeal® LCI Sealant has a broad application base designed to seal a wide variety of common penetrations in light commercial and grouped residential construction. Penetrant types include insulated and non-insulated metallic pipes and tubes, nonmetallic pipes and tubes, and common electrical service and power distribution, telephone, data, and TV cabling. This product is also used in conjunction with other SpecSeal® Products such as SpecSeal® Firestop Collars and Wrap Strips to protect larger plastic pipes.

3. PHYSICAL PROPERTIES

See Table B.

4. PERFORMANCE

SpecSeal® LCI Sealant is the basis for systems that meet the exacting criteria of ASTM E814 (UL1479) as well as to the time-temperature requirements of ASTM E119 (UL263). LCI provides up to a 2-hour fire rating for typical service penetrations through concrete or wood floors, concrete or masonry walls, as well as gypsum board walls (3-hour for metallic pipe, conduit and tubing). LCI meets Class A finish requirements for Flame Spread and Smoke Development when tested in accordance with ASTM E84 (UL723). LCI Sealant is also acoustically tested, demonstrating excellent sound attenuation properties.

5. SPECIFICATIONS

The firestopping sealant shall be a water-resistant, intumescent latex sealant. The sealant when exposed to high heat or flame shall exhibit a free expansion of up to 8 times its original volume. The firestopping sealant shall contain no water soluble nor hygroscopic ingredients and shall be acoustically tested. The sealant shall be UL Classified and tested to the requirements of ASTM E814 (UL1479) and shall meet Class A finish requirements when tested in accordance

with ASTM E84 (UL723).

SPECIFIED DIVISIONS

DIV.	7	07840	Through-Penetration Firestopping
DIV.	13	13900	Special Construction Fire Suppression & Supervisory Systems
DIV.	15	15250	Mechanical Insulation – Fire Protection
DIV.	16	16050	Basic Electrical Materials & Methods

Facts On Call STI's automated faxing system for the latest Demand Product and System Information toll-free at 888-526-6800!

STI Product Data Sheet • Series LCI Intumescent Sealant • FOD-5062 03/2003

www.stifirestop.com • Toll Free 800-992-1180



Forming: Nom. 4 pcf mineral wool (3" depth)

Table C: SEALANT REQUIREMENTS IN CUBIC INCHES PER 1/4 INCH OF INSTALLED DEPTH*

Pip	e Size		Diameter of Opening (in.)										
Trade Size	Pipe O.D.	1.5	2.0	3.0	4.0	5.0	6.0	7.0	8.0	10	12	14	26
0.5″	0.840	0.3	0.6	1.6	3.0	4.8	6.9	9.5	12.4	19.5	28.1	38.3	132.6
1″	1.315	0.1	0.4	1.4	2.8	4.6	6.7	9.3	12.2	19.3	27.9	38.1	132.4
1.5″	1.900			1.1	2.4	4.2	6.4	8.9	11.9	18.9	27.6	37.8	132.0
2″	2.375			0.7	2.0	3.8	6.0	8.5	11.5	18.5	27.2	37.4	131.6
2.5″	2.875			0.1	1.5	3.3	5.4	8.0	10.9	18.0	26.7	36.9	131.1
3″	3.500				0.7	2.5	4.7	7.2	10.2	17.2	25.9	36.1	130.3
3.5″	4.000					1.8	3.9	6.5	9.4	16.5	25.1	35.3	129.6
4″	4.500	*D	ifferent Sea	alant Depth?		0.8	3.0	5.6	8.5	15.6	24.2	34.4	128.7
6″	6.625		1/2 ″ Mu	Iltiply by 2				1.1	4.0	11.1	19.7	29.9	124.2
B‴	8.625		5/8″ Mu	Iltiply by 2.5						4.9	13.6	23.8	118.0
10″	10.750		1" Mi 1-114" Mi	Iltiply by 4 Iltiply by 5							5.6	15.8	110.0
12″	12.750											6.6	100.8
24″	24.000												19.6

IMPORTANT NOTE: This table is for estimation purposes only. Consult UL Fire Resistance Directory or STI Product & Application Guide for specific installation requirements and limitations

Page 2 of 4



Fig. 3: ELECTRICAL, DATA OR COMMUNICATIONS - Gypsum Walls





UL System No. F-C-1074 F Rating: 1 & 2 Hr • T Rating: 1/4, 1/2 and 1 Hr Steel, Iron or Copper: 4" • Chase wall optional. Annulus: 0" to 1" • Sealant: 5/8" bottom, 3/4" top



UL System No. F-C-5043 F Rating: 1 Hr • T Rating: 3/4 and 1 Hr Steel, Iron or Copper: 4" Pipe covering: 1" Fiber Glass, Mineral fiber or AB/PVC • Chase wall optional. Annulus: 0" to 1" • Sealant: 5/8" bottom. 3/4" top.

6. INSTALLATION INSTRUCTIONS

GENERAL: Areas to be protected must be clean and free of oil, loose dirt, rust or scale. Installation temperatures must be between 35°F (2°C) and 100°F (38°C). Allow product to dry a minimum of 24 hours before exposure to moisture.

SYSTEM SELECTION: Selection of an appropriate firestop system design is critical to the fire protection process. Space limitations preclude highly detailed information pertaining to individual application systems. Please consult the Product & Application Guide as well as the UL® Fire Resistance Directory for additional information.

FORMING: Some installations may require forming as either an integral part of the system or as an option to facilitate installation. In systems where forming is required, mineral wool batts with a minimum nominal density of 4 PCF are generally required. Cut forming material oversize to allow for tight packing. Position forming material to allow for the proper depth of fill material.

FILL MATERIAL: SpecSeal® LCI may be installed by caulking using a standard caulking gun or from bulk containers using a bulk loading caulk gun, or by manually troweling using a mason's trowel or putty knife. If the sealant tends to pull back from a surface, clean the surface with a damp rad or sponge and reapply. Work sealant into all areas exercising care to eliminate voids or seams. The surface of the sealant can be smoothed using a putty knife dipped in water. Adding water to the sealant itself is not recommended. Sealant (when dry) may be painted using most non-solvent based paints.



In gypsum wallboard penetrations, apply a minimum cove bead of 1/4" at the interface of the penetrant with both exterior wall surfaces.

SMOKE SEALING: In some applications including firestop collars, SpecSeal® LCI Sealant is recommended as a smoke seal. It is suggested in these applications that the sealant be applied to both sides of walls. In floor applications, a sealing bead is suggested top and bottom.

LIMITATIONS: SpecSeal LCI Sealant is water-based and cures through the evaporation of water. Low temperatures as well as high humidity may retard drying. Non-porous or impermeable backing materials, plates, or coatings may retard the drying process. Do not paint or seal in any way that prevents contact with air until sealant has dried through completely.

7. MAINTENANCE

No maintenance is normally required, however a periodic inspection of rated barriers is recommended to make sure that any new openings, modifications of previously installed firestops, or areas exhibiting physical damage, have been properly sealed or repaired. Subsequent sealing or repairs should be accomplished using SpecSeal® products per the original approved design.

TABLE D: ORDERING INFORMATION

CAT. NO. DESCRIPTION

LCI300	Sealant 10.1 oz Tube	18.2 Cu In (300 ml)
LCI305	Sealant 5 Gal Pail	1,155 Cu In (19.0 Liters)
LCI320	Sealant 20 oz Sausage	36 Cu in. (592 ml)
LCI329	Sealant 29 oz Quart Tube	52 Cu in. (858 ml)

Additional SpecSeal Products...

Series SSS Sealant

The industry's most versatile sealant provides the firestopping solutions for a wide range of combustible and noncombustible applications. Water-based intumescent sealant expands up to 8X!

Intumescent Wrap Strips

Two grades of intumescent wrap strips provide an unmatched combination of flexibility, economy, and expansion (up to 30X). Systems for plastic pipes including FR Polypropylene up to 8" trade size!

SSC & LCC Firestop Collars

Easy to install, economical protection for ABS and PVC pipes (both solid and foam core) as well as CPVC, PVDF, and FRPP. LCC Collars are available up to 4" and SSC Collars are available up to 6" trade size.

Firestop Mortar

modified design.

8. TECHNICAL SERVICE

back system at 888-526-6800.

10. AVAILABILITY

Lightweight, versatile and economical! The best choice for large or complex installations

RETROFIT: When adding or removing penetrants, care should be

taken to minimize damage to the seal. Reseal using SpecSeal® products per the approved design. NOTE: New penetrants of

a different nature than the original design may require a totally

new firestop design or extensive modifications to the existing

design. Reseal all openings as per the requirements of the

Specified Technologies Inc. provides toll free technical support

to assist in product selection and appropriate installation

design. UL Systems, Material Safety Data Sheets and other

technical information is available at the Technical Library at

www.stifirestop.com or through STI's automated attendant fax

Consult Material Safety Data Sheet for additional information

SpecSeal® Series LCI Sealant is available from authorized STI

distributors. Consult factory for the names and locations of the

nearest sales representatives or distributors. Available packages

9. PRECAUTIONARY INFORMATION

on the safe handling and disposal of this material.

and additional SpecSeal® Products are listed below.

SSP Firestop Putty

Available both in bar form and in pads, putty provides easy retrofit for through-penetrations and economical protection for electrical boxes.

Pensil® Silicones Sealants and foam for through-penetrations and construction joints. Unexcelled aging characteristics and flexibility.

Elastomeric Joint Seals

New economical products for sealing construction joints. Choose caulk or spray applied products tested to UL2079.

CITY OF NEW YORK MEA 130-96M

Important Notice: All statements, technical information, and recommendations contained herein are based upon testing believed to be reliable, but the accuracy and completeness thereof is not guaranteed.

WARRANTY: Specified Technologies Inc. manufactures its goods in a manner to be free of defects. Should any defect occur in its goods (within one year), Specified Technologies Inc., upon prompt notification, will at its option, exchange or repair the goods or refund the purchase price.

Limitations and Exclusions: THIS WARRANTY IS IN LIEU OF ALL OTHER REPRESENTATIONS EXPRESSED OR IMPLIED (INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR USE) AND UNDER NO CIRCUMSTANCES SHALL SPECIFIED TECHNOLOGIES INC. BE RESPONSIBLE FOR ANY INCIDENTAL OR CONSEQUENTIAL PROPERTY DAMAGE OR LOSSES. PRIOR TO USE, THE USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR ITS INTENDED USE, AND THE USER ASSUMES ALL RISKS AND LIABILITY FOR

SUBSEQUENT USE No statement or recommendation not contained herein shall have any force or effect unless in an agreement signed by officers of seller and manufacturer.

MADE IN THE USA - COPYRIGHT © 2003 SPECIFIED TECHNOLOGIES, INC.



200 Evans Way • Somerville, NJ 08876 Phone: (800) 992-1180 • Fax: (908) 526-9623 Facts-On-Demand: (888) 526-6800 STI on the WEB: www.stifirestop.com





Reproduced from Electronic Media

PRODUCT DATA SHEET Firestop Putty & Putty Pads

1. PRODUCT DESCRIPTION

SpecSeal® Series SSP Putty is a non-hardening, intumescent compound designed to seal through-penetrations as well as certain membrane penetrations against the spread of fire, smoke and toxic gasses. SpecSeal® Putty expands up to 8 times its original size when exposed to high temperatures or flames.

Requiring no tools, SpecSeal® Putty is soft and pliable making it easy to install by hand packing into openings. Its aggressive adhesion makes it suitable for use with all common construction materials as well as cable jacketing and pipes. SpecSeal® Putty remains soft and easy to reuse or retrofit.

SpecSeal® Putty Pads provide this same level of protection in a release lined pad for easy application to electrical boxes or other penetrants. The pad is conveniently sized to fit a typical 1-1/2" deep 4S box with no cutting or piecing required. Faced on both sides with a convenient poly liner, SpecSeal® Putty Pads are easily applied with no mess or excessive residue.

2. APPLICATIONS

Series SSP Putty and Putty Pads are used to seal through-penetrations as well as construction gaps and blank openings. SpecSeal® Putty Pads are used to seal around electrical boxes to reduce sound transmission (see Technical Update) and increase fire resistance. These pads also provide a metered method of application when sealing through-penetrations and in some applications, are used to provide a cushion to allow movement due to settling, expansion and contraction, or vibration.

3. PHYSICAL PROPERTIES

See Table A.





Spec Sould



FEATURES

- Non-Hardening Easy retrofit!
- Two Stage Intumescence features aggressive expansion.
- Endothermic Fillers absorb heat & release water.
- **Highly Adhesive Formula** Stays put. Allows movement.
- **Soft & Pliable** for easy installation.
- No Water-Soluble Expansion Ingredients means better water resistance!
- **Sound Deadening!** Excellent sound attenuation properties. Reduces noise transmission.

5. SPECIFICATIONS

The firestopping putty shall be a one-part, two-stage intumescent, non-hardening compound. The putty, when exposed to high heat or flame shall be capable of expanding a minimum of 5 times. Range of continuing expansion shall be from 230° F to >1,000°F. The putty shall be soft and pliable with aggressive adhesion and shall not contain any water-soluble intumescent ingredients. The putty shall be UL Classified and/or FM Systems Approved and tested to the requirements of ASTM E814 (UL1479).

SPECIFIED DIVISIONS

DIV.	7	07840	Through-Penetration Firestopping
DIV.	13	13900	Special Construction Fire Suppression & Supervisory Systems
DIV.	15	15250	Mechanical Insulation – Fire Protection
DIV.	16	16050	Basic Electrical Materials & Methods

For the latest Product and System Information, Call STI'S FACTS-ON-DEMAND automated information attendant system by dialing toll-free (888)526-6800!

	AL PROPERTIES
Product Name	Series SSP Putty
Color	Red
Odor	None
Density	1.45
Solids	100%
Expansion Begins	230°F
Volume Expansion	> 500% (free expansion)
In-Service Temp	. ≤ 130°F

4. PERFORMANCE

SpecSeal® Series SSP Putty is the basis for systems that meet the exacting criteria of ASTM E814 (UL1479). Systems have been tested for all common forms of construction and most common penetrants with ratings up to 3 hours. Sound attenuation properties have also been tested as per ASTM C919 and E90.

Additionally, SpecSeal® Putty Pads have been tested to UL263 (ASTM E119, NFPA 251) and are classified for up to 2 hours as a Wall Opening Protective Material for use with both metallic and nonmetallic outlet or switch boxes installed in gypsum wallboard assemblies (steel and wood stud assemblies). Boxes protected with SpecSeal® Putty Pads have been successfully tested with box spacing reduced to less than 16". (Not tested nor approved for boxes installed directly back to back).

5. SPECIFICATIONS

See Page 1

6. INSTALLATION INSTRUCTIONS

GENERAL: Areas to be protected must be clean and free of oil, loose dirt, rust or scale. Installation, storage, and in-service temperatures must be below 130°F. No drying or curing is required.

SYSTEM SELECTION: Please consult the STI Product and Application Guide as well as the UL® Fire Resistance Directory for applicable through-penetration firestop systems.

Fig. 1: METALLIC PIPE PENETRATIONS - CONCRETE/MASONRY FLOOR





STI Product Data Sheet • Firestop Putty & Putty Pads

FORMING: Some installations may require forming as either an integral part of the system or as an option to facilitate installation. In systems where forming is required, mineral wool batts (1 1/2" nom. thickness, 4 lb./cu. ft. density) are recommended. Some gypsum wallboard systems utilize fiberglass. Cut forming material oversize to allow for tight packing. Recess forming material at a depth which allows for the proper depth of fill material.

FILL MATERIAL: SpecSeal® Putty may be installed by hand packing into the penetration. Care should be exercised to work the putty into and against all contact surfaces. Install putty to required depth. Work putty into all areas, exercising care to eliminate voids or seams. Where possible, space all penetrants adequately to allow putty to be packed into all voids and assure a good smoke seal. Most firestop system designs utilize a 1" depth of SpecSeal® Putty.

PUTTY PADS: SpecSeal® Putty Pads are available as a 7.25" x 7.25" x 3/16" poly release faced pad for protection of recessed electrical boxes and as a through-penetration sealant. The pad is sized to fit a common 1-1/2" deep 4S electrical box. To install remove release liner from one side of pad. Align edge of pad to top of box and center pad.



Fig. 5: EXAMPLE OF MAINTAINING STC VALUES OF WALL AND CREATING AN EFFECTIVE SOUND BARRIER



Putty pad reduces sound transmission by blocking path of sound travel.



Remove poly liner from one side of pad (Step 1). Align pad to the side of box partially overlapping the stud and adhere. Working to the opposite side of the box to the edges (Step 2). If wall membrane is in place, pack putty into gaps between box and gypsum board slightly overlapping inner wallboard surface. If membrane is to be installed after pad installation, overlap front edge of box so that putty will be compressed around edges of box as wallboard is installed. Cut slits in pad to fit around conduits or cables. (Step 3). Press pad to surface of top, bottom, and sides of box (Step 4). Trim excess at corners and apply to conduit fittings connected to the box. Remove exposed poly liner. Optionally, putty may be packed into inside of conduit fittings to prevent passage of smoke.

Adhere pad to top of box and bring pad down over the back of the box. Adhering pad to all outer surfaces will create excess material at the corners. Pinch pleat material together and fold against sides of box or trim off as desired. Putty pad must be applied to a uniform depth of 3/16" (one layer of pad) over the exterior surface of box for both 1 and 2 hour applications. Optionally, additional putty may be packed into conduit fittings to prevent the transmission of smoke through the conduit system.

Pads may also be used in throughpenetrations. Strips of pad may be cut off and packed around penetrants. Pad strips may also be applied to penetrants in a mortar system to create a firestop as well as a cushion to absorb movement due to expansion and contraction or vibration.

CLEAN UP: Remove excess material from all contact surfaces immediately. Clean hands or skin using a waterless hand cleaner. When using wateremulsifiable soaps, apply soap and work over areas of skin contact prior to applying water.

7. MAINTENANCE INSPECTION:

Installations should be inspected periodically for subsequent damage. Any damage should be repaired using SpecSeal® products per the original approved design.

RETROFIT: When adding or removing penetrants, care should be taken to tightly reseal the penetration. Reseal using SpecSeal® Putty per the approved design.

8. TECHNICAL SERVICE

Specified Technologies Inc. provides toll free technical support to assist in product selection and appropriate installation design. Design System Drawings suitable for submittal or specification purposes are available on request.

9. PRECAUTIONARY INFORMATION

Consult Material Safety Data Sheet for additional information on the safe handling and disposal of this material. Wash areas of skin contact with soap and water. Avoid contact with eyes. DO NOT APPLY TO EXPOSED ELECTRICAL CONDUCTORS.

10. AVAILABILITY

SpecSeal® Series SSP Putty is available from authorized STI distributors nationwide. Consult factory for the names and locations of the nearest sales representatives or distributors.

Table C:	ORDERING	SINFORMATION				
Cat. No. SSP100 SSP4S SSP9S	Description 36 in ³ (0.6 lite 7.25" x 7.25" 9.00" x 9.00"	Case Quan. er) bar 6 x 3/16" pad 20 x 3/16" pad 20				
Additional S	pecseal Produc	μ				
SSB Firest	op Pillows	Durable, monolithic pillows for installations requiring quick and easy retrofitting. Systems designed for pipes, cables and cable tray in all types of construction!				
Series SSS Sealant		The industry's most versatile sealant provides the firestopping solutions for a wide range of combustible and noncombustible applications. Water-based intumescent sealant expands up to 8X!				
Series LC S	Sealant	An economical latex firestop sealant for noncombustible applications. Non-halogenated, easy clean up, flexible, water-resistant!				
Firestop Mortar		Lightweight, versatile and economical! The best choice for large or complex installations.				
Pensil® Sil	icones	Sealants and foam for through-penetrations and construction joints. Unexcelled aging characteristics and flexibility.				
Intumescent Wrap Strips		Two grades of intumescent wrap strips provide an unmatched combination of flexibility, economy, and expansion (up to 30X). Systems for plastic pipes including FR Polypropylene up to 8" trade size!				
Molded Fire	estop Collars	Easy to install, economical protection for ABS and PVC pipes (both solid and foam core) as well as CPVC, PVDF, and FRPP. Collars available up to 6" trade size.				
Elastomeri	c Joint Seals	New economical products for sealing construction joints. Choose caulk or spray applied products tested to UL2079.				

CITY OF NEW YORK MEA 30-92M

Important Notice: All statements, technical information, and recommendations contained herein are based upon testing believed to be reliable, but the accuracy and completeness thereof is not guaranteed.

WARRANTY: Specified Technologies Inc. manufactures its goods in a manner to be free of defects. Should any defect occur in its goods (within one year), Specified Technologies Inc., upon prompt notification, will at its option, exchange or repair the goods or refund the purchase price. Limitations and Exclusions: THIS WARRANTY IS IN LIEU OF ALL OTHER

REPRESENTATIONS EXPRESSED OR IMPLIED (INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR USE) AND UNDER NO CIRCUMSTANCES SHALL SPECIFIED TECHNOLOGIES INC. BE RESPONSIBLE FOR ANY INCIDENTAL OR CONSEQUENTIAL PROPERTY DAMAGE OR LOSSES. PRIOR TO USE, THE USER SHALL

DETERMINE THE SUITABILITY OF THE PRODUCT FOR ITS INTENDED USE, AND THE USER ASSUMES ALL RISKS AND LIABILITY FOR SUBSEQUENT USE.

No statement or recommendation not contained herein shall have any force or effect unless in an agreement signed by officers of seller and manufacturer.

MADE IN THE USA - COPYRIGHT © 2000 SPECIFIED TECHNOLOGIES, INC.



200 Evans Way • Somerville, NJ 08876 Phone: (800) 992-1180 • Fax: (908) 526-9623 Facts-On-Demand: (888) 526-6800 STI on the WEB: www.stifirestop.com



Material Safety Data Sheet

01-JAN-2003

SpecSeal® TYPE LCI SEALANT

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Material Identification

PRODUCT NAME.....SpecSeal® LCI Sealant CHEMICAL FAMILY.....Mixture

Company Identification

MANUFACTURER/DISTRIBUTOR

Specified Technologies, Inc. 200 Evans Way Somerville, NJ 08876

PHONE NUMBERS

 Product Information
 : 1-908-526-8000

 Emergency
 : 1-800-255-3924

COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME

Proprietary mixture

CAS NUMBER

HAZARDS IDENTIFICATION

Possible skin and eye irritant. Pale, red paste. *

Potential Health Effects:

EYE: Contact may cause irritation.

SKIN: Contact may cause irritation.

INGESTION: Relatively non-toxic.

INHALATION: Irritation of the nose, throat, and lungs may result from over-exposure to vapors or mist.

CHRONIC (CANCER) INFORMATION: Not classified as carcinogenic.

LONG TERM TOXIC EFFECTS: None known.

FIRST AID MEASURES

First Aid

INHALATION: Remove to fresh air.
SKIN CONTACT: Wash thoroughly.
EYE CONTACT: Irrigate eyes with running water for at least 15 minutes. Get medical attention if irritation develops.
INGESTION: None applicable.

FIRE FIGHTING MEASURES

Not a fire hazard.

EXTINGUISHING MEDIA......Dry Chemical; Carbon Dioxide; Foam; Water spray for large fires.

SPECIAL FIRE FIGHTING PROCEDURES:As for surrounding fire.

ACCIDENTAL RELEASE MEASURES

Safeguards (Personnel)

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

HANDLING AND STORAGE

Store under ambient conditions. No special handling required.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines Exposure Limits PEL(OSHA) : Particulates (Not Otherwise Classified) 15 mg/m3, 8 Hr. TWA, total dust 5 mg/m3, 8 Hr. TWA, respirable dust TLV(ACGIH): None Established

PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM	. Pale, red paste with minimal odor
SPECIFIC GRAVITY	. 1.10
PERCENT VOLATILES	. 22
EVAPORATION RATE	.>1
BOILING POINT	. 100 deg. C
SOLUBILITY IN WATER	. Infinitely dilutable

STABILITY AND REACTIVITY

STABILITY:	This is a stable material.
CONDITIONS TO AVOID	Storage >55 deg. C
HAZARDOUS POLYMERIZATION:	Will not occur.
INCOMPATIBILITIES:	None special.

TOXICOLOGICAL INFORMATION

Mixture not tested but based on components: May be irritating to skin and eyes and may aggravate existing skin and eye conditions. None of the components are listed as carcinogens.

ECOLOGICAL INFORMATION

No data.

DISPOSAL CONSIDERATIONS

Waste Disposal:

Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.

TRANSPORTATION INFORMATION

DOT - not regulated.

REGULATORY INFORMATION

U.S. Federal Regulations

TSCA Inventory Status: Reported/Included.

Section 313 Supplier Notifications.

This product contains no toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372:

OTHER INFORMATION

NPCA-HMIS Rating

Health : 1

Flammability : 0

Reactivity : 0

Personal Protection rating to be supplied by user depending on use conditions.

STATE RIGHT-TO-KNOW LAWS

No substances on the state hazardous substances list, for the states indicated below, are used in the manufacture of products on this Material Safety Data Sheet, with the exceptions indicated. While we do not specifically analyze these products, or the raw materials used in their manufacture, for substances on various state hazardous substances lists, to the best of our knowledge the products on this Material Safety Data Sheet contain no such substances except for those specifically listed below:

SUBSTANCES ON THE NEW JERSEY WORKPLACE HAZARDOUS SUBSTANCE LIST PRESENT AT A CONCENTRATION OF 1% OR MORE (0.1% FOR SUBSTANCES IDENTIFIED AS CARCINOGENS, MUTAGENS OR TERATOGENS): NJTSRN-LCI300

WARNING: SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER: Possible traces of formaldehyde, ethyl acrylate, acetaldehyde, acrylamide and acrylonitrile.

WARNING: SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM: None known.

This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief accurate and reliable as of the data compiled. However, no representation, warranty, or guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. We do not accept liability for any loss or damage that may occur form the use of this information.

Responsibility for MSDS :

Specified Technologies, Inc. 200 Evans Way Somerville, NJ 08876



Material Safety Data Sheet

01-JAN-2003

SpecSeal® Firestop Putty

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Material Identification

PRODUCT NAME.....SpecSeal® Firestop Putty CHEMICAL FAMILY.....Mixture

Company Identification

MANUFACTURER/DISTRIBUTOR

Specified Technologies, Inc. 200 Evans Way Somerville, NJ 08876

PHONE NUMBERS

Product Information : 1-908-526-8000 Emergency : 1-800-255-3924

COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME

CAS NUMBER

Proprietary mixture

HAZARDS IDENTIFICATION

Possible skin and eye irritant. Red solid. *

Potential Health Effects:

EYE: Contact may cause irritation and redness.

SKIN: Contact may cause irritation and redness.

INGESTION: Relatively non-toxic.

INHALATION: Irritation of the nose, throat, and lungs may result from over-exposure to vapors or mist from heated material.

CHRONIC (CANCER) INFORMATION: Not classified as carcinogenic.

LONG TERM TOXIC EFFECTS: None known.

FIRST AID MEASURES

First Aid

INHALATION: Remove to fresh air.
 SKIN CONTACT: Wash thoroughly.
 EYE CONTACT: Irrigate eyes with running water for at least 15 minutes. Get medical attention if irritation develops.
 INGESTION: None applicable.

FIRE FIGHTING MEASURES

FLASH POINT >163 deg. C based on most volatile component.

EXTINGUISHING MEDIA......Dry Chemical; Carbon Dioxide; Foam; Water spray for large fires.

SPECIAL FIRE FIGHTING PROCEDURES:As for surrounding fire.

ACCIDENTAL RELEASE MEASURES

Safeguards (Personnel)

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

HANDLING AND STORAGE

Store under ambient conditions. No special handling required.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

None.

PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM	Red solid with minimal odor
SPECIFIC GRAVITY	1.49
PERCENT VOLATILES	none
SOLUBILITY IN WATER	Very slight

STABILITY AND REACTIVITY

TOXICOLOGICAL INFORMATION

Mixture not tested but based on components:

May be irritating to skin and eyes and may aggravate existing skin and eye conditions. Irritation of the nose, throat, and lungs may result from over-exposure to vapors or mist from heated material.

None of the components are listed as carcinogens.

ECOLOGICAL INFORMATION

No data. Not anticipated to be environmental hazard.

DISPOSAL CONSIDERATIONS

Waste Disposal:

Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.

TRANSPORTATION INFORMATION

DOT - not regulated.

REGULATORY INFORMATION

U.S. Federal Regulations

TSCA Inventory Status: Article.

Section 313 Supplier Notifications.

This product contains no toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372:

OTHER INFORMATION

NPCA-HMIS Rating

- Health : 1
- Flammability : 0
- Reactivity : 0

Personal Protection rating to be supplied by user depending on use conditions.

STATE RIGHT-TO-KNOW LAWS

No substances on the state hazardous substances list, for the states indicated below, are used in the manufacture of products on this Material Safety Data Sheet, with the exceptions indicated. While we do not specifically analyze these products, or the raw materials used in their manufacture, for substances on various state hazardous substances lists, to the best of our knowledge the products on this Material Safety Data Sheet contain no such substances except for those specifically listed below:

SUBSTANCES ON THE NEW JERSEY WORKPLACE HAZARDOUS SUBSTANCE LIST PRESENT AT A CONCENTRATION OF 1% OR MORE (0.1% FOR SUBSTANCES IDENTIFIED AS CARCINOGENS, MUTAGENS OR TERATOGENS): NJTSRN-SSP

WARNING: SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER: Possible traces of formaldehyde and acrylonitrile.

WARNING: SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM: None known.

This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief accurate and reliable as of the data compiled. However, no representation, warranty, or guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. We do not accept liability for any loss or damage that may occur form the use of this information.

Responsibility for MSDS :

Specified Technologies, Inc. 200 Evans Way Somerville, NJ 08876