# SpecSeal® LC Endothermic Firestop Sealant

**SpecSeal® LC**

SpecSeal® LC Sealant is a latex-based, high solids firestop compound. This material, when properly installed, will effectively seal penetration openings and joints against the spread of fire, smoke, hot gasses and water.

SpecSeal® LC Sealant is engineered to adhere well to virtually all construction surfaces and may be applied using a standard caulk gun or by troweling with a standard mason's trowel or with a putty knife.

SpecSeal® LC Sealant dries to form a flexible shield against the propagation of fire. Its premium latex binder system is totally resistant to water and will not re-emulsify after drying. SpecSeal® LC Sealant is non-halogenated, contains no asbestos or inorganic fibers.

## Applications

SpecSeal® LC Sealant is designed primarily for sealing construction joints and gaps as well as penetrations for noncombustible penetrants. SpecSeal® LC has been tested and approved for single metallic pipe penetrations up to 30" (762 mm) as well as multiple penetrants through both masonry and gypsum wallboard constructions. Additional systems have been tested for steel sleeved penetrations as well as some common electrical and communications cable penetrations and joint penetrations.

## Specifications

The firestopping sealant shall be a one-part, latex-based compound. The sealant shall dry to form a flexible non-shrinking penetration seal and shall be capable of allowing pipe movement and shall contain no water soluble fillers, or inorganic fibers. The sealant shall be thixotropic and shall be capable of caulking or troweling onto vertical surfaces or overhead. The sealant shall be UL Certified and tested to the requirements of ASTM E814 (UL1479), ASTM E1966 (UL2079) and CAN/ULC-S115.

### Specified Divisions

| | | |
|---|---|---|
| Division 7 | 07 84 13 | Penetration Firestopping |
| Division 7 | 07 84 43 | Joint Firestopping |
| Division 22 | 22 00 00 | Plumbing |
| Division 26 | 26 00 00 | Electrical |

**GREENGUARD**
PRODUCT CERTIFIED FOR LOW CHEMICAL EMISSIONS
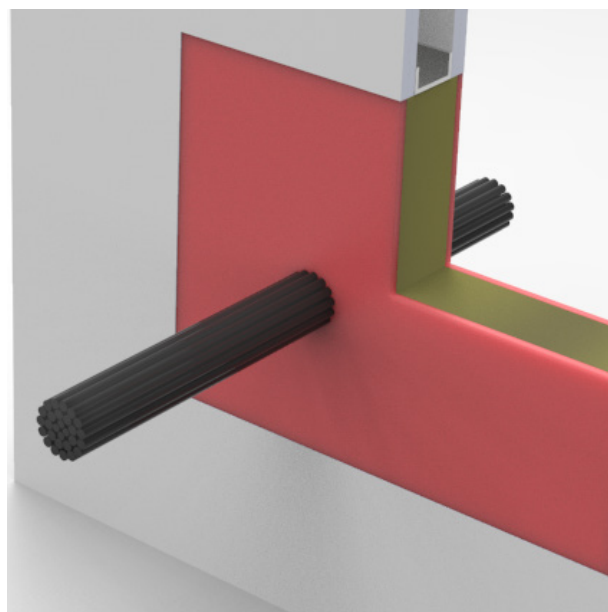UL.COM/GG
UL 2818
GOLD

## Performance

SpecSeal® LC Sealant is the basis for systems that meet the exact criteria of ASTM E1966 (UL2079) and CAN/ULC-S115 as well as the time-temperature requirements of ASTM E119. Tested systems will provide up to a 3 hour rating utilizing as little as 1/4" (6 mm) of sealant depth (1/2" (13 mm) for 4 hours). All tested systems have been cycled 500 times at total movement up to +/- 12.5% or 25% in compression only.

UL CERTIFIED SAFETY US-CA RL4288 · CLASSIFIED c(UL)us · FM APPROVED

## Features & Benefits

- Water-based - easy installation, cleanup, & disposal
- Endothermic fillers - absorb heat & release water
- High solids formula - minimal shrinkage
- Paintable when dry
- Safe, low VOC's, no asbestos, no PCB's, no inorganic fibers
- Red color - easy identification and inspection
- Installer friendly - excellent caulking properties along with high build capabilities
- Excellent smoke seal
- Flexible
- Non-halogenated
- Auto bonding
- Meets LEED™ v3, v4, & v4.1 requirements. Low emitting materials credit. See general LEED letter for additional applicable credits.

## Limitations

Use product as per manufacturer's instructions. Use only in applications per the manufacturer's published designs or specific recommendations. End user must ultimately determine the suitability of the product and/or design to his or her specific requirements and assumes responsibility for its use. PRODUCT CONTAINS WATER AND IS CONDUCTIVE UNTIL DRY. DO NOT APPLY IN THE PRESENCE OF EXPOSED OR ENERGIZED ELECTRICAL CONDUCTORS.

This product has been designed to be safe with plastics. It has been used extensively and successfully with various types of plastic pipes, tubes, and plastic cable insulations. Variations in these materials, however, make it impossible to guarantee compatibility. STI strongly recommends that the user consults with the pipe, tubing, or cable manufacturer in question regarding any known sensitivities or potential restrictions before applying this product.

**STI** Specified Technologies Inc.

# SpecSeal® LC Endothermic Firestop Sealant

**SpecSeal®**
## LC

## PHYSICAL PROPERTIES

| | | | |
|---|---|---|---|
| Color | Deep Red | Coverage | For more information on product coverage see the following documents for Linear Joint & Penetration |
| Density/Weight per Gallon | 10.7 lb/gal (1.28 kg/L) | pH | 7.4 to 8.4 |
| Solids Content by Weight | 81% | In Service Temperature | Less than 185°F (85°C) |
| Solids Content by Volume | 75.2% | Storage Temperature | 40°F (4°C) to 95°F (35°C) |
| Flame Spread* | 0 | Application Temperature | 35°F (2°C) to 100°F (38°C) |
| Smoke Development* | 10 | STC Rating (ASTM E90-04/ASTM C919) | 61 (Relates to Specific Construction) |
| Mold & Fungus Growth Rating (ASTM G21) | 0 | VOC Content** | 57 g/L |
| Movement Capabilities*** | +/- 12.5% or 25% in compression only | Average Volume Shrinkage (ASTM C1241) | 21.5% |
| | | Shelf Life From Date of Manufacture | 24 months |

*Tested to ASTM E84 (UL723) at 14% surface coverage (modified test for sealants and caulks)   **Per SCAQMD Rule 1168 (EPA Method 24)
***500 Cycles per UL2079, AC30 (ICBO) and ASTM E1399

## Maintenance

Inspection: Installations should be inspected periodically for subsequent damage. Any damage should be repaired using SpecSeal® LC Sealant as per the original approved design. Retrofit: When adding or removing penetrants, care should be taken to minimize damage to the seal. Reseal using SpecSeal® LC Sealant as 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 openings as per the requirements of the modified design.

## System Selection

To find your firestop system or create a submittal, visit https://systems.stifirestop.com/ to use System Search & Submittal Builder. You may also visit the UL Online Certifications Directory/UL Product iQ™ for complete listings. (Firestop Systems).

## Technical Service

Specified Technologies Inc. provides toll free technical support to assist in product selection and appropriate installation design. UL System designs suitable for submittal or specification purposes are available on request. A complete library of technical information is provided at the company's website www.stifirestop.com including Safety Data Sheets (SDS's).

## Precautionary Information

Consult Safety Data Sheet (SDS) 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. The use of an OSHA or NIOSH approved mask for dust and mist environment is recommended. Apply in areas with adequate ventilation. CAUTION: COATING IS CONDUCTIVE UNTIL DRY. DO NOT APPLY TO OR IN THE PRESENCE OF ENERGIZED ELECTRICAL CONDUCTORS.

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**SpecSeal®**
# LC

## Availability

SpecSeal® LC Sealant is available from Specified Technologies Inc. (STI) authorized distributors. For additional purchasing and technical information or for the names and locations of the nearest representative and/or distributor, regarding this and other Specified Technology products, please call 1-800-992-1180 or visit www.stifirestop.com.

| ORDERING INFORMATION | | | | | |
|---|---|---|---|---|---|
| Catalog Number | UPC Number | Size | (UOM) Qty. | Case Qty. | Weight (Each) |
| LC150 | 730573011300 | 10.1 Oz Tube - 18.2 cu in (300 ml) | 1 | 12 | 0.96 lbs (0.44 kg) |
| LC120 | 730573011331 | 20 Oz Sausage - 36 cu in (592 ml) | 1 | 12 | 1.70 lbs (0.77 kg) |
| LC129 | 730573011317 | 29 Oz Tube - 52 cu in (858 ml) | 1 | 12 | 2.56 lbs (1.16 kg) |
| LC155 | 730573011355 | 5 Gallon Pail - 1,155 cu in (19 liters) | 1 | 1 | 55.81 lbs (25.31 kg) |

**IFC MEMBER**
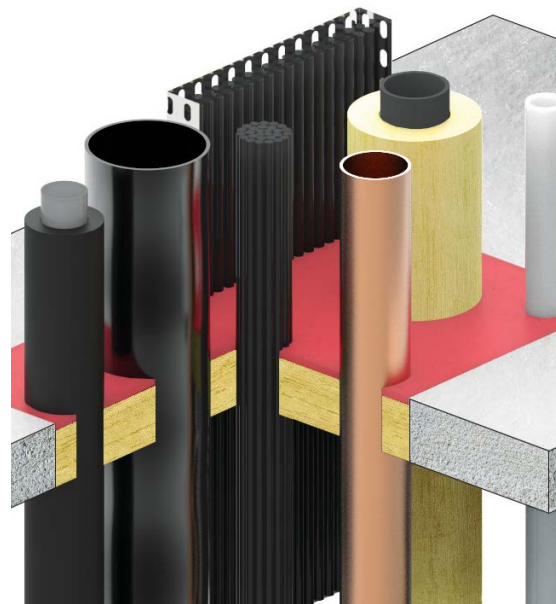
**STI® Specified Technologies Inc.**

# SpecSeal® LCI Intumescent Sealant

SpecSeal® LCI Sealant is a versatile and economical intumescent sealant that has excellent caulking properties as well as high build properties on vertical or overhead surfaces. This single component sealant may be caulked (standard cartridge or bulk loaded), knifed or troweled. In addition, SpecSeal® LCI Sealant does not contain PCB's or asbestos.

SpecSeal® LCI Sealant is storage stable (when stored according to the manufacturer's recommendations), and will not separate or shrink when dried (when applied according to the manufacturer's recommendations). 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.

## Applications

SpecSeal® LCI Sealant has a broad application base designed to seal a wide variety of common penetrations and construction joints. Penetrant types include:  Metallic penetrants (steel, iron, copper pipe, copper tubing, steel conduit and EMT) up to 36 in (914 mm) trade size; Non-metallic penetrants (Conduits & Tubing including PVC, CPVC, ABS, and PEX); Insulated pipes including heating, cooling, and condensation applications; Common electrical service and power distribution (service entrance, cable trays, busways), telephone, data, and TV cabling; Structural Steel and Metal Ductwork including HVAC, bath and dryer vents. This product is also used in conjunction with other SpecSeal® Products such as SpecSeal® Firestop Collars and Wrap Strips to protect larger plastic pipes.

## 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 10 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 Certified and/or FM approved and tested to the requirements of ASTM E814 (UL1479), CAN/ULC-S115 and shall meet Class A finish requirements when tested in accordance with ASTM E84 (UL723).

### Specified Divisions

| | | |
|---|---|---|
| Division 7 | 07 84 13 | Penetration Firestopping |
| Division 7 | 07 84 43 | Joint Firestopping |
| Division 22 | 22 00 00 | Plumbing |
| Division 23 | 23 00 00 | HVAC |
| Division 26 | 26 00 00 | Electrical |

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## Performance

SpecSeal® LCI Sealant is the basis for systems that meet the exacting criteria of ASTM E814 (UL1479), ASTM E1966 (UL2079) and CAN/ULC-S115 as well as to the time-temperature requirements of ASTM E119 (UL263). LCI provides up to a 4-hour fire rating for typical service penetrations through concrete or wood floors, concrete or masonry walls, as well as gypsum board walls. SpecSeal® LCI Sealant meets Class A finish requirements for Flame Spread and Smoke Development when tested in accordance with ASTM E84 (UL723). Meets or exceeds the requirements of ASTM C834, Type C, Grade 0. SpecSeal® LCI Sealant is also acoustically tested, demonstrating excellent sound attenuation properties.

## Features & Benefits

- Economical: high performance without the high price
- Highly intumescent: expands up to 10 times
- Excellent smoke seal
- 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 asbestos, no PCB's, no inorganic fibers
- Paintable when dry
- Auto bonding
- Non-halogenated
- High solids formula - minimal shrinkage
- Meets LEED™ v3, v4, & v4.1 requirements. Low emitting materials credit. See general LEED letter for additional applicable credits.

UL CERTIFIED SAFETY US·CA R14288    UL CLASSIFIED c US    FM APPROVED    FBC SYSTEM COMPATIBLE    c W us Intertek

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# SpecSeal® LCI Intumescent Sealant

**SpecSeal®**
**LCI**

## PHYSICAL PROPERTIES

| | |
|---|---|
| Color | Red |
| Density/Weight per Gallon | 12.3 lb/gal (1.47 kg/L) |
| Solids Content by Weight | 80.0% |
| Solids Content by Volume | 70.8% |
| Flame Spread* | 0 |
| Smoke Development* | 0 |
| Mold & Fungus Growth Rating (ASTM G21) | 0 |
| Movement Capabilities | 33% Compression Only Class II |
| Coverage | For more information on product coverage see the following documents for Linear Joint & Penetration |
| pH | 9 |
| In Service Temperature | Less than or equal to 185°F (85°C) |
| Storage Temperature | 40°F (4°C) to 95°F (35°C) |
| Applicaton Temperature | 35°F (2°C) to 100°F (38°C) |
| STC Rating (ASTM E90-04/ASTM C919) | 62 (Relates to Specific Construction) |
| VOC Content** | 26 g/L |
| Expansion Begins | 350°F (177°C) |
| Average Volume Shrinkage  (ASTM C1241) | 21.1% |
| Volume Expansion | 10x Free Expansion |
| Shelf Life From Date of Manufacture | 24 months |

*Tested to ASTM E84 (UL723) at 14% surface coverage (modified test for sealants and caulks)     **Per SCAQMD Rule 1168 (EPA Method 24)

## Limitations

Use product as per manufacturer's instructions. Use only in applications per the manufacturer's published designs or specific recommendations. End user must ultimately determine the suitability of the product and/or design to his or her specific requirements and assumes responsibility for its use. PRODUCT CONTAINS WATER AND IS CONDUCTIVE UNTIL DRY. DO NOT APPLY IN THE PRESENCE OF EXPOSED OR ENERGIZED ELECTRICAL CONDUCTORS.

This product has been designed to be safe with plastics. It has been used extensively and successfully with various types of plastic pipes, tubes, and plastic cable insulations. Variations in these materials, however, make it impossible to guarantee compatibility. STI strongly recommends that the user consults with the pipe, tubing, or cable manufacturer in question regarding any known sensitivities or potential restrictions before applying this product.

## 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.

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 modified design.

## System Selection

To find your firestop system or create a submittal, visit https://systems.stifirestop.com/ to use System Search & Submittal Builder. You may also visit the UL Online Certifications Directory/UL Product iQ™ for complete listings. (Firestop Systems).

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# SpecSeal® LCI Intumescent Sealant

**SpecSeal®**
**LCI**

## Technical Service

Specified Technologies Inc. provides toll free technical support to assist in product selection and appropriate installation design. UL System designs suitable for submittal or specification purposes are available on request. A complete library of technical information is provided at the company's website www.stifirestop.com including Safety Data Sheets (SDS's).

## Precautionary Information

Consult Safety Data Sheet (SDS) for additional information on the safe handling and disposal of this material.

## Availability

SpecSeal® LCI Sealant is available from Specified Technologies Inc. (STI) authorized distributors. For additional purchasing and technical information or for the names and locations of the nearest representative and/or distributor, regarding this and other Specified Technology products, please call 1-800-992-1180 or visit www.stifirestop.com.

| ORDERING INFORMATION | | | | | |
|---|---|---|---|---|---|
| Catalog Number | UPC Number | Size | (UOM) Qty. | Case Qty. | Weight (Each) |
| LCI300 | 730573011706 | 10.1 Oz Tube - 18.2 cu in (300 ml) | 1 | 12 | 1.05 lbs (0.48 kg) |
| LCI305 | 730573011751 | 5 Gallon Pail - 1,155 cu in (19 liters) | 1 | 1 | 61.39 lbs (27.84 kg) |
| LCI320 | 730573011720 | 20 Oz Sausage - 36 cu in (592 ml) | 1 | 12 | 1.96 lbs (0.89 kg) |
| LCI329 | 730573011799 | 29 Oz Tube - 52.3 cu in (858 ml) | 1 | 12 | 2.94 lbs (1.33 kg) |

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SpecSeal®
LCC

# SpecSeal® LCC Firestop Collars

The SpecSeal® LCC Collar is a factory-manufactured device designedto protect plastic pipes penetrating fire-rated walls and floors. Utilizing a heavy gauge galvanized metal collar to house a molded intumescent insert, the SpecSeal® LCC Firestop Collar is specifically sized to fit 1-1/2 in, 2 in, 3 in, and 4 in (38 mm, 51 mm, 76 mm and 102 mm) trade sized pipes. When exposed to temperatures in excess of 320°F (160°C), the SpecSeal® LCC Collar's molded insert begins to expand (intumesce) rapidly to form a dense, highly insulative char. Its free expansion ranges from 32x to 64x original (pre-expanded) volume. Expansion continues up to 1,000°F (538°C).

## Applications

SpecSeal® LCC Collars are used to protect a variety of plastic pipes including PVC, PVC Foam Core (ccPVC), CPVC, RNC, PP, FRPP, FRP, HDPE, PE, PVDF, ABS and ABS Foam Core (ccABS) in both vented (DWV) and closed (electrical conduit and water supply) installations.

SpecSeal® LCC Collars are suitable for use in all common constructions including concrete floors, concrete over steel deck, concrete walls, concrete block walls, gypsum board walls, as well as wood floor assemblies.

## Specifications

The firestop system shall be a factory assembled firestop collar utilizing a molded, flexible intumescent insert. The intumescent insert shall provide a minimum of 30x free expansion and shall contain no water soluble expansion ingredients. The specified material shall be approved for a wide range of applications including PVC, PVC Foam Core (ccPVC), CPVC, RNC, PP, FRPP, FRP, HDPE, PE, PVDF, ABS and ABS Foam Core (ccABS) when used by itself or in combination with other products from the same manufacturer. The collar shall be UL Certified and tested to the requirements of ASTM E814 (UL1479) and CAN/ULC-S115.

**Specfied Divisions**

| | | |
|---|---|---|
| Division 7 | 07 84 13 | Penetration Firestopping |
| Division 22 | 22 00 00 | Plumbing |

## Performance

SpecSeal® LCC Collars are the basis for systems that meet the exacting criteria of ASTM E814 (UL1479) and CAN/ULC-S115. Systems have been tested for all common forms of masonry construction and the most common plastic pipes with ratings up to two hours. Consult factory for information not available in the UL Online Certifications Directory/UL Product IQ™ as of this printing.

## Limitations

This product has been designed to be safe with plastics. It has been used extensively and successfully with various types of plastic pipes, tubes, and plastic cable insulations. Variations in these materials, however, make it impossible to guarantee compatibility. STI strongly recommends that the user consults with the pipe, tubing, or cable manufacturer in question regarding any known sensitivities or potential restrictions before applying this product.

### PHYSICAL PROPERTIES

| | |
|---|---|
| Available Sizes | 1.5" (38 mm)<br>2" (51 mm)<br>3" (76 mm)<br>4" (102 mm) |
| Shell Construction | Galvanized Steel |
| Expansion Begins | 320°F (160°C) |
| Volume Expansion | 32 to 64x<br>(free expansion) |
| In Service Temperature | Less Than 120°F (49°C) |
| Shelf Life | No Limit |

## Features & Benefits

• Rapid expansion - closes off burning pipes quickly

• Small profile - use it in all the tight spots

• Flexible & durable - no loose flakes (eye hazards)

• Water resistant - no water soluble or hygroscopic ingredients

• Economical - lower installed cost

• High volume char - expands up to 60 times

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# SpecSeal® LCC Firestop Collars

## Maintenance

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

## System Selection

To find your firestop system or create a submittal, visit https://systems.stifirestop.com/ to use System Search & Submittal Builder. You may also visit the UL Online Certifications Directory/UL Product iQ™ for complete listings. (Firestop Systems).

## Technical Service

Specified Technologies Inc. provides toll free technical support to assist in product selection and appropriate installation design. UL System designs suitable for submittal or specification purposes are available on request. A complete library of technical information is provided at the company's website www.stifirestop.com including Safety Data Sheets (SDS's).

## Precautionary Information

No unusual hazards are known or expected. Observe normal safety procedures during installation.

## Availability

SpecSeal® Firestop Collars are available from Specified Technologies Inc. (STI) authorized distributors. For additional purchasing and technical information or for the names and locations of the nearest representative and/or distributor, regarding this and other Specified Technology products, please call 1-800-992-1180 or visit www.stifirestop.com.

| ORDERING INFORMATION | | | | | |
|---|---|---|---|---|---|
| Catalog Number | UPC Number | Description | (UOM) Qty. | Case Qty. | Weight (Each) |
| LCC150 | 730573039014 | Firestop Collar for 1.5" (38 mm) Trade Size Plastic Pipe | 1 | 6 | 0.22 lbs (0.10 kg) |
| LCC200 | 730573039021 | Firestop Collar for 2.0" (51 mm) Trade Size Plastic Pipe | 1 | 6 | 0.24 lbs (0.11 kg) |
| LCC300 | 730573039038 | Firestop Collar for 3.0" (76 mm) Trade Size Plastic Pipe | 1 | 6 | 0.46 lbs (0.21 kg) |
| LCC400 | 730573039045 | Firestop Collar for 4.0" (102 mm) Trade Size Plastic Pipe | 1 | 6 | 0.75 lbs (0.34 kg) |

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# SpecSeal® SSW Gray Intumescent Wrap Strip

SpecSeal® **SSW**

SpecSeal® Wrap Strips are highly flexible, elastomeric strips designed to firestop combustible penetrations in fire-rated floors, floor/ceilings, and walls. Convenient 12 ft (3.7 m) rolls, or individually sized strips facilitate installation and minimize waste.

These products utilize STI's fast responding intumescent technology, providing very responsive and highly directionalized expansion. Rapid expansion provides quick closure for burning combustible penetrants.

When exposed to temperatures in excess of 250°F (121°C), the SpecSeal® Wrap Strip begins to expand (intumesce) rapidly to form a dense, highly insulative char. Free expansion varies according to the grade utilized (See Table A). Expansion continues up to temperatures of 1,000°F (538°C).

## Applications

SpecSeal® Wrap Strips are used for firestopping combustible penetrants such as nonmetallic pipes or pipe insulation. Installations were developed for both "tuck-in" applications (where strips are secured around the penetrant and slid into the opening) and restraining collar assemblies (for surface mounting). For larger openings or complex penetrant configurations, systems were developed utilizing wrap strips in conjunction with other SpecSeal® products. SpecSeal® Wrap Strips are suitable for use in all common forms of construction including concrete floors, concrete over steel deck, concrete walls, concrete block walls, gypsum board/stud walls, and wood floor/ceiling assemblies.

## Specifications

The wrap strip material shall be a highly flexible, intumescent material. The wrap strip shall contain no water soluble expansion ingredients and provide a minimum of 30x free expansion. The intumescent wrap strip shall be faced on each side with plastic. The specified material shall be approved for a wide range of applications including combustible and noncombustible penetrants when used by itself or in combination with other products from the same manufacturer. The wrap strip shall be UL Certified and tested to the requirements of ASTM E814 (UL1479) and CAN/ULC-S115.

**Specified Divisions**

| | | |
|---|---|---|
| Division 7 | 07 84 13 | Penetration Firestopping |
| Division 22 | 22 00 00 | Firestopping for Plumbing |

### Features & Benefits

- Rapid expansion - closes off burning penetrants faster
- High volume char - significant expansion seals off opening
- Water-resistant - no soluble or hygroscopic ingredients
- Economical - 12 ft (3.7 m) rolls or precut strips means no piecing, less waste
- Highly flexible - no foil, easier to install
- Versatile - performer for a wide range of complex applications
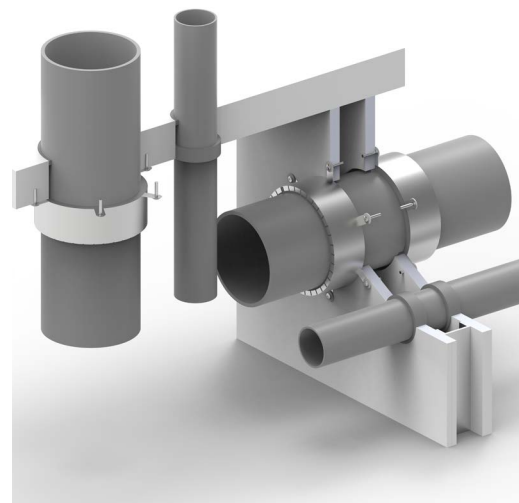
## Performance

SpecSeal® Wrap Strips are the basis for systems that meet the exacting criteria of ASTM E814 (UL1479) and CAN/ULC-S115. Systems were tested for all common forms of construction and penetrants with ratings up to 4 hours (dependent upon grade of wrap strip utilized).

## Limitations

This product has been designed to be safe with plastics. It has been used extensively and successfully with various types of plastic pipes, tubes, and plastic cable insulations. Variations in these materials, however, make it impossible to guarantee compatibility. STI strongly recommends that the user consults with the pipe, tubing, or cable manufacturer in question regarding any known sensitivities or potential restrictions before applying this product.

## Maintenance

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

**Specified Technologies Inc.**

# SpecSeal® SSW Gray Intumescent Wrap Strip

**SpecSeal®**
**SSW**

## System Selection

To find your firestop system or create a submittal, visit https://systems.stifirestop.com/ to use System Search & Submittal Builder. You may also visit the UL Online Certifications Directory/UL Product iQ™ for complete listings. (Firestop Systems).

## Technical Service

Specified Technologies Inc. provides toll free technical support to assist in product selection and appropriate installation design. UL System designs suitable for submittal or specification purposes are available on request. A complete library of technical information is provided at the company's website www.stifirestop.com including Safety Data Sheets (SDS's).

## Precautionary Information

Consult Safety Data Sheet (SDS) 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.

| TABLE A: PHYSICAL PROPERTIES | | | | | | |
|---|---|---|---|---|---|---|
| Catalog Number | SSW125 | SSW250 | SSW375 | SSW375-12 | SSW1569 | SSW2538 |
| Color | Gray | Gray | Gray | Gray | Gray | Gray |
| Thickness | 1/8" (3.2 mm) | 1/4" (6.4 mm) | 3/8" (9.5 mm) | 3/8" (9.5 mm) | 11/16" (18 mm) | 3/8" (9.5 mm) |
| Width | 1-1/2" (38 mm) | 1-1/2" (38 mm) | 1-1/2" (38 mm) | 1-1/2" (38 mm) | 1-1/2" (38 mm) | 2-1/2" (64 mm) |
| Length (min.) | 8-1/16" (205 mm) | 12-1/16" (306 mm) | 15-15/16" (405 mm) | 12' (3.7 m) | 12' (3.7 m) | 12' (3.7 m) |
| Weight (min.) | 0.07 lbs (0.03 kg) | 0.21 lbs (0.10 kg) | 0.40 lbs (0.18 kg) | 3.71 lbs (1.68 kg) | 6.31 lbs (2.86 kg) | 6.93 lbs (3.14 kg) |
| Expansion System | Single-Stage | Single-Stage | Single-Stage | Single-Stage | Single-Stage | Single-Stage |
| Expansion Begins | 320°F (160°C) | 320°F (160°C) | 320°F (160°C) | 320°F (160°C) | 320°F (160°C) | 320°F (160°C) |
| Volume Expansion | 30x to 60x | 30x to 60x | 30x to 60x | 30x to 60x | 30x to 60x | 30x to 60x |
| Mold & Fungus Growth Rating (ASTM G21) | 0 | 0 | 0 | 0 | 0 | 0 |
| In Service Temperature | Less than 130°F (54°C) | Less than 130°F (54°C) | Less than 130°F (54°C) | Less than 130°F (54°C) | Less than 130°F (54°C) | Less than 130°F (54°C) |
| Storage Temperature | Less than 130°F (54°C) | Less than 130°F (54°C) | Less than 130°F (54°C) | Less than 130°F (54°C) | Less than 130°F (54°C) | Less than 130°F (54°C) |
| Shelf Life | No Limit | No Limit | No Limit | No Limit | No Limit | No Limit |
| Oven Aging | No Change 140°F (60°C) | No Change 140°F (60°C) | No Change 140°F (60°C) | No Change 140°F (60°C) | No Change 140°F (60°C) | No Change 140°F (60°C) |
| Humidity Exposure | No Change 60°C (98% R.H.) | No Change 60°C (98% R.H.) | No Change 60°C (98% R.H.) | No Change 60°C (98% R.H.) | No Change 60°C (98% R.H.) | No Change 60°C (98% R.H.) |
| UL Accelerating Aging | Pass | Pass | Pass | Pass | Pass | Pass |

**STI** Specified Technologies Inc.

# SpecSeal® SSW Gray Intumescent Wrap Strip

**SpecSeal®**
**SSW**

## WRAP STRIP AND RESTRAINING COLLAR REQUIREMENTS

| Wrap Strip Type | Trade Size (in.) | Pipe OD (in.) | 1st Layer (in.) | 2nd Layer (in.) | Total Wrap Strip Length per Stack (in.) | Restraining Collar Length (in.) |
|---|---|---|---|---|---|---|
| SSW1569 | 6 | 6.625 | 25.1 | - | 25.1[1] | 27.1[1] |
| SSW375-12, SSW2538 | 6 | 6.625 | 23.2 | 25.5 | 48.7 | 27.5 |
| | 8 | 8.625 | 29.5 | 31.8 | 61.3[2] | 33.8[2] |
| | 10 | 10.75 | 36.1 | 38.5 | 74.6[3] | 40.5[3] |
| | 12 | 12.75 | 42.4 | 44.8 | 87.2[3] | 46.8[3] |

[1]Requires 1 stack of 1 layer of wrap strip and SSWRC2 restraining collar (1-1/2" depth).
[2]Requires 1 stack of 2 layers of wrap strip and SSWRC3 restraining collar (2-1/2" depth).
[3]Requires 2 stacks of 2 layers of wrap strip and WSC12 restraining collar (5" depth).

## Availability

SpecSeal® Wrap Strips are available from Specified Technologies Inc. (STI) authorized distributors. For additional purchasing and technical information or for the names and locations of the nearest representative and/or distributor, regarding this and other Specified Technology products, please call 1-800-992-1180 or visit www.stifirestop.com.

## ORDERING INFORMATION

| Catalog Number | UPC Number | Size | (UOM) Qty. | Case Qty. | Weight (Each) |
|---|---|---|---|---|---|
| SSW1569 | 730573037980 | 12' x 1-1/2" x 11/16" (3.7 m x 38 mm x 17.5 mm) roll | 1 | 6 | 6.31 lbs (2.86 kg) |
| SSW2538 | 730573037973 | 12' x 2-1/2" x 3/8" (3.7 m x 64 mm x 9.5 mm) roll | 1 | 6 | 6.93 lbs (3.14 kg) |
| SSW375-12 | 730573037966 | 12' x 1-1/2" x 3/8" (3.7 m x 38 mm x 9.5 mm) roll | 1 | 12 | 3.71 lbs (1.68 kg) |
| SSWRC2 | 730573037522 | 1-1/2" width 30 gauge galvanized sheet metal restraining collar for ≤6" (152 mm) trade size pipe, 25' (7.6 m) roll | 1 | 1 | 5.19 lbs (2.35 kg) |
| SSWRC3 | 730573037553 | 2-1/2" width 30 gauge galvanized sheet metal restraining collar for 8" (204 mm) trade size pipe, 25' (7.6 m) roll | 1 | 1 | 6.40 lbs (2.90 kg) |

## PRECUT WRAP STRIPS ORDERING INFORMATION

| Catalog Number | UPC Number | Size | (UOM) Qty. | Case Qty. | Weight (Each) |
|---|---|---|---|---|---|
| SSW125 | 730573031254 | 1-1/2" (38 mm) x 1/8" (3.2 mm) strip sized for 2" (51 mm) trade size pipe | 1 | 540 | 0.07 lbs (0.03 kg) |
| SSW250 | 730573032503 | 1-1/2" (38 mm) x 1/4" (6.4 mm) strip sized for 3" (76 mm) trade size pipe | 1 | 160 | 0.21 lbs (0.10 kg) |
| SSW375 | 730573033753 | 1-1/2" (38 mm) x 3/8" (9.5 mm) strip sized for 4" (102 mm) trade size pipe | 1 | 150 | 0.40 lbs (0.18 kg) |

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SpecSeal® SSW Intumescent Wrap Strip • ZSFOD5092 24721

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# SpecSeal® SSM Firestop Mortar

**SpecSeal® SSM**

SpecSeal® Firestop Mortar is an economical, light-weight portland cement-based firestop product. This passive (non-intumescent) material utilizes a combination of heat sinking and insulating properties to provide an extremely high level of fire resistance.

SpecSeal® Firestop Mortar mixes with water to form a non-shrinking, high yield mortar that may be applied by pouring, pumping, or troweling.

Its low density and light weight means that less forming as well as less forming support is required. Its low density also makes re-penetration for retrofitting a simple task.

SpecSeal® Firestop Mortar is designed to dry quickly and will not crack or spall due to freezing or changes in temperature. Its adhesion is due to a chemical bond thus most installations require little or no mechanical anchoring.

## Applications

SpecSeal® Firestop Mortar is used to seal through-penetrations as well as construction gaps and blank openings. This product is also used in conjunction with other SpecSeal® Firestop Products such as SpecSeal® Firestop Collars and Wrap Strips.

SpecSeal® Firestop Mortar has been tested for a wide range of penetrants including metallic pipes, cables, cable trays (both steel and aluminum), busways, steel dutcts, as well as combustible penetrants such as plastic pipes or insulated metallic pipes (when used in conjunction with other SpecSeal® intumescent products).
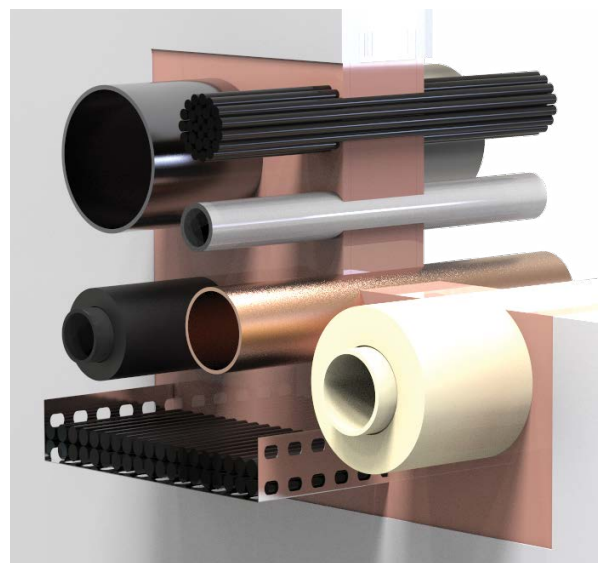
SpecSeal® Firestop Mortar is suitable for openings of all sizes. Its method of application makes it specifically useful for medium to large openings with simple to very complicated combinations of penetrants.

## Specifications

The Firestopping material shall be a light-weight, fast drying portland cement based material. The density of the wet mortar shall be = 53-80 lb./cu. ft. The density of the dry mortar shall be = 24 to 26 lb./cu.ft. The specified mortar shall be approved for a wide range of applications including combustible and noncombustible penetrants when used by itself or in combination with other products from the same manufacturer. The firestop mortar shall be UL Certified and/or FM Systems Approved and tested to the requirements of ASTM E814 (UL1479) and CAN/ULC-S115.

### Specified Divisions

| Division 7 | 07 84 13 | Penetration Firestopping |
|---|---|---|
| Division 22 | 22 00 00 | Plumbing |
| Division 23 | 23 00 00 | HVAC |
| Division 26 | 26 00 00 | Electrical |

## Features & Benefits

- Light weight - less forming and support required
- Fast drying - forms come down faster
- Low density - easy retrofit
- Economical - highest yield per pound means lower installed cost
- Wide range of application - includes aluminum cable tray
- Red color for easy identification and inspection
- Chemical adhesion reduces the need for expensive and time consuming concrete fasteners
- Versatile performer for a wide range of complex applications
- Paintable when dry

## Performance

SpecSeal® Firestop Mortar is the basis for systems that meet the exacting criteria of ASTM E814 (UL1479) and CAN/ULC-S115. Systems have been tested for all common forms of masonry construction and most common penetrants with ratings up to 3 hours.

STI designed firestop systems are engineered to maximize the fire resistance of the seal by not only sealing off the spread of fire and hot gasses but also by minimizing the amount of heat conducted through the assembly. Thus all systems have been designed to provide T Ratings capable of matching the rating of the wall or floor assembly (where possible) when tested without penetrants.

**Specified Technologies Inc.**

# SpecSeal® SSM Firestop Mortar

| PHYSICAL PROPERTIES | |
|---|---|
| Color | Pale red |
| Odor | No perceptible odor |
| Density Mixed (Wet) | 53 to 80 lb/cu ft = 7.1-10.7 lb/gal (0.85 -1.28 kg/L) |
| Density (Dry Mortar) | 24 to 26 lb/cu ft = 3.21-3.4 lb/gal (0.38-1.42 kg/L) |
| Flame Spread* | 0 |
| Smoke Development* | Less than 5 |
| Application Temperature | 35°F (2°C) to 100°F (38°C) |
| In Service Temperature | -10°F (-23°C) to 200°F (93°C) |
| Storage Temperature | No Limit |
| Ratio of Water/Mortar | 18.1/22 to 22/22 |
| Yield (Per 22 lb.) | 1,150 cu. in (18.8 L) to 1,300 cu. in. (21.3 L) |
| Open Time | 30 Minutes working time |
| Shelf Life | No Limit |

*Tested to ASTM E84 (UL723) at 14% surface coverage (modified test for sealants and caulks)

## Limitations

This product has been designed to be safe with plastics. It has been used extensively and successfully with various types of plastic pipes, tubes, and plastic cable insulations. Variations in these materials, however, make it impossible to guarantee compatibility. STI strongly recommends that the user consults with the pipe, tubing, or cable manufacturer in question regarding any known sensitivities or potential restrictions before applying this product.

## Maintenance

Inspection: Installations should be inspected periodically for subsequent damage. Any damage should be repaired using SpecSeal® Firestop Mortar per the original approved design.

Retrofit: When adding or removing penetrants, care should be taken to minimize damage to the seal. Reseal using SpecSeal® Mortar at the original design depth or SpecSeal® Sealant at the depth required for the type of penetrant being sealed (See Sealant Product Data Sheet for details and requirements). 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 new design.

## System Selection

To find your firestop system or create a submittal, visit https://systems.stifirestop.com/ to use System Search & Submittal Builder. You may also visit the UL Online Certifications Directory/UL Product iQ™ for complete listings. (Firestop Systems).

## Technical Service

Specified Technologies Inc. provides toll free technical support to assist in product selection and appropriate installation design. UL System designs suitable for submittal or specification purposes are available on request. A complete library of technical information is provided at the company's website www.stifirestop.com including Safety Data Sheets (SDS's).

**Specified Technologies Inc.**

**SpecSeal®**
# SSM

## Precautionary Information

WARNING: THIS PRODUCT IS CONDUCTIVE WHEN WET AND WILL CREATE A PATH TO GROUND UNTIL DRY. DO NOT INSTALL IN CONTACT WITH ENERGIZED ELECTRICAL CONDUCTORS. EXERCISE CARE WHEN ENERGIZING PENETRANTS. THIS PRODUCT CONTAINS PORTLAND CEMENT AND LIME. DO NOT INGEST. AVOID CONTACT WITH EYES. DO NOT INHALE.

Consult Safety Data Sheet (SDS) for additional information on the safe handling and disposal of this material. Normal safety-wear such as rubber gloves, safety glasses, and dust mask used to handle conventional cement-based products should be worn.

## Availability

SpecSeal® SSM Firestop Mortar is available from Specified Technologies Inc. (STI) authorized distributors. For additional purchasing and technical information or for the names and locations of the nearest representative and/or distributor, regarding this and other Specified Technology products, please call 1-800-992-1180 or visit www.stifirestop.com.

| ORDERING INFORMATION | | | | | |
|---|---|---|---|---|---|
| Catalog Number | UPC Number | Description | Packaging | Weight (Each) | Nom. Yield (Mixed) |
| SSM106 | 730573041062 | SpecSeal® SSM Firestop Mortar | Poly Pail | 22.87 lbs (10.37 kg) | 1,225 in³ (20.1 L) |
| SSM22B | 730573042007 | SpecSeal® SSM Firestop Mortar | Fiber Bag | 22.41 lbs (10.17 kg) | 1,225 in³ (20.1 L) |

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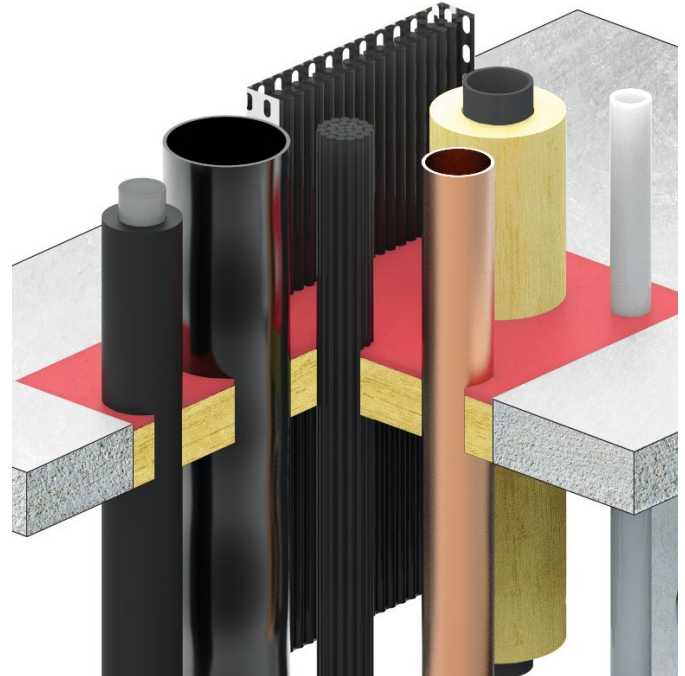SpecSeal® SSM Firestop Mortar • ZSFOD5021 24721

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# SpecSeal® LCI Intumescent Sealant

**SpecSeal® LCI**

SpecSeal® LCI Sealant is a versatile and economical intumescent sealant that has excellent caulking properties as well as high build properties on vertical or overhead surfaces. This single component sealant may be caulked (standard cartridge or bulk loaded), knifed or troweled. In addition, SpecSeal® LCI Sealant does not contain PCB's or asbestos.

SpecSeal® LCI Sealant is storage stable (when stored according to the manufacturer's recommendations), and will not separate or shrink when dried (when applied according to the manufacturer's recommendations). 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.

## Applications

SpecSeal® LCI Sealant has a broad application base designed to seal a wide variety of common penetrations and construction joints. Penetrant types include: Metallic penetrants (steel, iron, copper pipe, copper tubing, steel conduit and EMT) up to 36 in (914 mm) trade size; Non-metallic penetrants (Conduits & Tubing including PVC, CPVC, ABS, and PEX); Insulated pipes including heating, cooling, and condensation applications; Common electrical service and power distribution (service entrance, cable trays, busways), telephone, data, and TV cabling; Structural Steel and Metal Ductwork including HVAC, bath and dryer vents. This product is also used in conjunction with other SpecSeal® Products such as SpecSeal® Firestop Collars and Wrap Strips to protect larger plastic pipes.

## 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 10 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 Certified and/or FM approved and tested to the requirements of ASTM E814 (UL1479), CAN/ULC-S115 and shall meet Class A finish requirements when tested in accordance with ASTM E84 (UL723).

**Specified Divisions**

| | | |
|---|---|---|
| Division 7 | 07 84 13 | Penetration Firestopping |
| Division 7 | 07 84 43 | Joint Firestopping |
| Division 22 | 22 00 00 | Plumbing |
| Division 23 | 23 00 00 | HVAC |
| Division 26 | 26 00 00 | Electrical |

## Performance

SpecSeal® LCI Sealant is the basis for systems that meet the exacting criteria of ASTM E814 (UL1479), ASTM E1966 (UL2079) and CAN/ULC-S115 as well as to the time-temperature requirements of ASTM E119 (UL263). LCI provides up to a 4-hour fire rating for typical service penetrations through concrete or wood floors, concrete or masonry walls, as well as gypsum board walls. SpecSeal® LCI Sealant meets Class A finish requirements for Flame Spread and Smoke Development when tested in accordance with ASTM E84 (UL723). Meets or exceeds the requirements of ASTM C834, Type C,

## Features & Benefits

- Economical: high performance without the high price
- Highly intumescent: expands up to 10 times
- Excellent smoke seal
- 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 asbestos, no PCB's, no inorganic fibers
- Paintable when dry
- Auto bonding
- Non-halogenated
- High solids formula - minimal shrinkage
- Meets LEED™ v3, v4, & v4.1 requirements. Low emitting materials credit. See general LEED letter for additional applicable credits.

**UL CERTIFIED** · **FM APPROVED** · **FBC SYSTEM COMPATIBLE** · **SPEARS** · **Intertek**

**STI® Specified Technologies Inc.**

# SpecSeal® LCI Intumescent Sealant

**SpecSeal®**
**LCI**

| PHYSICAL PROPERTIES | |
|---|---|
| Color | Red |
| Density/Weight per Gallon | 12.3 lb/gal (1.47 kg/L) |
| Solids Content by Weight | 80.0% |
| Solids Content by Volume | 70.8% |
| Flame Spread* | 0 |
| Smoke Development* | 0 |
| Mold & Fungus Growth Rating (ASTM G21) | 0 |
| Movement Capabilities | 33% Compression Only Class II |
| Coverage | For more information on product coverage see the following documents for Linear Joint & Penetration |
| pH | 9 |
| In Service Temperature | Less than or equal to 185°F (85°C) |
| Storage Temperature | 40°F (4°C) to 95°F (35°C) |
| Applicaton Temperature | 35°F (2°C) to 100°F (38°C) |
| STC Rating (ASTM E90-04/ASTM C919) | 62 (Relates to Specific Construction) |
| VOC Content** | 26 g/L |
| Expansion Begins | 350°F (177°C) |
| Average Volume Shrinkage  (ASTM C1241) | 21.1% |
| Volume Expansion | 10x Free Expansion |
| Shelf Life From Date of Manufacture | 24 months |

*Tested to ASTM E84 (UL723) at 14% surface coverage (modified test for sealants and caulks)      **Per SCAQMD Rule 1168 (EPA Method 24)

Grade 0. SpecSeal® LCI Sealant is also acoustically tested, demonstrating excellent sound attenuation properties.

## Limitations

Use product as per manufacturer's instructions. Use only in applications per the manufacturer's published designs or specific recommendations. End user must ultimately determine the suitability of the product and/or design to his or her specific requirements and assumes responsibility for its use. PRODUCT CONTAINS WATER AND IS CONDUCTIVE UNTIL DRY. DO NOT APPLY IN THE PRESENCE OF EXPOSED OR ENERGIZED ELECTRICAL CONDUCTORS.

## 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.

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 modified design.

## System Selection

To find your firestop system or create a submittal, visit https://systems.stifirestop.com/ to use System Search & Submittal Builder. You may also visit the UL Online Certifications Directory/UL Product iQ™ for complete listings. (Firestop Systems).

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SpecSeal® LCI Intumescent Sealant  •  ZSFOD5062 3409

# SpecSeal® LCI Intumescent Sealant

## Technical Service

Specified Technologies Inc. provides toll free technical support to assist in product selection and appropriate installation design. UL System designs suitable for submittal or specification purposes are available on request. A complete library of technical information is provided at the company's website www.stifirestop.com including Safety Data Sheets (SDS's).

## Precautionary Information

Consult Safety Data Sheet (SDS) for additional information on the safe handling and disposal of this material.

## Availability

SpecSeal® LCI Sealant is available from Specified Technologies Inc. (STI) authorized distributors. For additional purchasing and technical information or for the names and locations of the nearest representative and/or distributor, regarding this and other Specified Technology products, please call 1-800-992-1180 or visit www.stifirestop.com.

| ORDERING INFORMATION | | | | | |
|---|---|---|---|---|---|
| Catalog Number | UPC Number | Size | (UOM) Qty. | Case Qty. | Weight (Each) |
| LCI300 | 730573011706 | 10.1 Oz Tube - 18.2 cu in (300 ml) | 1 | 12 | 1.05 lbs (0.48 kg) |
| LCI305 | 730573011751 | 5 Gallon Pail - 1,155 cu in (19 liters) | 1 | 1 | 61.39 lbs (27.84 kg) |
| LCI320 | 730573011720 | 20 Oz Sausage - 36 cu in (592 ml) | 1 | 12 | 1.9628 lbs (0.89 kg) |
| LCI329 | 730573011799 | 29 Oz Tube - 52.3 cu in (858 ml) | 1 | 12 | 2.94 lbs (1.33 kg) |

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