

PRODUCT DATA SHEET



Series LCC Firestop Collars



1. PRODUCT DESCRIPTION

The SpecSeal® Series LCC Firestop Collar is a factory-manufactured device designed to 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 Collar is specifically sized to fit 1-1/2", 2", 3", and 4" 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 32-64 times original (pre-expanded) volume. Expansion continues up to 1,000°F (538°C).

2. APPLICATIONS

SpecSeal® LCC Collars are used to protect a variety of plastic pipes including PVC, PVC Foam Core (ccPVC), CPVC, 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.

3. PHYSICAL PROPERTIES

See Table A. This material is extremely stable. Long term aging studies indicate no significant loss of physical properties nor significant change in expansion properties after elevated temperature and/or humidity testing. Consult factory for additional information.

4. PERFORMANCE

SpecSeal® LCCCollars are the basis for systems that meet the exacting criteria of ASTM E814 (UL1479). 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 UL Fire Resistance Directory as of this printing.

5. 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, CPVC, ABS, and ABS Foam Core pipes when used by itself or in combination with other products from the same manufacturer. The collar shall be UL Classified 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

6. INSTALLATION

GENERAL: The installation of this product may require the application of a smoke seal utilizing SpecSeal® Series LCI Sealant as well as suitable mechanical fasteners for attachment to the floor or wall surface. Sealant and floor or wall attachment hardware must be purchased separately. SpecSeal® LCCCollars are very compact in design and therefore require relatively small cored openings. See Table C for collar dimensions and recommended opening sizes.

SYSTEM SELECTION: Proper methods and materials are critical to firestopping. A number of methods have been developed to suit a wide variety of firestopping applications. Consult the UL Fire Resistance Directory, STI's LC Intumescent Product & Application Guide, or the Technical Library at www.stifirestop.com for the latest in tested application designs. Additional product literature or information may also be obtained by calling your local distributor, sales rep. or STI toll free at (800) 992-1180.

SMOKE SEALING: Some applications may require the application of sealant into the annulus around the pipe as a smoke seal. Consult the UL Classified design for installation requirements including depth and location of caulking. Where required, apply sealant to a clean surface, free of dirt, oil, rust, or scale. Caulk annulus completely shut. Sealant may be smoothed out or the collar may be set directly into the wet sealant.

FEATURES

- **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!



FIRESTOP DEVICE CLASSIFIED BY
 UNDERWRITERS LABORATORIES INC.®
 FOR USE IN THROUGH-PENETRATION
 FIRESTOP SYSTEMS. SEE UL FIRE
 RESISTANCE DIRECTORY

8L98



Table A: PHYSICAL PROPERTIES

Available Sizes

1.5", 2", 3", and 4"

Shell Construction

Galvanized Steel

Expansion Begins

320°F (160°C)

Volume Expansion

32 to 64X (free expansion)

In Service Temp

≤120°F (49°C)

PACKING MATERIALS: In some applications where the collar diameter is insufficient to completely cover the opening around the pipe, some tested designs may require mineral wool packing material to be installed into the annulus prior to the installation of the collar.

FASTENERS: Always use the correct type of fasteners shown in the appropriate UL Classified design. All fasteners should be steel (lead or plastic fasteners are unsuitable and should not be used). 1 1/4" or 1 1/2" fender washers are used in conjunction with all wall or floor fasteners. All fasteners should be installed as per the recommendations of the manufacturer.

CONCRETE: Expanding wedge type anchors (1/4" x 1 3/4") are recommended. Self-tapping steel concrete fasteners are also approved for some installations. Powder activated fasteners may be used at the discretion of the installer and subject to the recommendations of the fastener manufacturer.

GYPHUM WALLBOARD: Toggle bolts or molly-type expanding anchors are suitable for collar attachment.

GYPHUM BOARD-WOOD FLOOR FLOOR/CEILING ASSEMBLIES: Toggle bolts are suggested for gypsum wallboard ceiling attachment. Collars mounted internally and fastened to wood may use standard #8 x 1/2" round head wood screws for attachment.

INSTALLATION FOR SURFACE MOUNTING:

1. Install SpecSeal® Firestop Sealant (if required).
2. With anchor tabs facing the mounting surface, flex collar open and wrap around pipe (See Fig. 1)
3. Collar uses a double hook tab and slot closure. Overlap collar so that the slots align over hook tabs (See Fig. 2)
4. Press slots down and back (towards mounting surface) over hooks and lock into the closed position (See Fig. 3)
5. Slide collar to mounting surface and mark fastener locations. Rotate collar or slide away from mounting surface to allow holes to be drilled. Reposition collar and install fasteners and fender washers. Tighten fasteners completely to finish collar installation.

7. MAINTENANCE

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

8. 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.

9. PRECAUTIONARY INFORMATION

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

10. AVAILABILITY

SpecSeal® Firestop Collars are available from authorized STI distributors nationwide. Consult factory for the names and locations of the nearest sales representatives or distributors.

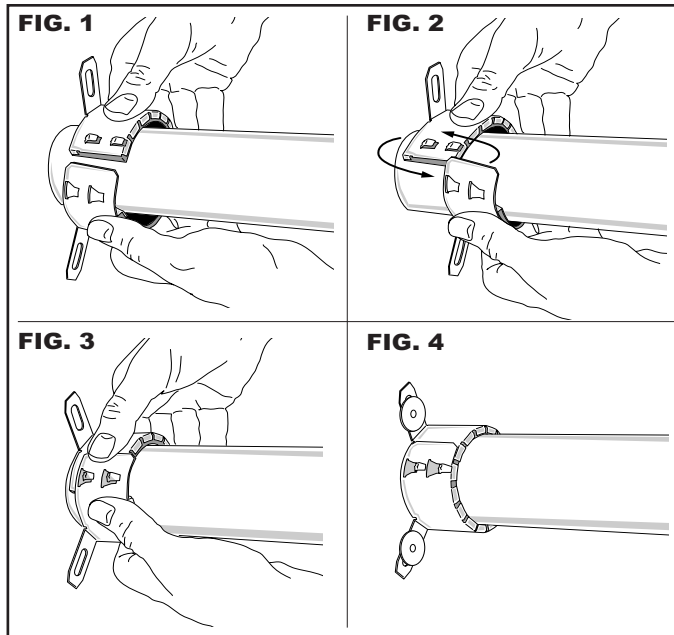


Table B: COLLAR DIMENSIONS & RECOMMENDED CORE SIZES

The following dimensions are provided for installation purposes only. All dimensions have been rounded up to the next 1/10th in.

Cat No. LCC	150	200	300	400
Trade Size	1.5"	2"	3"	4"
Opening Size	2"	2.5"	4"	5"
A	4"	4.4"	5.4"	6.2"
B	2.3"	2.8"	4.3"	5.5"
C	1.5"	1.5"	1.5"	1.5"

Table C: ORDERING INFORMATION

Cat. No.	Description
LCC150	For 1.5" Trade Size Plastic Pipe
LCC200	For 2.0" Trade Size Plastic Pipe
LCC300	For 3.0" Trade Size Plastic Pipe
LCC400	For 4.0" Trade Size Plastic Pipe

Additional SpecSeal Products...
Series LCI Sealant: A versatile and economical intumescent product for firestopping a wide array of applications in small commercial or grouped residential construction.

CITY OF NEW YORK MEA 213-01M

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.

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