SpecSeal® SIL Silicone Firestop Sealant

SpecSeal® SIL Silicone Firestop Sealant is a one-part, neutral-curing silicone sealant exhibiting superior performance in applications where sealing openings in walls and floors are needed to control the spread of fire, smoke, toxic gasses, and water during fire conditions.

SpecSeal® SIL Silicone Firestop Sealant reacts with atmospheric moisture to form a high-strength, durable seal that will adhere to most building substrates without the use of primers. SpecSeal® products do not contain asbestos or PCBs.

BASIC USES: SpecSeal® SIL Silicone Firestop Sealant is designed for use in firestop systems for through penetrations and joints. This product excels in applications where greater water resistance is required. Systems have been tested for Class 1 W Ratings per UL1479.

SpecSeal® SIL Silicone Firestop Sealant is available in non-sag (SIL300) and self-leveling (SIL300SL) grades and may also be used to seal vertical and horizontal joints between metals, masonry, concrete and other common construction materials. SpecSeal® SIL Silicone Firestop Sealant is specially designed for use in static or dynamic joints. The low modulus characteristic minimizes strain on the substrate surface and the elastomeric quality allows excellent recovery from extension and compression cycling.



SpecSeal® SIL Silicone Firestop Sealant is used to seal both through-penetration firestop systems and joint systems. Representative systems have been tested involving primarily noncombustible penetrants, electrical, data, or telephone cables, construction gaps, expansion joints, curtain wall safing applications, and top-of-wall joints.

Specifications

The silicone firestop sealant shall be a one-part, neutral-cure meeting the requirements of ASTM C920. The firestop sealant shall be UL Certified and tested to ASTM E814 (UL1479), ASTM E1966 (UL2079), and CAN/ULC-S115. Class 1 W Ratings per UL1479 shall be available for a variety of different firestop systems.

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® SIL Silicone Firestop Sealants are the basis for systems that meet the exacting criteria of ASTM E814 (UL 1479), ASTM E1966 (UL 2079), ASTM E1399, as well as the time-temperature requirements of ASTM E119 (UL 263). Firestop systems for both joint systems and through-penetration firestops have been tested with ratings up to 4 hours. See UL Systems for more specific information.

Additionally, SpecSeal® SIL Silicone Firestop Sealant meets ASTM C920, "Standard Specification for Elastomeric Joint Sealants". For SIL300, the product is listed as Type S, Grade NS, Class 50, Use A, G, M, O. For SIL300SL, the product is listed as Type S, Grade P, Class 25, Use A, G, M, O.





Features & Benefits

- Low modulus allows dynamic movement in joints
- Non-halogenated
- Auto bonding allows fresh sealant to adhere to cured sealant
- Excellent water resistance for water-tight sealing; including class 1 W ratings (UL1479)
- Ozone and UV resistant for excellent weathering ability and long service life
- Excellent chemical resistance protects in polluted or corrosive atmospheres
- Excellent adhesion to most building substrates
- Excellent smoke seal
- Neutral cure
- Safe, no asbestos, no PCB's, no inorganic fibers
- Meets LEED™ v3, v4, & v4.1 requirements.
 Low emitting materials credit. See general
 LEED letter for additional applicable credits.









Finally, SIL300 (non-sag) has been evaluated by NSF Laboratories for inclusion in Lubrizol's FGG/BM/CZ CPVC System Compatible program.



SpecSeal® SIL Silicone Firestop Sealant



F	PHYSICAL PROPERTIES - AS SUPPLIEI		
	SIL300 (Non-Sag)	SIL300SL (Self-Leveling)	
Consistency	Trowelable	Pourable	
Density/(Weight per Gallon)	11.6 lbs/gal	11.5 lbs/gal	
Solids Content by Weight	100%	85%	
Coverage	For more information on product coverage see the following documents for Linear Joint & Penetration	For more information on product coverage see the following documents for <u>Linear Joint</u> & <u>Penetration</u>	
Viscosity	1,200,000 cps	25,000 cps	
Storage Temperature	Less than 80°F (27°C)	Less than 80°F (27°C)	
Application Temperature	35°F (-37°C) to 140°F (60°C)	35°F (-37°C) to 140°F (60°C)	
VOC Content**	20 g/L	Less than 47 g/L	
Shelf Life From Date of Manufacture	18 months	18 months	
Tooling Time	25 to 30 minutes	25 to 30 minutes	
Tack Free, ASTM C679 (77°F, 50%RH)	3 to 4 hours	50 to 60 minutes	
Sag/Slump, ASTM D2202	0.1" max	N.A.	
Storage Warranty Period	12 months from date of shipment if stored in original unopened container at 80°F (27°C)	12 months from date of shipment if stored in original unopened container at 80°F (27°C)	
	PHYSICAL PROPERTIES - CURED		
	SIL300 (Non-Sag)	SIL300SL (Self-Leveling)	
Color	Concrete (limestone)	Gray	
Flame Spread*	5	5	
Smoke Developed*	45	45	
Mold & Fungus Growth Rating (ASTM G21)	0	1	
Movement Capabilities	± 50% (ASTM C719) ± 35% (ASTM E1399)	± 50% (ASTM C719) ± 15% (ASTM E1399)	
In Service Temperature	-35°F (-37°C) to 350°F (177°C)	-35°F (-37°C) to 300°F (149°C)	
Shore A Hardness (ASTM D2240)	24	26	
STC Rating (Relates to Specific Construction), (ASTM E 90-04/ASTM C919)	61	61	
Weathering & U.V. Resistance	Excellent	Excellent	
Tensile Strength, psi (ASTM D412)	341 psi (2.35 MPa)	110 psi (0.76 MPa)	
Elongation % (ASTM D412)	715%	600%	
Tensile at 100% Elongation (ASTM D412)	73.2 psi (0.50 MPa)	60 psi (0.41 MPa)	
Peel Strength (21 day cure @ 77°F/50 RH), ASTM C794	56.6 pli	12 pli	

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

Inspection: Installations should be inspected periodically for subsequent damage. Any damage should be repaired using SpecSeal® products per the original approved design. Cut away damaged material and reapply sealant as required. 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.



** Per SCAQMD Rule 1168 (EPA Method 24)

Maintenance

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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 iQTM 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

Avoid contact with eyes. Uncured product may irritate eyes on contact. Use only in well ventilated areas. To clean areas of skin contact, wipe off uncured material with a dry cloth or paper towel prior to washing. Waterless hand cleaners are particularly effective while sealant is uncured. Consult Safety Data Sheet (SDS) for additional information on the safe handling and disposal of this material.

Availability

SpecSeal® SIL Silicone Firestop 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)		
SIL300	730573013106	10.1 Oz Tube - 18.2 cu in (300 ml)	1	24	1.03 lbs (0.47 kg)		
SIL305	730573013052	4.5 Gallon Pail -1,037 cu in (17.0 liters)	1	1	54.43 lbs (24.69 kg)		
SIL320	730573013205	20 Oz Sausage - 36 cu in (592 ml)	1	12	1.86 lbs (0.84 kg)		
SIL305SL	730573013267	4.5 Gallon Pail - 1,037 cu in (17.0 liters)	1	1	51.89 lbs (23.54 kg)		
SIL320SL	730573013229	20 Oz Sausage - 36 cu in (592 ml)	1	12	1.86 lbs (0.84 kg)		

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.





