

TECHNICAL BULLETIN

TARGET MARKET ROOFING



BUILDING TRUST



Subject: Silicone Sealants

19-03

Note: The Sikasil WS-295 PDS and link to the distributors list have been updated

Sika Corporation – Roofing is pleased to announce the addition of two more approved silicone sealants to join Sikasil® SG -15 in Sika's roofing and waterproofing sealant product line.

- Sikasil SG-15
A versatile, structural glazing and/or weatherseal one component, non-sag, elastomeric, neutral cure silicone sealant. Meets the requirements of ASTM C-920, Type S, Grade NS, Class 25, Use NT, M, G, A, O; ASTM C-1184 Structural Silicone Sealant; TT-S-00230C, Type II, Class A.
- Sikasil SG-10
A fast curing, one component, non-sag, elastomeric, neutral cure silicone sealant. Meets the requirements of ASTM C-920, Type S, Grade NS, Class 25, Use NT, T, M, G, A, O; TT-S-00230C, Type II, Class A; TTS-001543A, Class A; CAN/CGSB-19.13-M87, AAMA 802.3 Type I and II, AAMA 803.3 Type I, AAMA 805.2, AAMA 808.3 and California Air Resources Board 2003 requirements for Volatile Organic Compound content.
- Sikasil WS-295
A one part, neutral cure for use in most common weatherproofing applications on a wide variety of materials. Meets the requirements of ASTM C-920, Type S, Grade NS, Class 50, Use NT, M, G, A, O; TT-S-00230C, Type II, Class A; CAN/CGSB-19.13-M87, AAMA 802.3 Type II, AAMA 803.3, AAMA 805.2, AAMA 808.3.

These sealants can be used at wall and curb terminations, pipe penetrations and metal flashings. They are not to be used in drain details or as sealant around reinforcing steel or dowels which are located on the structural deck.

The products listed have been tested for compatibility with Sarnafil and Sikaplan membranes and are the only silicone sealants approved for use in Sarnafil and Sikaplan roofing and waterproofing systems.

These products will not be stocked by Sika-Roofing warehouses, they can be purchased at a local Sika Distributor. For a list of distributors please go to and use 'Waterproofing' for the category:
<https://usa.sika.com/en/construction/adhesives-sealants/contact-the-team/adhesives-sealants-distributors.html>

Sealant is a maintenance item and is not covered under the Sika warranty.

Please see attached product data sheets for additional information.

Sikasil® SG-15

Structural Glazing / Weatherseal Neutral Cure Silicone Sealant

Typical Product Data (for further data please see Safety Data Sheet)

Chemical Base	1- C Silicone
Color	Multiple
Cure mechanism	Moisture
Cure type	Oxime
Density (uncured)	9.35 lbs. / gal.
Non-sag properties - Vertical @ 120 °F (49 °C) (ASTM C-639)	Non-sag
Slump (ASTM D-2202)	Nil
Skin Time (MNA Method)	15 minutes
Tack free time ^A (ASTM D-679)	25 minutes
Extrusion Rate g/min (ASTM C-1183 modified) 1/8" orifice @ 90 psi	300
Curing speed (MNA Method)	1/8 inch in 24 hours
Shore A-hardness (ASTM C-661)	18
Tensile strength (ASTM D-412)	210 psi (1.4 MPa)
Elongation at break (ASTM D-412)	650%
Bond durability - glass/ aluminum / concrete (ASTM-C793)	± 25%
Movement capability (ASTM C-719)	± 25%
Application Temperature	product substrate & air
	-35 – 140 °F (-32 – 40 °C) 40 – 105 °F (5 – 40 °C)
Service temperature	-80 – 350 °F (-62 – 176 °C)
Weathering Resistance	Excellent
Shelf life (storage below 77°F (25°C))	Cartridge, Drum, & Pail
	12 months

^{A)} 77 °F (25 °C) / 50% R.H.

Description

Sikasil® SG-15 is a versatile, structural glazing and/or weatherseal one-component, non-sag, elastomeric, neutral cure silicone sealant. Meets the requirements of ASTM C-920, Type S, Grade NS, Class 25, Use NT, M, G, A, O; ASTM C1184 Structural Silicone Sealant; TT-S-00230C, Type II, Class A;

Product Benefits

- Glazing and/or weatherseal applications with one product
- Outstanding UV and weathering resistance
- Versatile "Medium" modulus
- Excellent flexibility for dynamic joint movement
- Bonds to most substrates without priming

Areas of Application

- Structural glazing
- Conventional glazing
- Perimeter sealing of windows, doors, skylights
- Curtain wall expansion joints and unitized field assembly
- Panel stiffeners
- Expansion Joints

Typical substrates include Glass, Aluminum, metal, tile, fiberglass, plastic, ceramics, masonry, concrete, brick, stone, granite, powder-coated aluminum, fluoropolymer painted surfaces, vinyl, PVC, and wood. This product is suitable for experienced professional users only. Test with actual substrates and conditions have to be performed to ensure adhesion and material compatibility.

Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's most current Product Data Sheet, label and Safety Data Sheet which are available at <http://usa.sika.com/> or on request at tsmh@us.sika.com. Nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instructions for each Sika product as set forth in the current Product Data Sheet, label and Safety Data Sheet prior to product use.



Cure Mechanism

Sikasil® SG-15 cures by reaction with atmospheric moisture. At low temperatures the water content of the air is lower and the curing reaction proceeds more slowly (see diagram below).

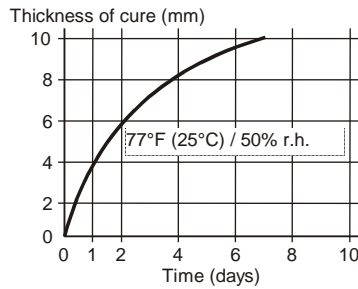


Diagram 1: Curing speed Sikasil® SG-15

Method of Application

Surface preparation

Surfaces must be clean, dry and free from grease, oil and dust. Surface treatment depends on the specific nature of the substrates and is crucial for a long lasting bond. Sikasil® SG-15 is designed to obtain adhesion without the use of a primer; however, certain substrates may require a primer. Test by applying the sealant and/or primer sealant combination to confirm results and proposed application methods.

Application

The optimum temperature for substrate and sealant is between 15 °C and 25 °C. Sikasil® SG-15 can be processed with hand, pneumatic or electric driven piston guns as well as pump equipment. For advice on selecting and setting up a suitable pump system, contact the System Engineering Department of Sika Corporation. Joints must be properly dimensioned. Basis for calculation of the necessary joint dimensions are the technical values of the adhesive and the adjacent building materials, the exposure of the building elements, their construction and size as well as external loads. Joints deeper than 15 mm must be avoided.

Tooling and Finishing

Tooling and finishing must be carried out within the skin time of the sealant or adhesive. When tooling freshly applied Sikasil® SG-15 press the adhesive to the joint flanks to get a good wetting of the bonding surface. No tooling agents to be used.

Removal

Uncured sealant may be removed from tools and equipment with solvents such as citrus based solvents or xylene, if cleaned before sealant has begun to cure. Strictly follow solvent manufacturer's instructions for use and warning statements. Once cured, the material can only be removed mechanically. Hands and exposed skin should be washed with soap and water immediately after use. **DO NOT USE SOLVENTS ON SKIN!**

Overpainting

Sikasil® SG-15 cannot be overpainted.

Application Limits

Recommended solution from Sika for structural glazing and window bonding are usually compatible to each other. These solutions consist of products such as Sikasil® SG, IG, WT as well as SikaHyflex®-300 and -600 series. For specific information regarding compatibility between various Sikasil® and SikaHyflex® products contact the Technical Department of Sika Corporation. To exclude materials influencing Sikasil® SG-15, all materials such as gaskets, tapes, setting blocks, sealants etc., in direct and indirect contact have to be approved by Sika in advance. Where two or more different reactive sealants are used, allow the first to cure completely before applying the next. The above mentioned Sika process materials may only be used in structural glazing or window bonding applications after a detailed examination and written approval of the corresponding project details by Sika Industry. Please also note the following:

- Allow treated wood to age six months before application.
- Brass and copper may be discolored. Test prior to application.
- Test porous surfaces such as concrete, masonry and natural stone for staining before use.

Further Information

Advice on specific applications will be given on request. To contact Sika Corporation's Industry Technical Services Department please send an email to tsmh@us.sika.com. Copies of the following publications are available on our website www.sikaindustry.com:

- Safety Data Sheets
- Product Data Sheets

Packaging Information

Cartridge	295 ml (10 fl. oz.)
Pail	4.5 gal
Drum	52 gal

Basis of Product Data

All technical data stated in this document are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

Health and Safety Information

For information and advice regarding transportation, handling, storage and disposal of chemical products, users shall refer to the actual Safety Data Sheets containing physical, ecological, toxicological and other safety-related data.

Limited Material Warranty

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor. **NO OTHER WARRANTIES IMPLIED OR EXPRESS SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.**

Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's most current Product Data Sheet, label and Safety Data Sheet which are available at <http://usa.sika.com/> or on request at tsmh@us.sika.com. Nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instructions for each Sika product as set forth in the current Product Data Sheet, label and Safety Data Sheet prior to product use.

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Sikasil® SG-10

Fast Cure Neutral Silicone Assembly Sealant

Technical Product Data (typical values)

Chemical Base	1-C silicone	
	Pigmented	Translucent
Color	Pigmented	Translucent
Cure mechanism	Moisture	Moisture
Cure type	Oxime	Oxime
Density (uncured)	11.9 lbs./gal.	8.6 lbs./gal.
VOC	21 g/L (0.18 lb./gal.)	21 g/L (0.18 lb./gal.)
Non-sag properties - Vertical @120°F (49°C) (ASTM C-639)	Non-sag	Non-sag
Slump (ASTM D-2202)	Nil	Nil
Skin Time (MNA Method)	6 minutes	8 minutes
Tack free time ² (ASTM D-679)	12 minutes	18 minutes
Extrusion Rate g/min (ASTM C-1183 modified) 1/8" orifice @ 90 psi	300	500
Curing speed (MNA Method)	1/8 inch 12 hours	1/8 inch 12 hours
Shrinkage	nil	nil
Shore A-hardness (ASTM C-661)	35 +/-5	12 +/-5
Tensile strength psi (mpa) (ASTM D-412)	300 psi (2.07)	190 psi (1.31)
Elongation at break (ASTM D-412)	400 %	600 %
Bond durability - glass/ aluminum / concrete (ASTM-C793)	± 25 %	± 25 %
Movement capability (ASTM C-719)	± 25 %	± 25 %
Application Temperature ¹ product only	-35° to 140°F (-32 to 40°C)	-35° to 140°F (-32 to 40°C)
Service temperature	- 80° to 350°F (-62.2° to 176°C)	- 80° to 350°F (-62° to 176°C)
Weathering Resistance	Excellent	Excellent
Shelf life (storage below 90°F (32°C))		
Cartridge and Unipac	12 months	12 months
Drum and Pail	12 months	12 months

¹ Substrate and Air Temperature must be between 40° - 105°F (5° - 40°C). See "Application" Section for details.

² 77°F (25°C) / 50% r.h.

Description

Sikasil®-SG10 is a fast curing, one-component, non-sag, elastomeric, neutral cure silicone sealant. Meets the requirements of ASTM-C920, Type S, Grade NS, Class 25, Use NT, T, M, G, A, O; TT-S-00230C, Type II, Class A; TT-S-001543A, Class A; CAN/CGSB-19.13-M87, AAMA 802.3 Type I and II, AAMA 803.3 Type I, AAMA 805.2, AAMA 808.3 and California Air Resources Board 2003 requirements for Volatile Organic Compound content. Sikasil®-SG10 is especially suitable for window fabrication and has passed the Florida Hurricane Glazing Code when used in designed systems.

Product Benefits

- Extremely long service life
- Faster production capability in assembly processes
- High early green strength, fast cure
- Excellent flexibility for dynamic joint movement
- Bonds to most substrates without priming
- Compatible with IG sealants
- Enhanced adhesion PVC/Vinyl, glass, aluminum, metals, powder coated surfaces, tiles, fiberglass, plastic, ceramic and wood
- AAMA Certified component for standard and impact glazing when used in designed systems

Areas of Application

- Window and door fabrication
- Back bedding and cap, toe and heel beads
- Perimeter sealing of windows, doors and skylights
- Conventional and Impact glazing
- Kitchen and bath countertops/solid surfaces, Sanitary Seals
- Marine cabins
- Truck/Trailer/Auto/RV production
- Component assembly processes

Typical Substrates

- Vinyl, glass, aluminum, powder coated aluminum, metals, tile, fiberglass, plastic, ceramic and wood

Industry



Coverage

Cartridge: Approximately 12.2 linear ft. (3.7 lin. m) for ½ x ¼ in (13 x 6 mm) bead.

Cure Mechanism

Sikasil®-SG10 cures by reaction with atmospheric moisture. At low temperatures the water content of the air is lower and the curing reaction proceeds more slowly (see diagram below).

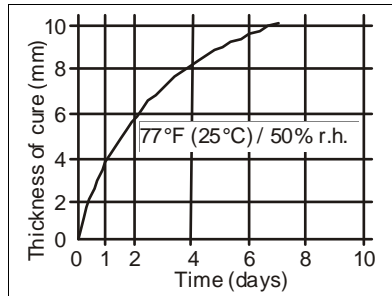


Diagram 1: Curing speed Sikasil® SG-10

Chemical Resistance

Sikasil®-SG10 is resistant to UV radiation, fresh water, seawater and proprietary aqueous cleaning agents; temporarily resistant to fuels, mineral oils, vegetable and animal fats and oils; no resistance to organic acids, concentrated mineral acids, caustic solutions and solvents. The above information is offered for general guidance only. Advice on specific applications will be given on request. Contact Technical Service at (tsmh@sika-corp.com).

Method of Application

Surface preparation

The substrate must be clean, dry, frost free, sound and free of any oils, greases or incompatible sealers, paints or coatings that may interfere with adhesion. Project specific substrates must always be submitted for testing before consideration in high demand applications.

POROUS SUBSTRATES – clean by mechanical methods to expose a sound surface free of contamination.

NON-POROUS SUBSTRATES – for cleaning non-porous substrates, use two cloth cleaning method using isopropyl alcohol, xylene or an approved, clean, pure non-diluted industrial grade solvent. Allow solvent to evaporate completely prior to sealant application. Strictly follow solvent manufacturer's instructions for safe handling.

PRIMING Sikasil®-SG10 is designed to obtain adhesion without the use of a primer; however, certain substrates may require a primer. Test by applying the sealant and/or primer sealant combination to confirm results and proposed application methods. Refer to Technical Data Sheet for primers **Sikasil®-2100**, or **Sikasil®-2300** available at www.sikausa.com or contact Technical Service for additional information at (tsmh@sika-corp.com).

Application

In all cases, make sure the joint design is correct. Proper joint design minimizes stresses on the sealant. Use masking tape if desired for areas adjacent to the joint to be sealed to prevent surface contamination. Apply sealant to dry, clean surfaces. An air operated or hand operated cartridge gun may be used. Do not break cartridge seal until just before use. Surfaces should be dried before the sealant is applied. Normally sealant skins in 8 minutes, dries to touch in 1 hour, and bonds in 24 hours.

This product is suitable for bulk dispensing straight from drums or pails by means of a pneumatic or hydraulic pump system. For advice on selecting and setting up a suitable pump system please contact our Technical Service Department at (tsmh@sika-corp.com).

Expansion Joint

Apply using professional caulking gun. Do not open product container until preparation work has been completed. Apply sealant using consistent, positive pressure to force sealant into the joint. Tool sealant to create a concave joint shape and ensure maximum adhesion. Dry tooling is recommended.

Adhesive Joint

Apply using professional caulking gun, dispensing equipment or trowel. Use sufficient quantity of adhesive to one or both substrates to provide designed contact area. Surfaces may be moved up to one hour after application without loss of adhesive strength.

Tooling and finishing

Tool joint, if necessary, and remove masking tape. Tooling should be completed in one continuous stroke. Tool immediately after sealant is applied and before a skin begins to form. Dry tool - DO NOT use soap or oil as a tooling aid. Remove masking tape immediately after tooling is completed. Complete Tooling of product within 5 minutes of sealant application.

Removal

Uncured sealant may be removed from tools and equipment with solvents such as isopropyl alcohol or xylene, if cleaned before sealant has begun to cure.. Strictly follow solvent manufacturer's instructions for use and warning statements. Once cured, the material can only be removed mechanically. Hands and exposed skin should be washed with soap and water immediately after use. Do not use solvents on skin!

Overpainting

Sikasil® SG-10 cannot be overpainted.

Limitations

- Not intended for structural glazing applications. Contact Technical service at (tsmh@sika-corp.com) for specifics if required.
- Do not allow sealant to come in contact with solvent during cure.
- Do not allow sealant to come in contact with curing polyurethane sealants during cure.
- Not intended for water immersion.
- Sealant may be applied below freezing temperatures if substrates are completely dry, frost free and clean.
- Not recommended for absorptive surfaces such as natural stone particularly limestone or marble where staining may occur. Test before use.
- Do not apply to surfaces that will be painted.
- Do not apply to substrates that bleed oil, plasticizers or solvent.
- Do not apply to damp or wet substrates.
- Lower temperature and humidity will extend tack free and cure rates.
- Allow treated wood to age six months before application.
- Brass and copper may be discolored through contact; test sample prior to application.
- Test sensitive substrates, such as mirror backings for compatibility before use.

WARNING: IRRITANT, SENSITIZER.

Contains Methyl ethylketoxime (CAS: 96-29-7), Oximino Silane (Trade Secret). Direct eye contact may cause irritation. Eye contact may cause conjunctivitis, corneal damage, or severe chemical burns. May cause skin irritation and sensitization. May be absorbed through the skin. May cause irritation to respiratory system. May cause drowsiness. May be harmful if swallowed. If heated, silicones can form formaldehyde vapors. Formaldehyde is a potential cancer hazard, a known skin and respiratory sensitizer, and an irritant

Further information available at:
www.sikausa.com

Sika Corporation Industry Products
30800 Stephenson Highway
Madison Heights, MI 48071
MADE IN USA



to the eyes, nose, throat, skin, and digestive system. Product contains oximes, possible skin sensitizers.

Drum	52 gal (197 L) in 55 gal drum
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PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.

HMIS

Health	*1
Flammability	1
Reactivity	0
Personal Protection	C

Value Basis

All technical data stated on this Product Data Sheet are based on the results of laboratory tests only. Actual measured data in the field may vary due to site specific conditions which are not known to Sika and beyond our control.

Legal Notes/Disclaimer

All information provided by Sika Corporation ("Sika") concerning Sika products, including but not limited to, any recommendations and advice relating to the application and use of Sika products, is given in good faith based on Sika's current experience and knowledge of its products when properly stored, handled and applied under normal conditions in accordance with Sika's instructions. In practice, the differences in materials, substrates, storage and handling conditions, actual site conditions and other factors outside of Sika's control are such that Sika assumes no liability for the provision of such information, advice, recommendations or instructions related to its products, nor shall any legal relationship be created by or arise from the provision of such information, advice, recommendations or instructions related to its products. The user of the Sika product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with the full application of the product(s).

FIRST AID

In case of eye contact, flush thoroughly with water for at least 15 minutes. SEEK IMMEDIATE MEDICAL ATTENTION. In case of skin contact, wash affected areas with soap and water. If irritation persists, SEEK MEDICAL ATTENTION. Remove and wash contaminated clothing. If inhalation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs or if swallowed, SEEK IMMEDIATE MEDICAL ATTENTION. Refer to Material Safety Data Sheet (MSDS) for further information.

Handling And Storage

Use with adequate ventilation. Product evolves Methyl ethyl ketoxime (MEKO) and methanol when exposed to water or humid air. Provide adequate ventilation to control MEKO within exposure guidelines. Keep container closed and store away from water or moisture or oxidizing materials.

When stored in the original, unopened containers at or below 90°F (32°C), shelf life is one year. A product skin may form in pails and drums, remove prior to use.

Further Information

Copies of the following publications are available on our website www.sikausa.com or by contacting (tsmh@sika-corp.com)

- Material Safety Data Sheet
- Product Data Sheet

Clean Up

Observe personal protective equipment recommendations described in MSDS. Disposal of collected product, residues, and cleanup materials may be governmentally regulated. Observe all applicable local, state and federal waste management regulations. Ventilate area. Contain spill. Evacuate unprotected personnel from hazard area. Wipe up and contain for disposal. Cover with absorbant, place in approved drum. Clean area as appropriate since spilled materials, even in small quantities, may present a slip hazard.

In case of emergency call:
Chemtrec: 800-424-9300
International: 703-527-3887

For further information and advice regarding transportation, handling, storage and disposal of chemical products, users should refer to the actual Material Safety Data Sheets containing physical, ecological, toxicological and other safety related data. It is highly recommended to read the actual Material Safety Data Sheet before using the product.

Limited Material Warranty

Manufacturer / Distributor warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor. **NO OTHER WARRANTIES IMPLIED OR EXPRESS SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY**

- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- KEEP CONTAINER TIGHTLY CLOSED
- FOR PROFESSIONAL USE ONLY

Packaging Information

Cartridge	10 fl. oz. (295ml)
Pail	4.5 gal (17 L) in a 5 gal pail

Further information available at:
www.sikausa.com

Sika Corporation Industry Products
 30800 Stephenson Highway
 Madison Heights, MI 48071
MADE IN USA

Sika reserves the right to change the properties of its products without notice. All sales of Sika product(s) are subject to its current terms and conditions of sale which are available at www.sikausa.com or by calling 201-933-8800.

Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's most current Product Data Sheet, product label and Material Safety Data Sheet which are available at www.sikausa.com. Nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instruction for each Sika product as set forth in the current Product Data Sheet, product label and Material Safety Data Sheet prior to product use.



PRODUCT DATA SHEET

Sikasil® WS-295

NEUTRAL CURE, WEATHER SEALING SILICONE SEALANT

PRODUCT DESCRIPTION

Sikasil® WS-295 sealant is a one part, neutral cure for use in most common weatherproofing applications on a wide variety of materials. Meets the requirements of ASTM C-920, Type S, Grade NS, Class 50, Use NT, M, G, A, O; TT-S-00230C, Type II, Class A; CAN/CGSB-19.13-M87, AAMA 802.3 Type II, AAMA 803.3, AAMA 805.2, AAMA 808.3

USES

Sikasil® WS-295 silicone sealant has been specifically designed:

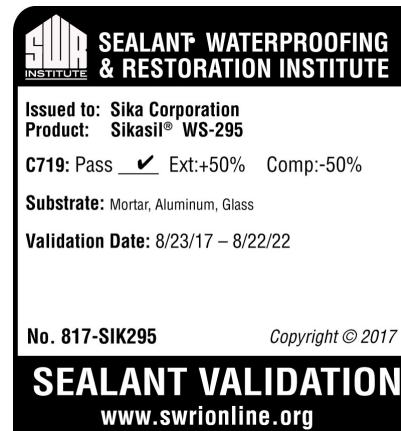
- As a weatherseal in both conventional glazing and structural glazing applications, including cap, toe and heel beads
- As a weatherseal in glass to glass butt joint glazing
- Sealing expansion and control joints in precast concrete panels and metal curtain walls.
- Perimeter sealing of doors, windows and other building components
- Adhering stiffeners to building panels
- Excellent for use in unitized curtain wall systems

CHARACTERISTICS / ADVANTAGES

- Versatile medium modulus
- Unaffected by most atmospheric conditions
- Excellent resistance to UV and Ozone exposure
- Non-staining
- Joint movement $\pm 50\%$
- Excellent adhesion
- One-component
- Excellent gunnability in all temperatures

APPROVALS / STANDARDS

- Meets the requirements of ASTM C1184 for structural silicone sealants



PRODUCT INFORMATION

Packaging	10 fl.oz. (295 ml) cartridge, 20 fl.oz. (600 ml) sausage, 2 gal. pails (7.57 L)
Color	White, Colonial White, Aluminum, Limestone, Black, Bronze, Medium Bronze, Custom

Shelf Life	12 months in original unopened containers
Storage Conditions	Store in unopened containers at temperatures lower than 80 °F (27 °C)
Volatile organic compound (VOC) content	37 g/L

TECHNICAL INFORMATION

Shore A Hardness	25	(7 days at 77 °F (25 °C) 50 % R.H.) (ASTM C-661)
Tensile Strength	200 psi (1.38 MPa)	(7 days at 77 °F (25 °C) 50 % R.H.) (ASTM D-412)
Tensile Stress at Specified Elongation	55 psi (0.38 MPa) at 100 %	(7 days at 77 °F (25 °C) 50 % R.H.) (ASTM D-412)
Elongation at Break	700 %	(7 days at 77 °F (25 °C) 50 % R.H.) (ASTM D-412)
Adhesion in Peel	30 pli on aluminium, glass and concrete	(7 days at 77 °F (25 °C) 50 % R.H.) (ASTM C-794)
Movement Capability	+/-50 %	(7 days at 77 °F (25 °C) 50 % R.H. at 100 %) (ASTM C-719)
UV Exposure	Excellent	Ozone/UV Resistance (ASTM D-1149)
Colour Stability	Staining, Color Change	None (ASTM C-510)
	Staining on Porous Substrates	No staining (ASTM C-1248)
Service Temperature	-80–350 °F (-62–177 °C)	

APPLICATION INFORMATION

Coverage

10.0 oz (295 ml) Cartridge: Yield in Linear feet

Width/Depth	1/4"	3/8"	1/2"
1/4"	24.1		
3/8"	16.0	10.7	
1/2"	12.0	8.0	6.0
3/4"	8.0	5.3	4.0
1"			3.0
1.25"			2.4
1.5"			2.0

20 oz (600 ml) Sausage: Yield in Linear feet

Width/Depth	1/4"	3/8"	1/2"
1/4"	48.1		
3/8"	32.1	21.4	
1/2"	24.1	16.0	12.0
3/4"	16.0	10.7	8.0
1"			6.0
1/25"			4.8
1/5"			4.0

Sag Flow	no sag	(77 °F (25 °C) 50 % R.H.) (ASTM C-639)
Cure Time	Tack Free Time	50 min. (at 77 °F (25 °C) and 50 % R.H.)
	Cure Time	7-14 days (ASTM C-679)
	Full Adhesion	7-14 days
Tooling Time	Initial Skin: 20–30 minutes (77 °F (25 °C) 50 % R.H.)	

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

The substrate must be clean, dry, frost free, sound and free of any oils, greases or incompatible sealers, paints or coatings that may interfere with adhesion.

POROUS SUBSTRATES – clean by mechanical methods to expose a sound surface free of contamination and laitance.

NON-POROUS SUBSTRATES – for cleaning non-porous substrates, use two rag wipe method using xylene or an approved commercial solvent. Allow solvent to evaporate prior to sealant application.

Priming

Sikasil® WS-295 is designed to obtain adhesion without the use of a primer; however, certain substrates may require a primer. Test by applying the sealant and/or primer sealant combination to confirm results and proposed application methods. Refer to Technical Data Sheet for primers Sikasil® Primer-2100 and contact Technical Service for additional information.

APPLICATION METHOD / TOOLS

The depth of the sealant should be 1/2 the width of the joint. The maximum depth is 1/2 in. (13 mm) and the minimum is 1/4 in. (6 mm). To control joint depth, use closed cell polyethylene, non-gassing polyolefin or open cell polyurethane backer rod. If joint depth does not allow for backer rod, use polyethylene bond breaker tape to prevent three-sided adhesion. Closed cell backer rod should be 25 % larger than joint width; do not compress more than 40 %. Open cell should be compressed 40 %. Do not use open cell rod in horizontal on grade joints or with E.I.F.S.

Sikasil® WS-295 is ready to use, apply using professional caulking gun. Do not open product container until preparation work has been completed. Apply sealant using consistent, positive pressure to force sealant into the joint. Tool sealant to create a concave joint shape and maximum adhesion. Dry tooling is recommended. DO NOT use soapy water or other liquids when tooling.

Removal

Use xylene, denatured alcohol or mineral spirits to remove uncured sealant from substrate and equipment. Follow solvent manufacturer's instructions for use and warnings. Cured material can only be removed mechanically.

LIMITATIONS

- All structural silicone glazing applications must be reviewed, approved and handled by Sika Facades, Fenestration and Insulating Glass Tech Service at 1-800-641-0234.
- Do not allow sealant to come in contact with solvent during cure.

- Do not allow sealant to come in contact with curing polyurethane sealants during cure.
- Not intended for immersion.
- Sealant may be applied below freezing temperatures if substrates are completely dry, frost free and clean. Contact Technical Service for more information.
- Do not apply when substrate temperatures are below -20 °F (-29 °C) or above 130 °F (54 °C).
- Not recommended for horizontal vehicular traffic.
- Do not apply to surfaces that will be painted as sealant surface will not hold paint.
- Do not apply to substrates that bleed oil, plasticizers or solvent.
- Do not apply to damp or wet substrates.
- Lower temperature and humidity will extend tack free and cure rates.
- Allow treated wood to age six months before application.
- Brass and copper may be discolored. Test apply prior to application.
- Test sensitive substrates, such as mirror backings, for compatibility before use.

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

OTHER RESTRICTIONS

See Legal Disclaimer.

ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

LEGAL DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at usa.sika.com or by calling SIKA's Technical Service Department at 1-800-933-7452. Nothing contained in

any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within the product's shelf life. User determines suitability of product for intended use and assumes all risks. User's and/or buyer's sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs.

NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.

Sale of SIKA products are subject to the Terms and Conditions of Sale which are available at <https://usa.sika.com/en/group/SikaCorp/termsandconditions.html> or by calling 1-800-933-7452.

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Product Data Sheet
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