# Construction

**Product Data Sheet** 

Edition 9.7.2012 Sikasil WS-295

# Sikasil® WS-295

# Neutral cure, weather sealing silicone sealant



### Description

Sikasil-WS 295 sealant is a one part, neutral cure, low to no bleed silicone sealant 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

### Where to Use

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

- 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

### **Packaging**

10.0 fl.oz. (295 ml) cartridge, 20 fl.oz. (600 ml) sausage

### How to Use

### **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.

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 2100 primer and contact Technical Service for additional information.

### **Typical 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.

Shelf Life 12 months in original unopened cartridges.

Storage Conditions Store in unopened containers at temperatures lower than 80°F (27°C).

Colors White, Colonial White, Aluminum, Limestone, Black, Bronze, Medium Bronze

VOC Content 25 g/L

### Uncured Properties at 77°F (25°C), 50% R.H.

Tool/Work Time (Initial Skin)20-30 minutesCure Time (ASTM C-679)7-14 daysFlow, Sag, Slump (ASTM C-639)no sagFull Adhesion (ASTM C-679)7-14 daysTack Free Time (ASTM C-679)50 min.

### Cured Properties after 7 days at 77°F (25°C), 50% R.H.

Dynamic Movement Capability (ASTM C-719) +/-50%

Elongation (ASTM D-412) 800%

Shore A Hardness (ASTM C-661) 25

Ozone/UV Resistance (ASTM D-1149) Excellent

Peel Strength (ASTM C-794) 30 pli

on aluminum, glass and concrete

Staining, Color Change (ASTM C-510)

Staining on Porous Substrates (ASTM C-1248)

100% Modulus (ASTM D-412)

Service Temperature Range
Tensile Strength (ASTM D-412)

none

100% Modulus (ASTM D-412)

55 psi (0.38 MPa)

-80°F to 350°F

200 psi (1.38 MPa)



### Application

The number of joints and the joint width should be designed for a maximum of ±25% movement of joint width at time of installation. The depth of the sealant should be 1/2 the width of the joint. The maximum depth is 1/2 inch (13mm) and the minimum is 1/4 inch (6mm). 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. 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.

### Limitations

- \*All structural silicone glazing applications must be reviewed and approved 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 or above 130°F.
- 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.

### **CAUTION**

WARNING: IRRITANT, SENSITIZER. Contains Methyl ethyl ketoxime (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. Maybe 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 to the eyes, nose, throat, skin, and digestive system. Product contains oximes, possible skin sensitizers.

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.

### First Aid

Remove to fresh air. Remove from skin and immediately flush with water for 15 minutes. Get medical attention if irritation develops or ill effects persist. Treat according to person's condition and specifics of exposure.

## 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. Wipe up and contain for disposal. Final cleaning may require use of steam, solvents, or detergents.

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

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1-800-933-SIKA NATIONWIDE Regional Information and Sales Centers. For the location of your nearest Sika sales office, contact your regional center.

Sika Corporation 201 Polito Avenue

Sika Canada Inc. 601 Delmar Avenue Pointe Claire Quebec H9R 4A9 hone: 514-697-2610 Fax: 514-694-2792

Sika Mexicana S.A. de C.V. Carretera Libre Celaya Km. 8.5





Lyndhurst, NJ 07071 Phone: 800-933-7452 Fax: 201-933-6225

Fracc. Industrial Balvanera Corregidora, Queretaro Phone: 52 442 2385800 Fax: 52 442 2250537

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