

# SIKALASTIC® 500 SYSTEMS SILICONE ROOF SYSTEM

BUILDING TRUST



## 20 YEAR SYSTEM COVERAGE FOR METAL SYSTEMS

### DESCRIPTION

The Sikalastic®-500 system for Metal is a high volume solids elastomeric silicone coating system that provides superior weather and UV resistance over a variety of roof substrates.

### BASIC USES

The Sikalastic®-500 system is a tough, durable application designed to extend the life of a roof from premature weathering and moisture intrusion in a wide range of environments. It is effective as a protective membrane to coat an entire roof, or to use for spot repair.

### FEATURES & BENEFITS

- Prolongs the life of an existing roof membrane while helping to lower internal temperatures and reduce cooling cost
- Hydrophobic - highly resistant to water penetration
- High tensile strength and abrasion resistant
- Excellent adhesion to a variety of roof substrates
- Ease of application - extremely fast and simple to install
- Can be used to reinforce and seal seams, penetrations, transitions, terminations, and spot repairs
- Slows degradation caused by normal weathering, aging and UV rays
- Economical - extends the life of your existing roof

### WARRANTY

Sika offers two Limited Warranties:

1. Material Only Warranty - No Charge
2. Labor & Material Warranty - For Approved Applicators. Fees apply.

\*Consult your Sika representative.

\*See Warranty System Sheet for Dry Film Thickness Requirement.

### REQUIRED MATERIALS

- Sikalastic®- 501 Primer or 502 Primer
- Sikalastic®- 500
- Sikalastic®- 500 Flash
- Sika Flexitape Heavy or Sika®Joint Tape SA

### SYSTEM DESCRIPTION

The Sikalastic®-500 can be described by using two comprehensive products to cover and protect your roof:

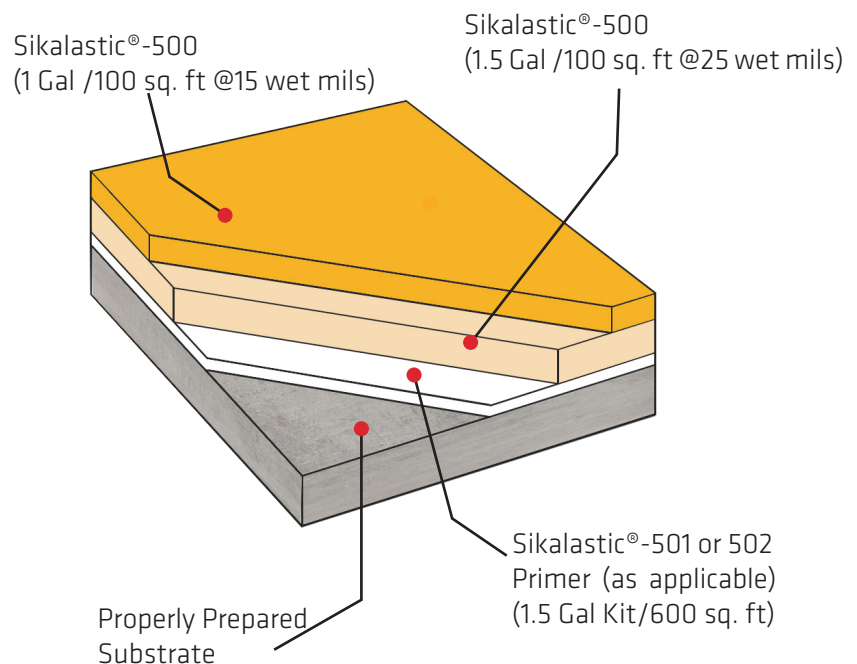
- (1) Sikalastic®-502 Primer, if applicable, is a two component, liquid applied, sol-vent based epoxy-polyamine primer with a unique penetrating characteristic. It has quick re-coat times and is low viscosity.
- (2) Sikalastic®-501 Primer, if applicable, is a two component, epoxy base primer that is used both as an application primer and a rust inhibitor.
- (3) Sikalastic®-500 is a versatile, low VOC, single-component, high solids, liquid silicone coating designed to be used as a base coat and a top coat for metal roof systems.

### STORAGE & HANDLING

Keep containers closed, and store in a dry, cool place away from heat, sparks, open flame, and moisture. Keep material stored above 65°F and on wood pallets off concrete floors. Open containers should be blanketed with dry nitrogen before re-sealing.

### ADHESION TEST

To ensure successful application of the Sikalastic®-500 always perform several adhesion tests (ASTM D-903) with the Sika coating to ensure the roof substrate will accept the coating. Do not proceed with coating system without prior testing. Contact a Sika representative for Kynar® Metal Roof types.



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## PRE-INSPECTION

Pre-inspect roof for necessary repairs before application of coating system. Inspection should include but not be limited to the following:

- HVAC flashings
- Water leakage
- Ponding water
- Substrate damage or disrepair
- Parapet wall conditions
- Proper drainage/obstructions
- Wet or damp insulation
- Copings and flashings
- Sign or display anchorage
- Sleepers & pitch pockets
- Seams, terminations, transitions & reglets

## SURFACE PREPARATION

(1) Remove all unnecessary and non-functional equipment and debris from the roof. (2) Remove dirt, and foreign material detrimental to adhesion or application of fluid-applied roofing by thoroughly cleaning all roof surfaces with a high pressure 2,000 -2,500 psi wash. Surfaces contaminated with oil, grease, animal fats, etc. must be removed using trisodium phosphate and water, or other solutions as required by job conditions and as permitted by local and federal regulations. Remove all cleaning solutions with plenty of fresh water and allow drying. (3) Metal seam and flashing failures must be repaired by traditional and professional roofing practices. Tighten and/or replace all existing fasteners, install crickets and complete metal sheet work repairs. (4) Prime all unsatisfactory rust areas with Sika's 501 Primer, a rust inhibitor. Continue to prime seams and all remaining detailed areas with Sikalastic®-502 Primer.

Detail all roof penetrations, skylights, rake edges, round projections, machine legs, sign posts, guide wire straps, inside and outside corners, gutters, joints, pipes, voids, protrusions and any areas where water could enter through the roof. Encapsulate all fasteners with Sikalastic®-500 Flash. Clean and seal all drain areas watertight. Use Sika's Web Seal where necessary. (5) On all at seams apply one pre-coat of Sikalastic®-500 Flash at a rate of 1.5 gallons per 100 sq. ft. @ 25 wet mils minimum and embed Sika Flexitape Heavy into the Fast Flash and/or base coat in between coats. Sikalastic®-500 Flash shall extend a minimum of 3 inches beyond the edges of the repair. (6) On metal roofs with standing seams, etc. apply Sikalastic®-500 Flash sealing them completely. (7) Allow roof and other prepared surfaces to dry completely before proceeding with field priming and/or coating application. **Note:** Thickness values of cured Im are averages and can vary due to finish of surface.

Always check the weather prior to application. Depending on the ambient, and substrate temperatures, relative humidity, and dew point take extra time and caution when applying the system within 2 to 6 hours of precipitation and/or when raw or freezing temperatures are experienced or anticipated. Do not apply over wet insulation or related materials.

## COATING APPLICATION

Apply Sikalastic®-502 Primer to the substrate at a theoretical coverage rate of 1/3 gal/100 sq. ft. @ 5 wet mils, and allow to dry. Then apply Sikalastic®-500 top coat at the rate of 1½ gal/100 sq. ft. @ 25 wet mils. Finally, apply another topcoat of Sikalastic®-500 at 1 gal/100 sq. ft. @ 15 wet mils to yield a total coverage of 40 mils (minimum requirement for 20 year material warranty). If applying higher mil thickness of Sikalastic®-500. Do not exceed 3½ gallons per square) per application. This could cause blisters and/or pinholes. Care should be taken to avoid sagging, pinholes, and runs of the coating on vertical, horizontal, and slanted surfaces to prevent sagging. Application rate may need adjusting if topcoat starts to sag on verticals or higher slopes. If adjusted, allow base coat and/or top coat to dry 24 hours in-between coats. Additional coats maybe required to achieve required mil thickness. Sikalastic®-500 Accelerator for topcoat may be used for faster cure times and to avoid pinholes and/or blisters.

**Protection:** After completion of application, do not allow traffic on coated sur-faces for a period of at least 48 hours at 75° F and 50% R.H., or until completely cured.

## EQUIPMENT

Spray Applied - See Sika's Spray Application Guide. Dipped and Rolled - Brushes of various sizes and a 3/8" nap roller should be used when applying on smooth surfaces such as metal.

### Sikalastic®-500 System Typical Data / Physical Properties

<b>Colors</b>	Gray, Charcoal and Tan. 8
<b>Shelf Life</b>	Months
<b>Curing (75°F-24°C, 50% R.H.)</b>	6-8 Hours
<b>Hardness Shore A, ASTM D-2240 Tear Resistance, ASTM D-624 Tensile Strength, ASTM D-412 Elongation, ASTM D-412 Specific Gravity</b>	55 ± 2% 45 lbs./in. (7.88 n/m) 300 psi (2.07 MPa) 200 ± 15% 1.34
<b>% Solids by Weight, ASTM D-2369</b>	98%
<b>% Solids by Volume, ASTM D-2697</b>	98%
<b>Viscosity at 77°F (25°C)</b>	8,000 - 11,000 cps 48g/L
<b>VOC, ASTM D-2369-81 Reflectivity</b>	(0.40lbs/gal) 0.88
<b>Emmissivity</b>	0.91
<b>SRI</b>	112