

# SIKALASTIC® 500 SYSTEMS SILICONE ROOF SYSTEM

BUILDING TRUST



## 20 YEAR SYSTEM COVERAGE FOR TPO AND PVC SYSTEMS

### DESCRIPTION

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

### BASIC USES

Sikalastic®-500 system is a tough, durable application designed to extend the life of roofs from premature weathering and moisture intrusion in a wide range of environments. It is effective as a protective membrane to coat an entire roof, to use for spot repair, and to provide additional protection for flashing when integrated with a reinforcement fabric. The Sikalastic®-500 system provides tenacious adhesion with an existing roof system to form a monolithic water resistant membrane.

### FEATURES & BENEFITS

- Prolongs the life of an existing roof membrane while helping to lower internal temperatures and reduce cooling costs
- 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 to make 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 a Sika representative

\*See Warranty System Sheet for Dry Film Thickness Requirement

### REQUIRED MATERIALS

- Sikalastic®-503 Primer
- Sikalastic®-500
- Sikalastic®-500 Flash
- Sika® Flexitape Heavy or Sika® Joint Tape SA
- Polyurethane Caulking

### SYSTEM DESCRIPTION

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

(1) Sikalastic®-503 primer is a two component, liquid applied, 100% solids, low viscosity polyurethane primer. Fast drying primer that provides quick recoat win-dow.

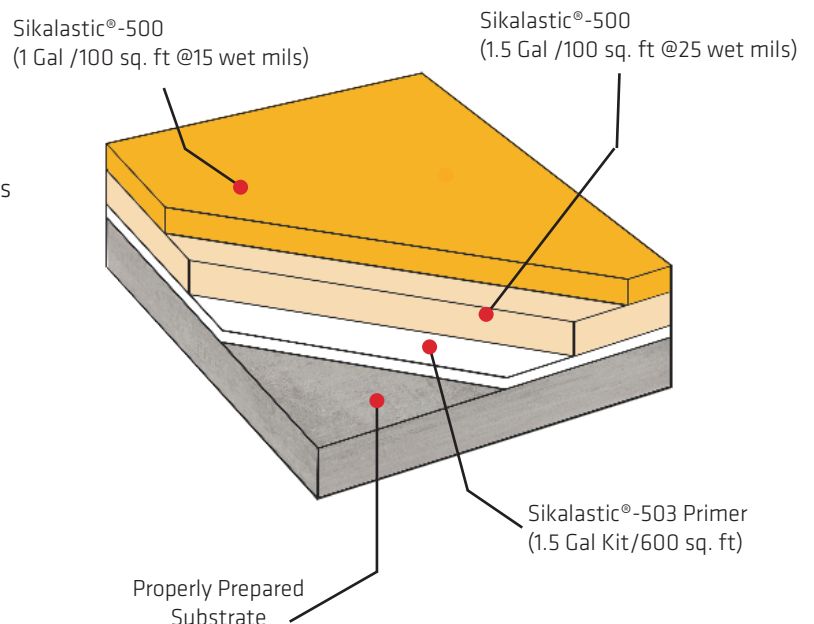
(2) Sikalastic®-500 is a versatile, low VOC, single-component, high solids, liquid silicone coating designed for use as either a base coat or a top coat for aged TPO and PVC roof system. base coat or a top coat for asphaltic roof system.

### 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 (18°C) and on wood pallets off concrete floors. Open containers should be blanketed with dry nitrogen before resealing.

### 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.



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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, and 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) Membranes with seams, terminations, transitions, penetrations, and flashing failure must be repaired by manufacturer's specification using appropriate professional roofing practices and then primed at the rate of 1/3 gal/100 sq. ft. @ 5 wet mils, and allow to dry. After primer has dried, detail area with Sikalastic®-500 flash. Apply one pre-coat of Sikalastic®-500 at a minimum rate of 1½ gallon per 100 sq. ft. @ 25 wet mils minimum. Sikalastic®-500 shall extend a minimum of 3 inches beyond the edges of the repairs and seams. (4) Round projections, machine legs, sign posts, guide wire straps, inside and outside corners, and similar areas should be flashed using Sikalastic®-500 flash. Seal gutters, parapet walls and caps so that they are watertight. Repair any damaged metal. Caulk and seal watertight all screws, seams, transitions, terminations, penetrations, skylights, joints, pipes, voids, protrusions and any areas where water could enter through the roof. (5) Make certain that all walking pads are appropriately and adequately secured. Use Sikalastic®-500 flash to caulk all edges of walking pads. (6) Clean and seal all areas around drains so that they are watertight. (7) Allow roof and other prepared surfaces to dry completely before proceeding with field priming and/or coating application. Note: thickness values of cured film are averages only and can vary due to type and 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®-503 Primer to the substrate at a theoretical coverage rate of 1/3 gal/100 sq. ft. @ 5 wet mils, and allow to dry. Then 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. Extra precautions should be taken on vertical, horizontal, and angled surfaces to avoid sagging, pinholes, and running of the coating. Application rate may need to be adjusted if topcoat begins to sag on vertical or angled surfaces. If adjusted, allow coating to dry at least 24 hours before making subsequent coating applications. Additional coats may be required to achieve desired mil thickness. Sikalastic®-500 Accelerator for topcoat may be used to accelerate curing process and reduce chance of pinholes and/or blisters. Actual required application rate will depend on desired thickness, system, and length of warranty. For low areas that accumulate ponding water, properly prepare the surface and apply an appropriate liquid roof patch to level the recessed area prior to coating. Sikalastic®-500 Accelerator is also available for faster curing times. Protection: After completion of application, do not allow traffic on coated surfaces 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 TPO and PVC.

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

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