

# SIKALASTIC®-500 SYSTEMS SILICONE ROOF SYSTEM

BUILDING TRUST



## QUICK SPECIFICATION: SYSTEM COVERAGE FOR AGED EPDM/HYPALON SYSTEMS

### DESCRIPTION

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

The Sikalastic®-500 systems provides tenacious adhesion with an existing roof system to form a monolithic membrane.

### FEATURES & BENEFITS

- Prolongs the life of an existing roof membrane while helping to lower internal temperatures and reduce cooling costs.
- Hydrophobic – resistance to water penetration
- High tensile strength and abrasion resistance
- 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

\*See Warranty System Sheet

### REQUIRED MATERIALS

- Sikalastic®-504 Primer
- Sikalastic®-500
- Sikalastic®-500 Flash
- Sika Flexitape Heavy
- Polyurethan caulking

### SYSTEM DESCRIPTION

The Sikalastic®-500 system for EPDM/Hypalon is comprised of two comprehensive products to cover and protect your roof:

1. Sikalastic®-504 primer, a single component, liquid applied low viscosity sprayable liquid primer used to pre-treat black EPDM rubber roof membranes prior to power washing and application of a roof coating.
2. Sikalastic®-500 System is a versatile, low VOC, single-component, high solids, liquid silicone coating designed for use as a base coat or as a top coat on aged EPDM/Hypalon roof systems.

### STORAGE & HANDLING

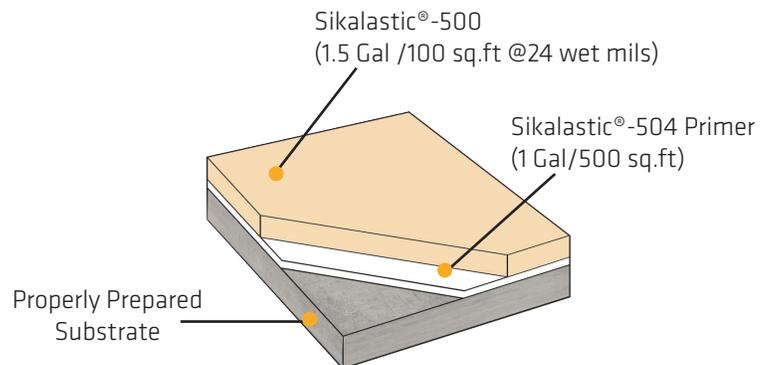
Keep containers closed, and store in a dry, cool place away from heat, sparks, open flame, and moisture. Keep material stored above 65°F (18°C) and on wood pallets off concrete floors. Open containers should be blanketed with dry nitrogen before resealing.

### ADHESION TEST

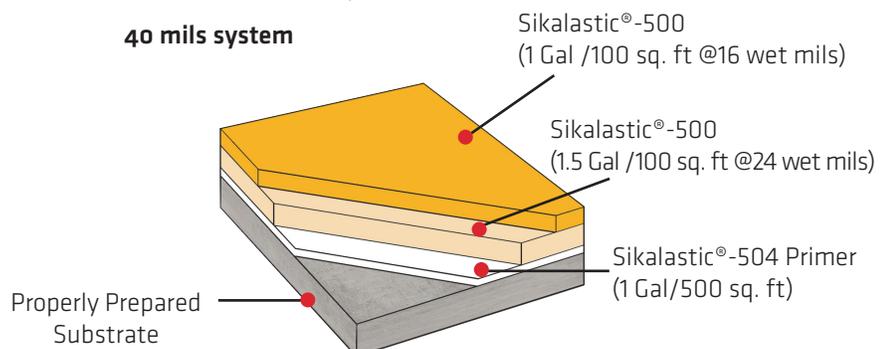
To ensure successful application of the Sikalastic®-500 always perform several adhesion tests (ASTM D-903) with the recommended primer to ensure the roof substrate will accept the coating. Do not proceed with coating system without prior testing.

### SYSTEMS BUILD UP

#### 24 mils system



#### 40 mils system



# SIKALASTIC®-500 SYSTEMS

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### PRE-INSPECTION

Pre-inspect roof for necessary repairs before application of coating system. Inspection should include but not 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) (13.79 MPa - 17.24 MPa) wash. Surfaces contaminated with oil, grease, animal fats, etc. must be removed using tri-sodium 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. Remove all cleaning solutions with plenty of fresh water in accordance with local regulations and allow to dry.

(3) Membranes with seams, terminations, transitions, penetrations, and flashing failure must be repaired by manufacturer's specification using appropriate professional roofing practices. Use Sikalastic®-504 Primer on all areas. Primer should be applied with an industrial garden pump sprayer at a theoretical coverage rate of 1 gallon per 500sq.ft. The roof substrate must then be carefully pressure washed with water using an approximate working pressure of 2,000 psi (depending on condition of the roof to remove any remaining dirt, dust, chalking, or loose materials.

(4) Repaired seams, flashings and other corrected areas should then be detailed with Sikalastic®-500 Flash or with one pre-coat of Sikalastic®-500 at a minimum rate of 1 gallon per 100 sq. ft. @ 16 wet mils. Sikalastic®-500 shall extend a minimum of 3 inches beyond the edges of the repair, feathered onto the substrate. For added strength, consider adding Sika Flexitape Heavy into the Sikalastic®-500 Flash.

(5) 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 and 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.

(6) Make certain that all walking pads are appropriately and adequately secured.

Use Sikalastic®-500 Flash to caulk all edges of walking pads.

(7) Clean and seal all areas around drains so that they are watertight.

(8) Allow roof and other prepared surfaces to dry completely before proceeding with subsequent coating applications. Note: thickness values of cured membranes 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 improperly prepared surfaces.

### COATING APPLICATION

Apply Sikalastic®-500 topcoat at the rate of 1½ gal/100 sq. ft. @ 24 wet mils, to yield a total of 24 wet mils of coverage, and allow membrane to cure. For the 40 wet mils system, apply another topcoat of Sikalastic®-500 at 1 gal/100 sq. ft. @ 16 wet mils to yield a total coverage of 40 mils. If applying higher mil thickness of Sikalastic®-500 do not exceed 3½ gal/100 sq. ft. per application. This could result in 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 - Please consult your Sika representative.

Dipped and Rolled - Brushes of various sizes and a 3/8" nap roller should be used when applying on smooth surfaces such as EPDM/Hypalon.

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

<b>Colors</b>	White, Tan, Light Gray and Custom Color.
<b>Shelf Life</b>	8 Months
<b>Curing (75°F-24°C, 50% R.H.)</b>	4 Hours
<b>Hardness Shore A, ASTM D-2240</b>	55 ± 2%
<b>Tear Resistance, ASTM D-624</b>	45 lbs./in.
<b>Tensile Strength, ASTM D-412</b>	300 psi
<b>Elongation, ASTM D-412</b>	200 ± 15%
<b>Specific Gravity</b>	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
<b>VOC, ASTM D-2369-81</b>	34g/L
<b>Reflectivity</b>	0.88
<b>Emmissivity</b>	0.91
<b>SRI</b>	112