

SIKALASTIC®-500 SYSTEMS SILICONE ROOF SYSTEM

BUILDING TRUST



QUICK SPECIFICATION: SYSTEM COVERATE FOR TPO AND PVC

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 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, and to provide additional protection for flashing when integrated with a reinforcement fabric.

The Sikalastic®-500 systems 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 – 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®-503 Primer
- Sikalastic®-500
- Sikalastic®-500 Flash
- Sika Flexitape Heavy

SYSTEM DESCRIPTION

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

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

STORAGE & HANDLING

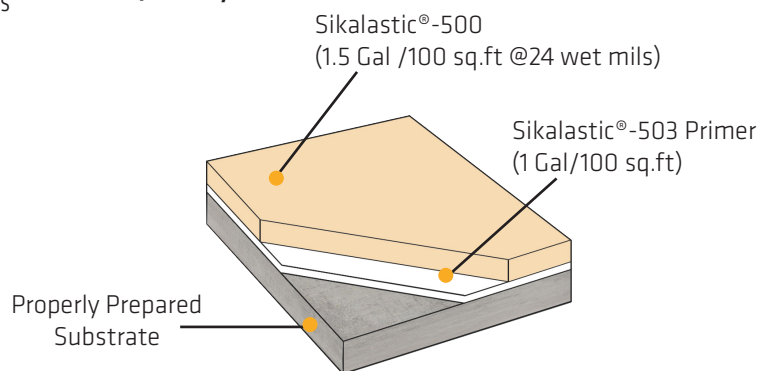
Keep containers closed, and store in a dry, cool place away from heat, sparks, open flame, and moisture. Keep material stored above 65°F (18°C) and on wood pallets off concrete floors. Open containers should be blanketed with dry nitrogen before resealing.

ADHESION TEST

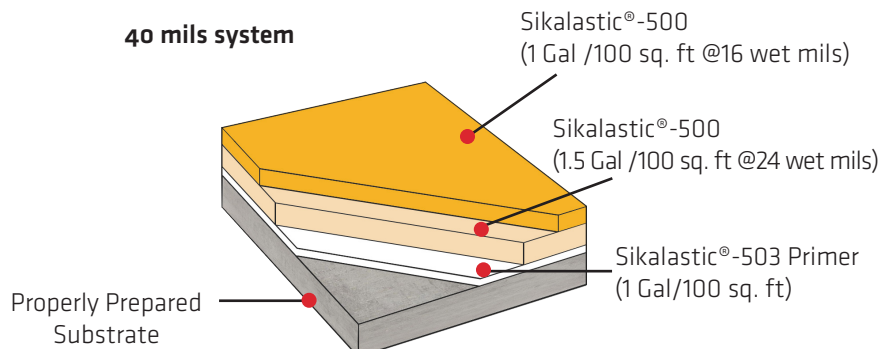
To ensure successful application of the Sikalastic®-500 always perform several adhesion tests (ASTM D-903) with the recommended primer to ensure the roof substrate will accept the coating. Do not proceed with coating system without prior testing.

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 psi 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.
- (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 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 related materials.
- (8) 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.

COATING APPLICATION

Apply Sikalastic®-500 top coat at the rate of 1½ gal/100 sq. ft. @ 24 wet mils, to yield a total of 24 wet mils of coverage and allow the 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 gallons per sq. ft.) 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 - 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 TPO and PVC.

Sikalastic®-500 System Typical Data / Physical Properties

Colors	White, Tan, Light Gray and Custom Color.
Shelf Life	8 Months
Curing (75°F-24°C, 50% R.H.)	4 Hours
Hardness Shore A, ASTM D-2240	55 ± 2%
Tear Resistance, ASTM D-624	45 lbs./in.
Tensile Strength, ASTM D-412	300 psi
Elongation, ASTM D-412	200 ± 15%
Specific Gravity	1.34
% Solids by Weight, ASTM D-2369	98%
% Solids by Volume, ASTM D-2697	98%
Viscosity at 77°F (25°C)	8,000 - 11,000 cps
VOC, ASTM D-2369-81	34g/L
Reflectivity	0.88
Emmissivity	0.91
SRI	112