SIKALASTIC® 500 SYSTEMS
SILICONE ROOF SYSTEM

BUILDING TRUST

20 YEAR SYSTEM COVERAGE FOR CONCRETE SYSTEMS

DESCRIPTION

The Sikalastic®-500 system for concrete is a high volume solids elastomeric silicone coating system that provides superior weatherproofing 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 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. The Sikalastic®-500 system 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 – 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
   *Consult your Sika representative.
   *See Warranty System Sheet for Dry Film Thickness Requirement.

REQUIRED MATERIALS

- Sikalastic®-502 Primer
- Sikalastic®-500
- Sikalastic®-500 Flash
- Sika Flexitape Heavy or Sika®Joint Tape SA
- High Strength Concrete Grout

SYSTEM DESCRIPTION

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

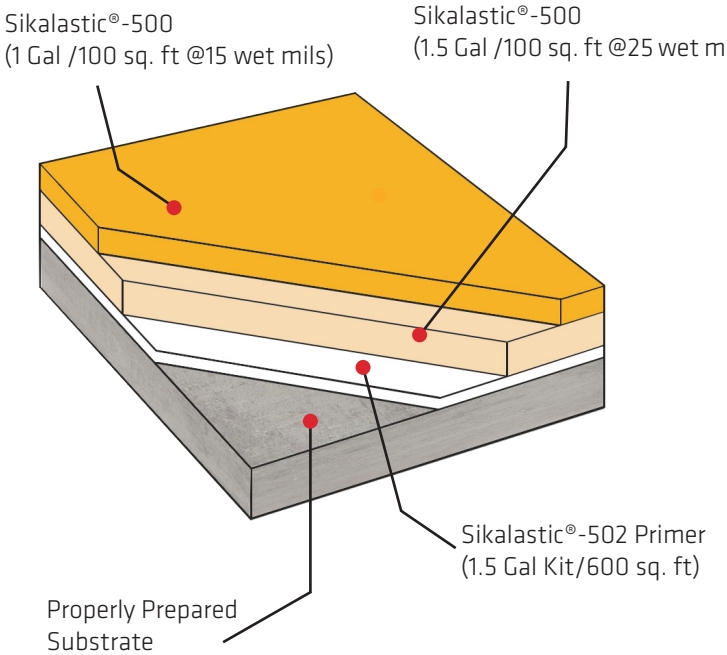
(1) Sikalastic®-502 primer, if applicable, is a two component, epoxy based primer with unique penetrating, and asphalt bleed blocking characteristics - quick re-coat times and low viscosity.
(2) Sikalastic®-500 is a versatile, low VOC, single component, high solids, liquid silicone coating designed for use as either a base coat or a top coat for asphalt 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 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
- Seepers & 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) Make every effort to remove asphalt flooring residue. Removal efforts must include use of methods such as pressure washing, scrappers, grinding, wire brushes, electrical drill wire wheels, or other similar tools. Consider complete shot blasting and grinding when necessary. For cracks and fissures less than 1/8" wide, and all joints, stress areas, and roof penetrations prime at the theoretical rate of 1/3 gal/100 sq. ft. @ 5 wet mils, allow drying. Then detail with Sikalastic®-500 Flash. All large gaps and cracks (greater than 1/4") shall be repaired using a high quality concrete grout. Grout must be fully cured before application of coating products. Prime cured grout at the theoretical rate of 1/3 gal/100 sq.ft. @ 5 wet mils, allow drying then detail with Sikalastic®-500 Flash shall extend a minimum of 3 inches beyond the edges of the repairs of gaps. (4) Seal watertight using Sikalastic®-500 Flash all round projections, machine legs, sign posts, guide wire straps, inside and outside corners, cant strips , gutters, parapet walls, caps, and seal watertight all screws, seams, skylights, joints, pipes, voids, protrusions and any areas where water could enter through the roof. (5) Clean and seal all areas around drains watertight. For added strength consider adding Sika Flexitape Heavy into the Sikalastic®-500 Flash (6) Allow roof and other prepared surfaces to dry completely before proceeding with field priming and/or coating application. Note: Thickness values of cured lm 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 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. Actual required application rate will depend on system specified and length of warranty.
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 metal.

Sikalastic®-500 System
Typical Data / Physical Properties

Colors	Gray, Charcoal and Tan.
Shelf Life	8 Months
Curing (75°F-24°C, 50% R.H.)	6-8 Hours
Hardness Shore A, ASTM D-2240	55 ± 2%
Tear Resistance, ASTM D-624	45 lbs./in. (7.88 n/m)
Tensile Strength, ASTM D-412	300 psi (2.07 MPa)
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	48g/L (0.40lbs/gal)
Reflectivity	0.88
Emmissivity	0.91
SRI	112