



SILICONE COATING SOLUTIONS

Instructions

SIL-ROOF 9001

Sil Roof 9001 Instructions

Sil-Roof 9000 Series is one-component, solvent-free, moisture curing silicone coating system that is designed for commercial and industrial waterproofing applications. Once cured, it displays excellent long-term resistance to natural weathering, humidity, and high and low temperatures with no adverse effect to the product. Silicone Coating Solutions Sil-Roof 9000 series waterproofs while still allowing the building to breathe for building moisture management. This coating system decreases roof temperatures and reduces energy costs.

Conditions before Sil-Roof is applied

Perform an adhesion test to surface of roof before installation of product; this is accomplished by thoroughly cleaning a small area. After it dries, use a brush to apply a layer of Sil-Roof to the cleaned area. After 24 hours, test area to see if it peels up, or remains imbedded in clean area. SCS sells multiple primers to help ensure product has good adhesion. Adhesion testing will determine which primers are needed for property owners.

Contractor shall be an approved applicator by Silicone Coating Solutions. Approved contractors have general knowledge and understanding of standard roofing practices as defined by the NRCA and knowledge of Silicone Coating Solutions products to be used herein this specification.

Before applying of Sil-Roof Restoration System, there will be a conference with the owner's representative to ensure a clear understanding of the specifications. The conference shall be attended by the owner's representative, the approved contractor, and an SCS representative.

For all warranty issues, a licensed contractor, authorized by SCS will be used as an approved applicator. Contractors must have proven business experience and references should be used to ensure proper installation.

Storage

Sil-Roof 9000 Series has a recommended shelf life of 12 months from date of manufacture, when stored in unopened containers between 40°F and 80°F.

It is best not to open product until ready to use, to prevent air and moisture from curing the product. If product is opened and not completely used, SCS recommends putting a thin layer of dry nitrogen prior to closing the product. If you do not have access to dry nitrogen, a thin layer of mineral spirits can be used in its place.

The primers listed below are recommended for use with the silicone coatings to ensure adhesion to your roof

BB-1100 Bleed Blocker Primer is formulated with “bleed resistant” materials to block the bleed-through of asphaltic components that can discolor topcoats. It has been designed to provide a long lasting flexible membrane with exceptional resistance to weathering. With its special formulation, it has the unique ability to “breathe”, providing a completely watertight membrane while allowing trapped moisture to escape.

SP-1500 Primer is a high quality, plasticizer free, single component, water-based, acrylic primer for spray, brush, or roller application. It has been designed to provide both excellent adhesion as well as plasticizer migration resistance. With its special formulation, it has the unique ability to “breathe”, providing a completely watertight membrane while allowing trapped moisture to escape. It has excellent adhesion to most single ply surfaces including PVC, Hypalon and aged TPO.

RI-1300 Rust Inhibitor Primer is a high quality, water-based, rust inhibiting, low VOC primer for spray, brush, or roller application. A self-cross-linking technology that provides low VOC levels with greater corrosion resistance and adhesion properties. With its special formulation, it has the unique ability to resist heat, cold, moisture and weathering. It dries quickly for a reduced wait time before silicone coating application.

PF-1280 is stitch-bonded, low profile, polyester fabric designed for use with the Sil-Wall 5000, Sil-Wall 4000L, Sil-Roof 9000 Series, and Sil-Roof 8000L Series. Used in roofing and waterproofing systems to form a strong, yet conforming membrane. PFPF-680 and PF-1280 is used to increase tensile and add strength to moving joints and flashings.

Sil-Gap 1000 Butter Grade Silicone Sealant is a thick, flexible liquid membrane that is a dispersion of 100% silicone rubber. It is designed to seal abnormal roof penetrations, as well as gaping holes that cannot be covered with standard sprayers or rollers. Sil-Gap 1000 features low odor, easy application, fast moisture cure, and superior adhesion to a variety of substrates.

Conditions of Roof before you start project

A moisture scan is recommended to validate that the underlying roof system insulation is moisture free.

Do not Proceed with installing primers or Sil-Roof on roof structure until all roofing issues have been fixed. Listed below are some of the items you might encounter:

- Rotten plywood-moldy wet insulation
- Bad gutters
- Leaking Skylights
- Bad substructure caused from years of water damage

A written disclaimer may be required if owner wants to proceed without fixing certain areas of concern.

The National Roofing Contractors Association (NRCA) considers ponding water on any roof undesirable and recommends that all roof systems be designed and built to ensure positive drainage.

SCS recommends pressure washing all roof surfaces of grease, oils, and heavy contaminants. Bleach diluted with water or other cleaning agents may be used to help clean roof. Thoroughly rinse surface and allow to dry prior to coating. All surfaces must be clean, dry, and free of loose particles. Cracks may be filled with SCS approved silicone sealants. If this step is not performed, product will not adhere to the surface correctly and any warranty will be voided.

Thoroughly investigate all skylights, roof drains, vents, mechanical equipment such as heat and air systems. Reinforce them with polyester tape and butyl tape as needed. Please refer to installation specs on these items

Many times, condensation lines are broken, cracked and in need repair; please carefully examine these and repair and/or replace before coating your roof. Make sure condensation lines drain water off the roof.

Sil-Roof 9000 Series Installation

Make sure all HVAC and any filter systems are off while spraying silicone, to prevent product from absorbed into systems.

Contractor shall take photographs of all roof areas, including detail work before work is performed.

Perform an adhesion test to surface of roof before installation of product; this is accomplished by thoroughly cleaning a small area. After it dries, use a brush to apply a layer of Sil-Roof to the cleaned area. After 24 hours, test area to see if it peels up, or remains imbedded in clean area. SCS sells multiple primers to help ensure product has good adhesion.

RI 1300 Primer is good choice for metal roofs inhibit any spread of rust that may be occurring. Sil-Roof has good adhesion to metal roofs, and the Rust Inhibitor primer is extra protection especially on metal Roofs that are showing areas of rust developing.

BB-1100 Bleed Blocker Primer - is formulated with “bleed resistant” materials to block the bleed-through of asphaltic components that can discolor topcoats.

SP-1500 Primer is a high quality, plasticizer free, single component, water-based, acrylic primer for spray, brush, or roller application. It has excellent adhesion to most single ply surfaces including PVC, Hypalon and aged TPO.

Check the weather to ensure no rain is in the forecast while applying Sil-Roof. Tack up time is usually one to two hours after product is applied.

Stir product thoroughly before application to achieve a uniform consistency. Apply with a brush, heavy-duty paint roller, or heavy-duty spray equipment.

The Sil-Roof can be easily applied with brush, roller, or commercial airless sprayer.

Due to the high viscosity of the material, a high-pressure airless sprayer capable of producing a minimum of 3500 PSI at the spray gun head should be used. The pump should have a minimum of 3 gallons per minute output rate. Always use components rated for pump pressure. Hoses should be BUNA-N jacketed for prevention of moisture contamination. Hoses should have a minimum I.D. of 3/4" and an adequate working pressure. The spray gun should be high pressure (5000 PSI) with reverse-a-clean spray tip, having a minimum orifice of .029 and a 50° fan tip. Have extra spray tips available for back up in case there is an issue with a tip. Recommended sizes are .035 to .043.

Applying the product to correct mil rate is crucial to the success of the product. In many cases, it may require two coats to acquire correct mil. Please refer to warranty contract to ensure correct mils are applied to surface. Metal Roofs will not require as thick a mil rate as EPDM or capsulated roofing; please refer to contract to ensure correct mil is applied.

SCS Representative will be able to assist you in determining the correct mil rate.

Take all necessary precautions to ensure that damage and overspray will not occur. This product will carry in windy condition. Take precautions to ensure product does not damage vehicles, other buildings, personal items, etc. SCS is not responsible for damages caused by the overspray of its products.

Application Rate per 100 sq. feet of surface

Sil-Roof 9001 Application rate may vary depending on surface and job conditions.

Primer- Usually applied at the rate of 1 gallon per square foot. Some application may require more: Bur/Asphalt, Modified Bitumen, EPDM

Sil-Roof covers approximately 1.5 gallons per square foot depending on surface. For example, 1.5 gallons applied on Bur/Asphalt, Modified Bitumen, EPDM roof would

result in a coverage area thickness of 15 to 17 mil, whereas the same 1.5 gallons would result in 20-21 mil thickness on metal of TPO roofs.

Using a primer first on Bur/Asphalt, Modified Bitumen, EPDM is recommended because it absorbs into material and allows a base coat for silicone coatings to be applied, which results in using less silicone coating. Please refer to warranty chart for more info

INSTALLATION OF WALKWAYS

Install the Sil-Way 2560 Walkway System at heavy traffic areas and at high impact areas as directed by the owner.

I. Walkway Areas

- A. Walkways should be a minimum of 30" wide.
- B. Mask off area to receive walkway system to ensure clean straight edges.
- C. Install GT-2540 Yellow Walkway Coating at a thickness of 25 mils.
- D. Immediately after the application of the GT-2540, broadcast GT-2560 Walkway Granules into the coating at a rate of 40 lbs. per 100 square feet. The granules will settle into the coating. Apply the granules generously, inspect the surface within a few minutes and reapply as needed to obtain a continuous film of granules.

II. High Impact Areas (around mechanical equipment, etc)

- E. Mask off area to receive walkway system to ensure clean straight edges. Area should be 30" wide around all identified equipment.
- F. Install GT-2540 Yellow Walkway Coating at a thickness of 40 mils.
- G. Immediately after the application of the GT-2540, broadcast GT-2560 Walkway Granules into the coating at a rate of 60 lbs. per 100 square feet. The granules will settle into the coating. Apply the granules generously, inspect the surface within a few minutes and reapply as needed to obtain a continuous film of granules.

After the coating has completely cured, remove all loose granules with a small hand blower and a soft bristle broom.

Job Completion

Inspect completed coating system and correct any defects to meet the specification and/or warranty requirements.

Transparent or Thin Areas: If areas appear to be undercoated, recoating may be needed to ensure correct mill rate was applied. Check all seams, curbs, and skylights for proper adhesion and correct mil rates.

A Silicone Coating Solutions Technical Representative will inspect the completed coating system and notify the contractor of any defects in the application.

Contractor shall take photographs showing all work completed, this includes all flashing, skylights, walkways, and mechanical areas where work was performed.

CLEAN UP

Be careful removing all taped off areas. Ensure property is clean from defects and debris. Look for any over spray that needs to be cleaned off gutters, or HVAC systems. Mineral Spirits works well for cleaning any overspray of Sil-Roof. Property should be neat and clean before contractor leaves.