

GreenSil 100

High Solids, Low VOC Silicone Coating



Overview

GreenSil 100 is a single-component, moisture-cured, fluid-applied silicone coating that is specially formulated to meet low-VOC requirements. Once cured, the silicone coating membrane offers excellent resistance to water intrusion, UV exposure, and natural weathering. This product is designed to provide protection for a wide range of building surfaces. It is excellent for waterproofing and restoring existing roof systems, as well as for weather protection of SPF roofing systems.

Features and Benefits

- Superior leak protection
- Easy to apply and wide application window
- Weatherability
- Long-lasting
- Resistance to ponding water

Coverage Rates

GreenSil 100 silicone Coating is 93% solids by volume. A typical application rate of 1.0-1.5 gallons per 100 square feet should yield a dry film thickness of approximately 15 mils in one coat. Waste, wind loss, and other variables will affect the actual dry film thickness.

Installation

1. All surfaces to be coated must be clean, dry, sound, and paintable. It may be necessary to power wash and/or prime to enhance adhesion.
2. No thinning or reducing is recommended. Mix well before using. For drums: use a ¾ hp air-powered mixer with a 6" blade and shaft that will create a good vortex. For pails: use at least a 3" blade or a suitable hand mix paddle. Mixed materials should be used immediately to avoid curing in the container with small amounts of atmospheric moisture.
3. It is not recommended that this product be applied at temperatures below 40°F (4°C) or if inclement weather is expected within 1 hour of application.

4. This product is suitable for application through airless spray equipment or with a roller, squeegee, or brush. Utilize a pump with a minimum output of 3 gallons per minute and 3,500 psi fluid pressure capability, fed with a 5:1 transfer pump and with ½" and ¾" ID hose. Always use components rated for the pump maximum pressure. Use a 30-mesh screen or larger. Use a spray tip with a minimum orifice of .30" and 50 degree fan angle. Medium to heavy nap roller pads are recommended. Use hoses dedicated for silicone coatings.
5. This coating can be installed in one or multiple coats.
6. SPF should be coated within 24 hours of application. Subsequent coats should be applied within 24 hours of prior applications to ensure full and uniform adhesion. Coating must be evenly applied and pinhole free. The coating will cure in 2 to 8 hours, dependent on weather conditions such as temperature and humidity. Do not install additional coats until coating is fully cured.
7. Approved roofing granules may be installed in the topcoat to improve aesthetics, traffic resistance, and impact resistance.
8. See listing at www.nsf.org for application and cure instructions for rainwater catchment use.
9. Cleanup of spray equipment containing uncured material may be accomplished by flushing with VM&P Naphtha or Rule 66 mineral spirits. GreenSil 100 cures by reacting with moisture and should not be left in spray guns, pump equipment, or hoses for prolonged periods unless equipment contains moisture lock hoses, fittings, and seals. Equipment without these components will transmit sufficient moisture vapor to gradually form cured material on hose walls and at unsealed connections.

Review Green Shield Product's specifications and details for complete installation information. Please contact Green Shield Products for more information.

TECHNICAL DATA SHEET



Energy Efficient Building Product Solutions

877.476-7453

greenshieldproducts.com



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Precautions

- Not recommended for continuous immersion service, for use in cold storage applications without a vapor retarder, or directly over asphaltic surfaces without a sealer.
- Silicone coatings are slippery when wet. Exercise caution when walking on a roof under these conditions.
- Avoid breathing silicone vapors or spray mists. Use an appropriate MESA/NIOSH approved respirator when exposure can exceed recommended PEL. This product is not recommended for interior use. Additional care must be taken to prevent rooftop HVAC equipment from introducing silicone vapors into interior areas during application. Building occupants should be warned of spray operations in process.
- Keep cleaning solvents away from all sources of heat, sparks, flame, lighted smoking materials, or any other ignition source. Pumping equipment should be grounded to avoid accidental ignition due to static sparks.
- It is not recommended to store this material at temperatures exceeding 100°F (38°C). Shelf life of unopened containers is 24 months. For maximum shelf life, store between 40°F and 70°F (4°C and 21°C). High temperatures will reduce shelf life.
- Remove any skin prior to mixing the material. Once container is opened, all product should be used. Container cannot be resealed without product skinning or curing inside container. Always keep covered and protected from the elements. When transporting this product, ensure that the lid is tight and the container is secured.
- See Safety Data Sheet (SDS) for complete safety information.

Ratings and Approvals

Underwriters Laboratories	File R38137
Factory Mutual Global	Approved
NSF Protocol	P151 (white only)
Miami-Dade County Product Control Approved NOA	NO. 23-0502.02
CRRC listed (white)	
Title 24	Compliant
ASTM C1305 Crack Bridging Ability	Passed
Meets Requirements of ASTM D6694 Standard Specification for Liquid-Applied Silicone Coating	

Typical Physical Properties ¹

Property	Test Method	GreenSil 100
Tensile Strength	ASTM D2370	307 psi @ 73°F (23°C) 484 psi @ 0°F (-18°C)
Elongation	ASTM D2370	205% @ 73°F (23°C) 307% @ 0°F (-18°C)
Tear Resistance	ASTM D624	26 lbf/in @ 73 F (23 C)
Permeance	ASTM E96 Procedure B	10.7 perms
Reflectivity	ASTM C1549	.87 initial/ .70 3-year aged (white)
Emissivity	ASTM C1371	.89 initial/ .90 3-year aged (white)
Solar Reflectance Index	ASTM E1980	SRI - White: 113
Water Absorption	ASTM D471	0.1% @ 73°F (23°C)
Low Temp. Flexibility	ASTM D522 Procedure B	Pass @ -15°F (-26°C)
Weathering	ASTM G53	No degradation after 8,760 hours
Hardness	ASTM D2240	50 Shore A
Max. Service Temp.		185°F (85°C)
Solids by Volume	ASTM D2697	93% +/- 2
Solids by Weight	ASTM D1644	95% +/- 2
Flash Point	ASTM D93	>105°F (41°C)
Cure Time		Min. 2 hours @ 100°F (38°C) & 90% RH Max. 8-12 hours @ 40°F (4°C) & 20% RH
VOC	EPA Method 24	<250 grams/L
Color		White, Light Gray, Dark Gray, Tan

Special colors are available at an additional charge with minimum order

¹ - Typical properties and characteristics are based on samples tested and are not guaranteed for all samples of this product. This data and information is intended as a guide and does not reflect the specification range for any particular property of this product.

Shipping Information

Container Size	Gross Weight	Class
5-gallon pail (18.9 L)	60.5 lbs. (27.4 Kg)	55
55-gallon drum (189.3 L)	662 lbs. (300.3 Kg)	55

D.O.T. Classification:
BC - Roof Coating,
Non-Regulated

Protect from freezing (32°F/0°C)
during shipping and storage



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