

AlphaGuard™ Si 100

High performance, high solids, one component, moisture cure silicone coating

FEATURES

Inorganic Compound

High Solids

One Component

Versatile

Highly Reflective (White)

BENEFITS

• Superior weathering characteristics

• Yields more dry waterproofing than lower solids products

• No mixing of multiple components

• No extra labor steps

• No pot life limitations

• Suitable for use over many substrates/roof types

• Lowers rooftop temperatures resulting in less stress and potential energy savings

• CRRC Listed

DESCRIPTION

AlphaGuard Si 100 is a high solids, single component, breathable, liquid applied silicone roof system. AlphaGuard Si 100 meets or exceeds the requirements of ASTM D6694 Standard Specification for Liquid-Applied Silicone Coating Used in Spray Polyurethane Foam Roofing Systems.

BASIC USES

AlphaGuard Si 100 can be used to restore or repair approved existing roofing substrates.

PACKAGING

5 gal (18.9 L) pail

50 gal (189.2 L) drum *Packaged in 55 gal drum

COLOR

White, Dark Grey, Light Grey, Tan and Terra Cotta

GRADE

Brush, Roller, Spray, Squeegee & Backroll

STORAGE

12 months shelf life in unopened containers when properly stored.

DO NOT FREEZE

Recommended storage conditions is indoors in a ventilated, dry area removed from heat, open flame, ignition sources, and direct sunlight. Storage temperatures should range from 60-70°F (15-21°C) and must not drop below 32°F (0°C) or exceed 110°F (43°C).

On the job site, materials should remain on the pallet until use and be stored in a shaded, ventilated area. Materials should be covered with a light-colored, reflective tarp for protection against the elements. Allow for adequate air flow inside the pallets.

Shelf life could be affected if the product is not stored properly.

APPLICATION

Surface Preparation: Surface must be clean, dry, in sound condition, and free of dirt, debris, and contaminants. Existing wet roofing components must be identified and replaced. Deficient areas of existing system must be repaired. All repairs should be made with like materials matching the existing components and allowed to properly cure prior to application of liquid-applied products.

If the surface has a pre-existing coating, paint, or sealant, please contact Tremco for adhesion/compatibility testing and surface preparation recommendations.

EPDM substrates require application of AlphaGuard Si Prep Cleaner prior to application.

Mixing:

Pails: Use a heavy duty corded power drill with Jiffy Mixer mixing blade. Mix until product is consistent in appearance and viscosity. Do not thin.

AlphaGuard™ Si 100

APPLICATION CONTINUED

Drums: Use industrial drum mixing equipment to mechanically mix each container. Mix until product is consistent in appearance and viscosity. Do not thin.

Priming: Application of AlphaGuard Si Primer is required on asphalt based substrates and surfaces. Adhesion testing is recommended for applications on existing single-ply membranes and surfaces that have a pre-existing coating, paint, or sealant to determine if a primer is necessary. Review the recommended primer product data sheet for specific product and application information.

Installation: Install product using one of the approved application methods evenly at the recommended coverage rate. Use wet mil gauges to monitor coverage rates throughout application. Subsequent coats should be applied within 24 hours of prior applications.

Non-Skid Application: Install an additional layer of top coat in white or chosen color at 1-1½ gal / 100 sq. ft. (16-24 wet mils) (0.4-0.6 L/m²) and immediately broadcast and backroll an approved non-skid media. Color striping can be installed in 3-4" wide areas along the perimeter of the walkway area at a coverage rate of 1-1½ gal / 100 sq. ft. (16-24 wet mils) (0.4-0.6 L/m²) to provide identification of the areas on the roof.

Approved Non-Skid Media:

- Silica Sand (20-40 mesh) - Coverage: 20-30 lbs. / 100 sq. ft.
- No. 11 Roofing Granule - Coverage: 10-15 lbs. / 100 sq. ft.

ACCEPTABLE ROOF SURFACES

BUR Smooth	MB Granule	MB Smooth	Single-Ply	SPUF
◆	◆	◆	◆	◆

COVERAGE RATES

Smooth BUR, Smooth MB, and Single-Ply Substrates:

Base Coat: 1 gal / 100 sq. ft. (0.4 L/m²) (16 wet mils)

Top Coat: 1½ gal / 100 sq. ft. (0.6 L/m²) (24 wet mils)

Granule Surfaced MB and SPUF Substrates:

Base Coat: 2 gal / 100 sq. ft. (0.8 L/m²) (32 wet mils)

Top Coat: 1½ gal / 100 sq. ft. (0.6 L/m²) (24 wet mils)

Non-Skid Coat: 1-1½ gals / 100 sq. ft. (0.4 - 0.6 L/m²) (16-24 wet mils)

Note: Coverage rates are listed at minimum recommended rates. The application surface can affect the necessary coverage rate. Color top coats may require higher coverage rates or additional coats to provide adequate hiding and consistent appearance.

TEMPERATURE/WEATHER RECOMMENDATIONS

Min Ambient: 40°F (4.4°C)

Max Ambient: 110°F (43.3°C)

- Minimum temperatures must be rising following application
- Do not apply when dew point is within 5°F (2.77°C) of ambient temperatures
- Do not apply when precipitation, fog or dew is imminent prior to cure of the product

CURE TIMES

Over-Coat Time:

2 hours @ 100°F (37.7°C) / 90% RH

8-12 hours @ 40°F (4.4°C) / 20% RH

Note: Cure times can be effected by a number of weather and jobsite conditions including but not limited to exposure to sunlight and wind, humidity, precipitation, and temperature.

SPRAY EQUIPMENT RECOMMENDATIONS

GENERAL GUIDELINES

Component: One-Component

Pressure: 3,500 psi

Tip Size: .030 - .039

Filters: Remove

Flow Rate: Min 3 gpm

Hose Type: Min 3/4" High Pressure BUNA-H Jacketed

**SPRAY EQUIPMENT
RECOMMENDATIONS**
CONTINUED

**CLEAN UP
LIMITATIONS**

PHYSICAL PROPERTIES

CODES & APPROVALS

AlphaGuard™ Si 100

WHIP: ¼" High Pressure BUNA-H Jacketed

Product Temperature: Ambient

- Must use heavy duty or industrial grade spray tips
- Properly clean and maintain spray equipment before, during, and after use
- Equipment should be properly grounded during use

Rule 66 Mineral Spirits or VM&P Naptha

Not recommended for use over the following:


Roof Decks: Cementitious wood fiber, metal, poured-in-place gypsum, structural lightweight or lightweight insulating concrete, and wood decks (includes plywood, tongue and groove, etc.).

Products/Systems: Asphalt-based gravel surfaced BUR systems, coal tar gravel surfaced BUR systems, clay tile, corrugated or standing seam metal roof systems, expanded or extruded polystyrene insulation, fluoropolymer finished metal, shingles, and tar-based products.

- Do not apply over asphalt surfaces without using the appropriate primer.
- Not for use under continuous immersion.

PROPERTY	TEST METHOD	TYPICAL VALUE
Accelerated Weathering	ASTM G53	No Degradation (8,760 hrs)
Elongation	ASTM D2370	235%
Indentation Hardness	ASTM D2240	50 Shore A
Low Temperature Flexibility	ASTM D522	Pass @ -15°F (-26.1°C)
Permeance	ASTM E96	6.1 perms
Tear Resistance	ASTM D624	37 lbf/in
Tensile Strength	ASTM D2370	460 psi
Water Absorption	ASTM D471	0.1%
Volume Solids	ASTM D2697	69%
Weight Solids	ASTM D1644	80%
VOC	EPA Method 24	< 250 g/L



	Rated Product ID #: 0612-0343	
	Smooth	Rough
	Initial / Aged	Initial / Aged
Solar Reflectance	0.87/0.70	Not Rated
Thermal Emittance	0.89/0.90	Not Rated
<small>The ratings above are subject to CRRC rating program conditions, requirements and limitations. Visit coolroofs.org for important information and disclaimers about CRRC rating requirements and limitations. For the purposes of a CRRC rating, a rough substrate is defined as a surface that is equally coarse or coarser than a new (i.e., unweathered) #11 granulated modified bitumen sheet.</small>		

AlphaGuard™ Si 100

MAINTENANCE

Your local Tremco Roofing sales representative can provide you with effective maintenance procedures which may vary, depending upon specific conditions. Periodic inspections, early repairs and preventive maintenance are all part of a sound roof program.

PRECAUTIONS

Users must read container labels and Safety Data Sheets for health and safety precautions prior to use.

TECHNICAL SUPPORT

Your local Tremco Roofing sales representative, working with the Technical Service Staff, can help analyze conditions and needs to develop recommendations for special applications.



Roofing & Building Maintenance

www.tremcoroofing.com
3735 Green Road
Beachwood, Ohio 44122
1.800.852.6013

220 Wicksteed Avenue
Toronto, Ontario M4H 1G7
1.800.668.9879

Tremco Roofing & Building
Maintenance is part of Tremco
Construction Products Group

Tremco is a US Registered trademark of Tremco CPG Inc.

The information provided on this data page supersedes all previous data concerning this product and its application.

The Statements provided concerning the materials shown are intended solely as a general guide for material usage and are believed to be true and accurate. Since the manner of use is beyond our control, Tremco DOES NOT MAKE NOR DOES IT AUTHORIZE ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PURPOSE, OR ANY OTHER WARRANTY, GUARANTEE OR REPRESENTATION, EXPRESSED OR IMPLIED, CONCERNING THIS MATERIAL EXCEPT THAT IT CONFORMS TO TREMCO'S PRODUCT SAMPLE. Buyer and user accept the product under those conditions and assume the risk of any failure, injury of person or property and loss or liability resulting from the handling, storage or use of the product, whether or not it is handled, stored, used in accordance with directions or specifications. UNDER NO CIRCUMSTANCE SHALL TREMCO BE LIABLE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES ARISING FROM ANY BREACH OF WARRANTY. IN ALL CASES, TREMCO'S LIABILITY IS LIMITED, AT TREMCO'S OPTION, TO THE REPLACEMENT OF GOODS, OR THEIR VALUE, PROVEN TO BE DEFECTIVE IN MANUFACTURING.