



Si70

PRODUCT DESCRIPTION

Rugged Coatings Si70 silicone elastomeric is a solvent-based silicone roof coating that provides outstanding weathering, and superior reflectivity properties. Formulated for use on sprayed in place polyurethane foam, it resists cracking and peeling. Si70 provides excellent waterproofing capabilities. The bright white finish reduces surface temperatures, minimizing thermal expansion and contraction. Under-the-roof temperatures are also reduced, lowering cooling costs. Rugged Coatings Si70 can often provide additional adhesion on certain surfaces that have been appropriately prepared.

GENERAL USES

Formulated for polyurethane foam, with appropriate prep and field testing, Si70 may also coat metal, single ply, smooth BUR, APP, SBS, modified bitumen, cured concrete, existing asphaltic and elastomeric roof coatings and other approved surfaces. NOT for use on roof shingles. EPDM rubber roofs must be primed with bonding primer designed for EPDM roofs. Other roof substrates including TPO, PVC, metal or asphalt may require primer before application. Bitumenous and asphaltic substrates may require Rugged Coatings PrBB Bleed Block Primer.

PACKAGING

SKU	SIZE
SIRW701-P (White)	5 gallon pail
SIRW701-D (White)	55 gallon drum

COLORS



White



Gray



Tan

CUSTOM COLORS: extended pricing and lead times apply.

PERFORMANCE CHARACTERISTICS

Elongation	185%
Tensile Strength	550 psi
Permeance (ASTM E 96 Procedure BW)	>7.9 US perms
Solar Reflectance Index	113
Reflectivity	0.87
Thermal Emissivity	0.90

APPLICATION NOTES

Brush/Roller

Airless Spray

- Hydraulic pump with minimum pressure of 5000 psi
- Graco 833 or 933 would be a good example.
- Spray tip: Reversible, self-cleaning tip without diffuser pin.
- Size .033" with a fan angle of 60° (ex. 633)
- Hose Size: At 300' total hose length, use 250' of 3/4" to 1/2" 10" swivel whip and 3/4" hose.
- General: The longer the hose, the smaller the tip orifice size.

PRODUCT CHARACTERISTICS

Color	White
Vehicle Base	100% Silicone + Petroleum Distillate Solvent
Weight per Gallon	10.9 +/- .4 lbs
Solids by Weight	82%
Solids by Volume	69%
Dry Film Thickness (@ 1 gal/100 sq. ft less surface absorption)	11.0 mils
DRY TIME	
Tack-free	10-20 minutes
Between coats	3 hours minimum
Full cure @ 70°F, 50% relative humidity	1-3 hours
Drying Time is temperature, humidity and film thickness dependent	
VOC	246 g/L
Flash Point	141°F
Clean Up	Virgin Mineral Spirits or Naptha

APPLICATION CONDITIONS

Do not apply below 40°F (10°C) or when rain is forecast. Applications during periods of low temperature or high humidity (Maximum humidity level: 85%) will shorten dry time. Allow at least 3 hours for coating to cure prior to being subjected to rain, heavy dew or temperatures below 40°F. KEEP FROM FREEZING. Refer to product application bulletin for detailed application information.

STANDARDS AND COMPLIANCE

Si70 passes ASTM D 6694 and is California Title 24 Compliant.

The following certifications and listings are pending:

UL 790 FM Approvals
Miami-Dade CRRC





FOR PROFESSIONAL USE

SURFACE PREPARATIONS

It is very important that you apply roof coatings and sealants to a clean, dry roof. Dirt, debris and grease can interfere with the ability of a product to adhere fully to the surface of your roof. Surface must be pre treated with manufacturers approved cleaner then power washed to remove dirt, loose paint and rust, excessive chalk, and other foreign matter which could prevent proper adhesion. All surfaces must be dry and free of dust, dirt, oil, loose materials, peeling paint etc. Rusty metal must be cleaned and primed with a rust inhibiting primer. Surfaces with mildew or biological growth must be cleaned with a bleach solution (2 parts water to one part bleach). Clean and pressure wash the roof. A mild detergent with broom is recommended on single ply membranes. Use only a wide fan spray tip. Previously coated surfaces must be completely dry and cured. Contact RUGGED COATINGS with material type questions. Once dry, prime surface as required. Next, treat all penetrations, drains, flashings, ponding, terminations, curbs, etc., with approved RUGGED COATINGS sealant and or reinforcement as specified by manufacturer. See website for specifications and details.

PRIMERS

A RUGGED COATINGS approved bleed blocking primer should be used on applications over asphalt substrates to help limit bleed through or discoloration. Asphalt, single ply membranes and metal should be field adhesion tested to determine if primer is needed. NOT for use on roof shingles. EPDM rubber roofs must be primed with Rugged Coatings single ply primer designed for EPDM roofs. An adhesion peel test should be performed to ensure proper adhesion prior to application. Other roof substrates including TPO, PVC, metal or asphalt may require primer before application. All Mod Bit and Asphalt surfaces must be aged and no substances present that can bleed through and cause discoloring. All single ply such as TPO, PVC and EPDM must be aged for better adhesion.

CLEAN UP

Brushes and rollers may be washed with VM&P, NAPTHA or VIRGIN MINERAL SPIRITS. spray equipment should be thoroughly flushed with MN&P, NAPTHA or VIRGIN MINERAL SPIRITS. and stored with pump manufacturers suggested storage media.

APPLICATION

Si70 is a moisture cure product. Humidity will accelerate the curing process. Curing starts immediately upon opening and opened product cannot be returned. Attempt to use all contents within one day of opening. DO NOT reuse empty containers. For exterior use only. DO NOT THIN. Rain, dew, fog, frost and relative humidity greater than 70% may result in faster curing times. Protective clothing, gloves, and eyewear should be used during application. Application should be completed when air and material temperatures are between 40 °F and 120 °F. Application can take place at colder temperatures (above 32 °F) however, special precautions must be taken to ensure there is NO MOISTURE, DEW or FROST present on the roof. These conditions will create adhesion issues and extend the curing process. Apply with a 3/4" nap exterior paint roller (preferably with mil gauge) or long bristle brush. Contact RUGGED COATINGS for spray requirements. Apply a uniform coat over entire surface. Coverage rate is 1.5 - 4 gallons per square (1 gallon per 100 square feet) yields approximately 11 dry mil in a one coat application. Coverage requirements varies depending on warranty & term. For extended warranty information, see published warranty qualifications or visit www.RuggedCoatings.com.

If multiple coats are used, additional coats shall be applied between 4 - 24 hours after first coat, or when foot traffic does not affect dry coating.

SLIP WARNING / EXTREMELY SLIPPERY

If there will be foot traffic on roof after installation (and cured), applicator may embed 40 - 60 lbs. of #11 ceramic granules per 100 sq. ft into top layer of coating to create a non-skid finish or walkway, walkway may be a safety color. Surfaces without granules are slippery when damp or wet. **Post coating, Do not walk on pitched roofs if there is any present moisture without proper safety equipment.**

DRY TIMES

Coating dries in 2 - 4 hours and fully cures in 8 - 24 hours at 70 °F and 50% relative humidity at 1.5 gallons per square. Thicker films, poor air flow and low humidity will increase dry times. Seal container when not in use. Do not walk on coating until fully cured.

WARRANTY AND DISCLAIMER

Rugged Coatings warrants Si70 Rubberized Silicone Roof Coating to be free from defects in materials and manufacturing. Under this warranty, we will provide, at no charge, a quantity of Si70 Rubberized Silicone Roof Coating sufficient to replace any Si70 Rubberized Silicone Roof Coating proven to be defective when applied according to our written instructions and in applications recommended by us as suitable for the product. THIS LIMITED WARRANTY IS THE BUYER'S SOLE AND EXCLUSIVE REMEDY AGAINST RUGGED COATINGS REGARDING THE PRODUCT. IN NO EVENT SHALL RUGGED COATINGS BE LIABLE FOR ANY CONSEQUENTIAL, SPECIAL, INCIDENTAL, INDIRECT, PUNITIVE OR OTHER DAMAGES ARISING FROM THE USE OR PERFORMANCE OF THE PRODUCT.

Since methods of application and on site conditions can affect performance, RUGGED COATINGS MAKE NO OTHER WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE REGARDING THE PRODUCT, AND RUGGED COATINGS HEREBY DISCLAIM ALL SUCH OTHER WARRANTIES.

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of Rugged Coatings. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of the publication. Consult your Rugged Coatings Technical Representative to obtain the most recent Product Data Information.

If further information is needed, contact Rugged Coatings Technical Service at
205-440-4996

