

## Silicone Roof Coating

**RC 1800** silicone roof coating is a high performing protective barrier for a variety of architectural surfaces and roofing substrates

**RC 1800** forms a durable, breathable and weatherproof roofing membrane that is highly resistant to degradation from UV and natural weathering

### TYPE OF APPLICATIONS:

- Single Ply
- Modified bitumen
- BUR
- Foam
- Metal

### SURFACE PREPARATION:

RC-1800 silicone roof coating can be applied to itself as well as a variety of roofing materials and substrates including: single ply membranes (TPO, PVC, EPDM, CSPE, and Hypalon), spray-applied polyurethane foam, metal, concrete, and common parapet/coping materials. Asphaltic substrates such as; modified bitumen, smooth BUR, and granulated cap sheet may require bleed blocker. Surfaces to which RC-1800 silicone roof coating is to be applied must be clean, dry, structurally sound and free of loose particles, dirt, dust, oil, frost, mildew and other contaminants. Damage to the underlying roof system, such as cracks, openings, holes, etc. should be properly repaired prior to application. Saturated substrates must be removed and repaired appropriately.

Users of RC-1800 silicone roof coating should verify that suitable adhesion can be attained to all existing roofing materials to be coated prior to large scale application of the coating. It is recommended that a test patch be cleaned and coated with RC-1800 silicone roof coating to verify the effectiveness of the asphalt bleed cleaning method and adhesion to the surface(s).

### Applicable Standards

- **ASTM D6694** – Standard Specification for Liquid-Applied Silicone Coating Used in Spray Polyurethane Foam Roofing Systems. Result: Pass
- **Cool Roof Rating Council (CRRC)** – Licensed SellerID 1200. SCM3502 (white) only. Rated Product ID –0002.
- **UL 790** – Flammability Characteristics – RC-1800 silicone roof coating carries Class “A” Non-Combustible and Class “B” Combustible credentials as tested under UL 790 procedures over spray foam and single ply roofing systems. Refer to the UL directory for specific information.
- **ASTM E84** – Standard Test Method for Surface Burning Characteristics of Building Materials. Result: Class A (Flame Spread Index 10, Smoke Developed Index 185).
- **Miami Dade NOA** – 13-1119.01
- **CAL FIRE**
  - **California Title 24 Compliant** - Can be used to comply with Title 24 high efficiency requirements
  - **NSF 151 Certification for rainwater catchment systems**
  - **FM Global**

## Packaging and Colors

RC-1800 silicone roof coating is available in nominal 5 gallon (18.9 liters) plastic pails and 55 gallon (208.2 liters) chimed steel drums. Weights shown below approximately correlate to 50 gallons and 5 gallons per container.

Grade	Color	Container	Weight (Lbs.)	Weight (Kg)
RC-1800 WHDE	White	Steel drum	540.0	245.2
RC-1800 WHPE	White	Plastic pail	54.0	24.5

## Typical Physical Properties

Typical physical property values of RC-1800 silicone roof coating as supplied are set forth in the table below:

### Typical Physical Properties –Supplied

Property	Value <sup>(1)</sup>	Test Method
Solids Content, Volume	90	
	Weight	91
		ASTM D1644-01 Modified
Tack Free Time	20-30 minutes	ASTM D3960
Skin-Over Time	10-15 minutes	WPSTM C-560
Viscosity	22,000 centipoises	ASTM D2196
Tensile Strength	204 psi (1.41 M Pa)	ASTM D2370
Elongation	542%	ASTM D2370
Durometer Hardness Shore A	36	ASTM D2240
VOC	<24 g/L	EPA Method 24
Solar Reflectance - initial 88%	ASTM	C1549 Emittance -
initial	0.90	ASTM C1371
SRI Value - initial 111	ASTM E1980	
SRI Value - aged <sup>(2)</sup>	103	ASTME1980
Permeance	9.3 perms	ASTM E96 (BW)
Tear Resistance	32 lbf/in.	ASTM D624
Low Temperature Flexibility	Pass	ASTM D522 (B)
Resistance to Wind		
Driven Rain	Pass	TT-C-555B

## HANDLING and STORAGE:

Customers considering the use of this product should review the latest Safety Data Sheet and label for product safety information, handling instructions, personal protective equipment if necessary, and any special storage conditions required. Safety Data Sheets are available upon request. Use of other materials in conjunction with RC-1800 products (for example, primers) may require additional precautions. Please review and follow the safety information provided by the manufacturer of such other materials

## Application Thickness

Theoretical maximum coverage rate of RC-1800 silicone roof coating is 14.4 mils (390 microns) DFT / gallon / square.

- Using 21 dry mils (610 microns) basis, coverage rate of RC-1800 silicone roof coating is approximately 1.5 gallons (5.7 liters) / square.

Coverage rates are approximate. Irregular surfaces and other factors may yield different coverage rates. Testing should be performed to determine actual coverage rates necessary to achieve desired mil thickness.

Please refer to RC-1800 silicone roof coating warranty mil chart for more details.

**Granules:** As an optional finish, granules may be installed into topcoat while it is still wet. Typical application rate is 40 pounds (18 kilograms) per 100 square feet (9.3 square meters). Contact the granule supplier or manufacturer for guidelines on suitable granule size and rate of granule coverage.

## **APPLICATION TEMPERATURE:**

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## **Application Guidelines**

RC-1800 silicone roof coating should be applied as received and dilution with solvent is not recommended. If settling in the package has occurred, stir or shake the material prior to use. Care should be taken to avoid overspray onto adjacent building materials, vehicles, plants, etc. Overspray can be cleaned up before it has cured by wiping alternately with solvent and dry rags. Cured material can be removed from surfaces with a razor blade, or scrubbed off with steel wool or synthetic abrasive pads and solvent. To control overspray, avoid spraying in winds that may cause drift. Surfaces not intended for coating should be masked or covered.

RC-1800 silicone roof coating should be sprayed or rolled ensuring uniform build and thorough coverage and can be applied in one coat. If applying in multiple coats, allow adequate time between each coat for the coating to cure before applying additional coat. Final cured film thicknesses must be free of voids, pinholes, cracks or blisters.

If any contamination is present on the cured surface, it must be washed and completely dry before application of subsequent coats.

## **Application Equipment**

RC-1800 silicone roof coating can be applied by spraying, rolling or brushing. RC-1800 silicone roof coating works with most commercially available spray application equipment that can deliver a minimum of 3,300 psi at the spray tip for at least 2.2 gallons per minute. Always use components rated for the required pump pressure. Hoses should be vapor lock type for prevention of moisture contamination. Contact Inland Coatings, LLC technical services for equipment recommendations.

Cleanup of spray equipment containing uncured material may be accomplished by flushing with mineral spirits or toluene. DO NOT USE water or alcohol based solvents. RC-1800 silicone roof coating cures by reacting with moisture, thus it should not be left in pumping equipment and hoses for prolonged periods unless equipment contains moisture lock hoses, fittings and seals. Equipment without moisture lock hoses, fittings and seals may transmit sufficient moisture vapor to gradually form cured material on hose walls and at unsealed connections. This can cause increased operating pressures and flow restriction.