



Physical property	Typical value	Test method
Appearance	Glossy white liquid	-
Solids Content by Volume	91% +/-3	ASTM D2697
VOC Content (Maximum)	<50 g/l	-
Tensile Strength (Minimum)	300 psi	ASTM D2370
Elongation at Break (Minimum)	280%	ASTM D2370
Durometer Hardness, Shore A	42 +/- 5 points	ASTM D2240
Tack-Free Time	1 to 2 hours	-
Cure Time	2 to 6 hours	-
Solar Reflectance per CRRC	0.88 initial and 0.73 aged	ASTM C1549
Thermal Emittance per CRRC	0.90 initial and 0.89 aged	ASTM C1371
Solar Reflectance Index (SRI) per CRRC	111 initial and 90 aged	ASTM E1980
Water Absorption	<0.001%	ASTM D471
Permeability (Nominal)	4.6	ASTM E96
Flash Point	140.9 °F (60.5 °C)	ASTM D93
Shelf Life (Unopened)	24 months	-
Application Temperature (Ambient)	35 °F to 120 °F (2 °C to 49 °C)	-

Approvals and Certifications

- Cool Roof Rating Council (CRRC) rated product: Product ID# 0620-0051
- Meets the requirements of California Energy Commission (CEC) Title 24 Section 118(i)3
- Florida Product Approval: FL10889-R3
- Miami-Dade County Product Control Approved: NOA# 21-1006.02
- UL Classified: Cements and coatings for roofing systems as to external fire exposure <74LM>
- FM Approved: Subject to the conditions of approval as a roof coating when installed as described in the current edition of the FMRC approval guide.
- Tested and certified by NSF International in accordance with NSF Protocol P151: Health Effects from Rainwater Catchment System Components
- Meets or exceeds ASTM D7281 Standard Test Method for Determining Water Migration Resistance Through Roof Membranes
- Meets or exceeds ASTM D6694 Standard Specification for Liquid-Applied Silicone Coating Used in Spray Polyurethane Foam Roofing Systems
- Excellent fungi resistance in accordance with ASTM G21 Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi
- Meets or exceeds Henry Dirt Pick-Up Resistance (DPR) Test Method MOT P-14

Description

Henry® 887 Tropi-Cool® 100% Silicone White Roof Coating is a premium, 100% silicone, moisture-cure coating designed to reflect the sun's heat and UV rays as well as protect many types of roofs. While suitable for use in all climates, the 100% silicone chemistry is especially suited for extreme tropical environments, which are exposed to some of the hottest and wettest weather with intense UV exposure. It is specially designed to maintain maximum reflectivity of heat and UV rays as it ages. Its moisture-cure chemistry creates a very aggressive chemical bond with the roof, which allows for permanent ponding water resistance, extreme durability, and superior capabilities of sealing and protection.

Henry® 887 Tropi-Cool® 100% Silicone White Roof Coating

Features

- Dirt Pick-Up Resistance (DPR) technology formula – Stays whiter and brighter longer
- 100% waterproof
- Rain-safe in 15-minutes
- 1-coat application
- Saves energy by reflecting heat
- Wide application temperature range from 35 °F to 120 °F (2 °C to 49 °C)
- Permanent ponding water resistant
- Superior UV resistance and weathering performance
- VOC compliant – solvent-free
- Mold and mildew resistant
- Chemically bonds with roof substrates as it cures
- Easy to apply by spray, roller, or brush
- Lifetime limited warranty
- Excellent adhesion and flexibility

Usage

Coating can be used on many different commercial or residential roof substrates to reflect the sun's heat and UV rays, as well as to help seal and protect the surface. It works well on low slope roofs and is suitable for pitched roofs. Acceptable roof types include:

- Aged asphalt roofs – including Built-Up Roofing (BUR) and Modified Bitumen (MB)
- Aged single-ply and rubber roofs, including TPO, EPDM, PVC, and Hypalon® roofs
- Aged fiberglass roofs
- Spray Polyurethane Foam (SPF) roofs
- Metal roofs
- Concrete roofs
- Recoating previously coated roofs
- RV, trailer, and mobile home roofs

Not recommended over shingles of any kind.

Application

CLEAN: Before coating the roof, use a pressure washer or high pressure nozzle and water hose to wash the roof with a non-filming detergent, such as TSP or TSP substitute. Use appropriate pressure and take caution not to inject water into the roof substrate during washing. In areas with stubborn dirt, grease, or other contaminants, use a stiff bristle brush or broom to scrub the areas clean with additional water and non-filming detergent. Treat algae or moss. The most effective method of cleaning algae and moss from a roof is with a 50:50 mix of laundry strength liquid chlorine bleach and water. Apply with a sprayer and allow the solution to dwell on the roof surface for 15 to 20 minutes, and then rinse thoroughly with low pressure water. Extended dwell times may be necessary, however, avoid letting the solution dry completely as this may prevent complete rinsing. Take proper precautions to protect landscaping and surrounding areas from the chlorine bleach solution. Use appropriate personal protective equipment when working with chlorine bleach. In severe cases, it may take more than one bleach treatment to kill all of the moss. Give the roof a final rinse to ensure it is free of all detergent or anything else that could affect adhesion. Allow roof to dry completely before application. Using a leaf blower or broom, clear any remaining dust, dirt, debris, and foreign material that may prevent proper adhesion. Apply a test area of coating over the existing membrane to verify absence of bleed-through and proper adhesion to membrane prior to start of application.

PREP: Repair defects, such as splits, cracks, blisters, deteriorated flashing, cracked metal edging, and any other defects affecting the water tightness of the roof. As a preventative measure, seal all roof penetrations, curbs, flashings, transition areas, areas where dissimilar materials intersect, and other areas that could leak with **Henry® 884 Tropi-Cool® 100% Silicone Roof Sealant** or **Henry® 885 Tropi-Cool® 100% Silicone Seam & Repair Roof Sealant**. Ensure all roof drains and gutters are clean and clear, and cut back any vegetation that is growing above the roof which may cause debris to fall on the roof and clog drains and gutters in the future. On metal roofs, remove rust by wire brushing.

MIXING: Coating may settle during storage. Mix well prior to and during use with a drill and mixing paddle. For 1 and 5 gallon pails, use a minimum 3" diameter mixing paddle or hand mix with a suitable paddle until consistent viscosity is achieved. In drums, use a minimum 6" diameter mixing paddle.

RV, Trailer, and Mobile Home Roofs: Check the manufacturer's recommendations for walking on the roof. Park on a level surface. Ensure vehicle is turned off with the parking brake set. Secure keys to ensure someone else does not move the vehicle while you are on the roof.

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APPLY: Coating should only be applied to a clean, dry, frost-free, and fully prepared roof substrate as described above. It may be applied with a 1/2" to 1" nap lint-free roller, brush, or commercial airless spray rig. Containers are packaged to keep latent moisture from prematurely starting the curing process. After opening the container, try to use it up as soon as possible. Keep containers covered and sealed at all times during use, when practical. If a skin forms in the container, simply remove the skin, mix the product, and use the rest. It should be applied in one coat smoothly and evenly over the entire roof surface, including parapet walls at a minimum 1.5 gallons per 100 square feet. Dry film thickness (DFT) should be a minimum of 22 mils. Coating must be evenly applied and pin-hole free. On steep-slopes, rough or aged surfaces, additional coats may be required to obtain a uniform, consistent thickness. Ensure coating is fully cured prior to additional coating installations. Cure times generally require a minimum of 2 to 6 hours depending on weather conditions. Complete additional coats within 48 hours. Waiting longer than 48 hours may require initial coat to have to be washed prior to application of additional coats. Apply subsequent coats perpendicular in fashion to the previous coat. For example, apply 1st coat north and south; apply 2nd coat east and west. Polyurethane foam should be coated within 24 hours of application. New concrete roofs must be allowed to cure for a minimum 28 days before coating.

Commercial Airless Spray Rig: If spraying, a commercial airless spray rig capable of producing a minimum of 3500 psi at the spray gun tip is required. The pump should have a minimum of 3 gallons per minute output and be fed by a 5:1 transfer pump to prevent cavitation. 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 a reverse-a-clean spray tip, having a minimum orifice of 0.030 and a 50° fan tip. Do not use hoses that have been used for acrylics because the liners absorb moisture and initiate the silicone cure process.

NSF PROTOCOL P151: Number of coats: 1-3. Maximum Field Use Dry Film Thickness (mils): 30 (maximum 15 per coat). Recoat Cure Time/Temperature: 24 hours at 100 °F (38 °C). Final Cure Time/Temperature: 48 hours at 100 °F (38 °C).

DO NOT THIN. Use extreme caution when applying and walking on silicone coated surfaces. Silicone coated surfaces are extremely slippery and can create a fall hazard resulting in death or injury. Keep away from food. Not recommended for application at temperatures below 35 °F (2 °C) or if rain is expected in less than 15 minutes of application. Lower temperatures and/or less humidity will typically result in slower cure times. When transporting, make sure the pail is secured and the lid is tight to prevent spills. Store in a cool, dry, and shaded location. Ensure lid is completely sealed.

Please consult Henry® Product Support for any specific questions regarding the application of this product.

Coverage

Approximately 320 square feet per 5 gallon size container (approximately 100 square feet per 1.5 gallons). Dry film thickness (DFT) should be a minimum of 22 mils. Coverage varies depending on surface texture and porosity.

Clean-Up

Clean-up of tools and spray equipment containing uncured material may be accomplished by cleaning or flushing with VM&P Naphtha or mineral spirits.

Spray Equipment: This product cures by reacting with moisture and should not be left in spray guns, pump equipment, and 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 potentially causing an increase in operating pressure and material flow restriction.

Packaging

1 gallon, 5 gallon, 55 gallon size containers

Shelf Life

Unopened, 24 months from date of manufacture when stored in a cool, dry, and shaded location.

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Limited Product Warranty

We, the manufacturer, warrant only that this product is free of defects, since many factors which affect the results obtained from this product - such as weather, workmanship, equipment utilized and prior condition of the substrate - are all beyond our control; therefore, Henry Company cannot guarantee results of the application of the coating including, but not limited to: appearance, water tightness, and suitability of the substrate. The substrate to be coated must be structurally sound and have reasonable life expectancy prior to being coated. We will replace at no charge any product proved to have a material defect during the life of the existing roof, provided it has been applied in accordance with our written directions for uses we recommended as suitable for this product. Proof of purchase must be provided. This warranty is void if the coating is coated over, patched, painted, or covered in any way with any product other than this coating or approved products. **DISCLAIMER OF WARRANTIES AND LIMITATION OF LIABILITY: THIS LIMITED WARRANTY IS IN LIEU OF ANY OTHER WARRANTIES EXPRESS OR IMPLIED INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. MANUFACTURER SHALL HAVE NO LIABILITY OF ANY KIND BEYOND PRODUCT REPLACEMENT, INCLUDING FOR CONSEQUENTIAL, EXEMPLARY OR INCIDENTAL DAMAGES RESULTING FROM ANY DEFECTS OR ANY DELAYS CAUSED BY REPLACEMENT OR OTHERWISE. IF PURCHASER DOES NOT ACCEPT THESE TERMS OF HENRY'S LIMITED WARRANTY, PURCHASER MAY RETURN WITHIN 30-DAYS OF PURCHASE ALL CONTAINERS OR PACKAGES OF PRODUCT PURCHASED FOR A FULL REFUND (PROVIDED THE CONTAINERS OR PACKAGING IS UNOPENED AND LESS SHIPPING CHARGES IF ANY). RETENTION OF PRODUCT BEYOND 30-DAYS FROM PURCHASE, OR USE OF PRODUCT SHALL CONSTITUTE ACCEPTANCE OF HENRY'S LIMITED WARRANTY TERMS, CONDITIONS AND DISCLAIMERS. THIS LIMITED WARRANTY PROVIDES THE PURCHASER'S EXCLUSIVE REMEDY FOR ANY DEFECT IN THE PRODUCT.** To the extent that any part of this LIMITED PRODUCT WARRANTY AND LIABILITY DISCLAIMER is determined unenforceable under the law of the place of purchase of the product, that part is severed and the remainder of these terms remain in full force and effect. To the extent permitted by law, the duration of any implied warranties is limited to the duration of Henry's express warranty.

For more information, visit www.henry.com or for technical assistance call us at 800-486-1278. Refer to the Safety Data Sheet prior to using this product. The Safety Data Sheet is available at www.henry.com or by emailing Henry® Product Support at productsupport@henry.com or by calling 800-486-1278.

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