

Henry[®] 487

100% Silicone White Roof Coating

Typical Physical Properties

Appearance	Glossy white liquid	Tack-Free Time	1 to 2 hours
Solids Content by Volume	91% +/-3	Cure Time	2 to 6 hours
voc	10 g/l maximum	Permeability	4.6 nominal
Tensile Strength	275 psi minimum	Flash Point	60.5 °C (140.9 °F)
Elongation at Break	150% minimum	Shelf Life (Unopened)	24 months
Durometer Hardness, Shore A	42 +/- 5 points	Application Temperature (Ambient)	2 °C to 49 °C (35 °F to 120 °F)

Approvals and Certifications

- UL Classified: Cements and coatings for roofing systems as to external fire exposure <74LM>
- 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.

Description

Henry[®] 487 100% Silicone White Roof Coating is a premium, 100% silicone, moisture-cure coating designed to protect many types of roofs as well reflect the sun's heat and UV rays. While suitable for use in all climates, the 100% silicone chemistry is especially suited for extreme environments, which are exposed to some of the hottest and wettest weather with intense UV exposure. It is specially designed to maintain maximum weatherproofing, and 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.

Features

- 100% waterproof
- Rain-safe in 15-mintues
- 1-coat application
- Wide application temperature range from 2 °C to 49 °C (35 °F to 120 °F)
- Lifetime limited warranty
- Saves energy by reflecting heat

- Excellent adhesion and flexibility
- 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

Product Size

3.78 L (1 GALLON), 18.93 L (5 GALLON)

Shelf Life

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

Usage

Coating can be used on many different commercial or residential roof substrates to help seal and protect the surface, as well as reflect the sun's heat and UV rays. 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
- 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 watertightness 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 by embedding Bakor® 990-06 Yellow Jacket Reinforcing Fabric between 2 heavy coats of Henry® 487 100% Silicone White Roof Coating applied over and at least 50 mm (2") beyond seam or transition. Bakor® 990-06 Yellow Jacket Reinforcing Fabric should be brushed into place with a soft bristle brush to eliminate wrinkles, air pockets or blisters to obtain full contact. 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 3.78 and 18.93 liter (1 and 5 gallon) pails, use a minimum 76 mm (3") diameter mixing paddle or hand mix with a suitable paddle until consistent viscosity is achieved. In drums, use a minimum 152 mm (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.

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 12 mm to 25 mm (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 5.7 liters per 9.3 square meters (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 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.

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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 11.4 liters (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 19 mm (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 38 °C (100 °F). Final Cure Time/Temperature: 48 hours at 38 °C (100 °F).

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

Coverage

Approximately 6.5 square meters (70 square feet) per pail per coat. Approximately 9.3 square meters per 5.7 liters per coat (100 square feet per 1.5 gallons per coat). 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.

Precautions

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 2 °C (35 °F) 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, shaded location. Ensure lid is completely sealed.

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, watertightness, 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.

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