

TECHNICAL DATA SHEET **Pro-Grade[®] 988**

Silicone Roof Coating

Physical Property	Typical Value	Test Method
Application Temperature (Ambient)	35° F to 120° F (2° C to 49° C)	-
Durometer Hardness	42 Shore A	ASTM D2240
Elongation at Break	280%	ASTM D412
Flash Point	140.9° F (60.5° C)	ASTM D93
Flame Spread	Class A	ASTM E108/UL790
Low Temperature Flexibility	-15º F (-26.1º C)	ASTM D522
Permeability	4.6 perms	ASTM E96
Solids Content by Volume	92% +/-3	ASTM D2369
Solar Reflectance, Initial	87*	ASTM C1549
Solar Reflectance, 3 Year Aged	84*	ASTM D7897, C1549
Solar Reflectance Index (SRI), Initial	110*	ASTM E1980
Solar Reflectance Index (SRI), 3 Year Aged	106*	ASTM D7897, ASTM E1980
Thermal Emittance, Initial	0.90*	ASTM C1371
Thermal Emittance, 3 Year Aged	0.90*	ASTM D7897, ASTM C1371
Tack-Free Time	1-2 hours	-
Tensile Strength	320 psi	ASTM D412
VOC Content (Maximum)	10 g/l	-
Water Absorption	0.0005%	ASTM D471
Water Leakage Resistance	Pass (≥22 dry mils)	ASTM D7281
Water Resistance (Hydrostatic Pressure)	100 psi (min 24 wet mil)	AATCC 127 (option 1)
Weathering, Accelerated QUV 5,000 Hours	No degradation	ASTM G154

*Applies to white coating color only

Approvals and Certifications

- Cool Roof Rating Council (CRRC) rated product: Product ID# 0620-0053
- 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# 23-0316.02
- 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 Test Method MOT P-14

Description

Pro-Grade® 988 Silicone Roof Coating is a 100% silicone, high solids, solvent-free, one-component, moisture-curing silicone rubber roof coating system for use on existing smooth asphaltic BUR, smooth or granulated cap sheet, single ply roof membrane, well-adhered acrylic coating, metal, concrete, sprayed-in-place polyurethane foam and various aged membrane roofing. The system provides long-term weathering protection and resists the effects of ozone, ultraviolet radiation and temperature extremes. With its high solids content and absence of hydrocarbon solvents, **Pro-Grade® 988** can be applied in excess of 50 mils in a single coat without blistering, while maintaining maximum adhesion.

Pro-Grade® 988 Silicone Roof Coating

Features

- Dirt Pick-Up Resistance (DPUR) technology formula Stays whiter and brighter longer
- 100% silicone moisture-cure technology
- High solids
- Rain safe in 15 minutes
- 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
- Excellent adhesion and flexibility
- Easy to apply by spray, roller, or brush

Usage

Coating can be used on many different commercial and 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 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

To prevent bleed-through, discoloring and staining over new or aged asphalt materials, BUR and modified bitumen membrane, **Pro-Grade**[®] **294 Base Coat & Sealer** must be used prior to making silicone repairs. On metal roofs, remove all rust and treat with a rust-inhibiting spot primer. Not recommended over Kynar[®] / Hylar[®] coated metal roofs, or shingles of any kind.

Always perform an adhesion test patch over smooth MB/BUR, EPDM, TPO, PVC, and Hypalon[®] and existing coated roofs, and metal roofs. Refer to the Adhesion Test Instructions for more information. If the adhesion test result is not greater than or equal to two pounds, use **Pro-Grade[®] 941 Primer** and repeat test.

Application

Clean: Using a minimum 2,000 psi pressure washer wash the roof with a non-filming detergent, such as TSP or TSP substitute. Caution should be used to not 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 mildew or mold. 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. Apply a test area of coating over the existing membrane to verify proper adhesion to membrane prior to start of application.

Prep: On metal roofs, remove all rust and treat with a rust-inhibiting spot primer. On asphaltic roofs, use **Pro-Grade 294**[®] for bleed blocking. If primer is required on single ply membrane or metal, apply **Pro-Grade**[®] **941**.

After primer or base coat sealer is applied (if needed), 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 penetrations, curbs, flashings, transition areas, areas where dissimilar materials intersect, and other areas that could leak with **Pro-Grade® 920 Silicone Roof Sealant** or **Pro-Grade® 923 Butter Grade Silicone Roof Sealer, Pro-Grade® 957 Silicone Fibered Roof Sealer** or a three-course patch with **Pro-Grade® 988 Silicone Roof Coating**. Ensure all drains are clean and clear and cut back any vegetation that is growing that may cause debris to fall on the roof and clog drains in the future.

MIXING: Coating may settle during storage. Mix well prior to and during use with a drill and mixing paddle. For 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.

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Coat: 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. 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 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. Mix well prior to and during use with a minimum ³/₄ horsepower air operated mixer. 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. Coating must be evenly applied and pin-hole free. Allow coating to fully cure before applying additional coats (depending on weather conditions, a full cure may take 2-6 hours).

Coating should only be applied to a clean, dry, and fully prepared roof substrate as described above. Application at temperatures lower than 50° F (10° C) and less than 35% relative humidity will typically result in slower cure times. The surface temperature must be at least six Fahrenheit degrees or three Celsius degrees above the dew point and rising.

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). For NSF P151 Rainwater Catchment Systems application instructions visit <u>https://us.henry.com/NSFP151</u>.

NOTE: DO NOT THIN. Do not apply at temperatures below 35° F (2° C) or if rain is expected within 15 minutes of application. The surface temperature must be at least six Fahrenheit degrees or three Celsius degrees above the dew point and rising. Store product in a cool, dry, shaded location. Ensure lid is completely sealed. Not for use over plywood, walking decks, gravel, degraded polyurethane foam, Kynar[®]/Hylar[®] coated metal roofs, shingles of any kind, or old roofs that are too dry and brittle to withstand the shrinkage stresses that occur after the application of any coating. Do not apply to wet or saturated roofs.

This product is not recommended for interior use. Building occupants should be warned of spray operations in process. Installers should exercise caution during spray processes to avoid falls caused by stepping into slippery wet coating. Installers should read and understand all technical and informational literature on this product, prior to use of the product.

Slip Warning: Use extreme caution when walking or working on silicone coated surfaces. Surface is extremely slippery and can create a fall hazard resulting in injury or death.

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

Coverage

Minimum coating coverage is 1.5 gallons/square. Dry film thickness (DFT) should be a minimum of 22 mils. Apply each additional coat in a perpendicular direction to the previous coat. Application rates should be adjusted to meet each particular roof's specified requirements. Coverage rates are theoretical and do not take into account for material loss due to spraying, surface texture, etc. Thicker dry film results in better performance and longer coating life.

 For Henry[®] Material Plus and Gold Seal Warranty, see the Henry[®] Pro-Grade[®] Silicone Roof Coating System Application Guide or appropriate Guide Specification for application and coating coverage rate requirements by substrate and duration.

Clean-Up

Clean-up of spray equipment containing uncured material may be accomplished by flushing with VM&P Naphtha or mineral spirits. Read solvent Safety Data Sheets before use. Keep cleaning solvents away from all sources of heat, sparks, flame, lighted smoking materials, or any other ignition source. 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

5 Gallon, 55 Gallon

Color

White, Gray, Tan

Shelf Life

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

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