



A superior silicone roofing solution

Description:

GAF Unisil Silicone Roof Coating provides protection against weather elements and UV rays, and enhanced protection against algae, mold, and mildew for a variety of substrates.

Features and Benefits:

- **Strong adhesion** to a wide range of substrates
- **Resists** ponding water
- **Long-term elastomeric properties** from sub-zero temperatures to high heat

Substrate Preparation:

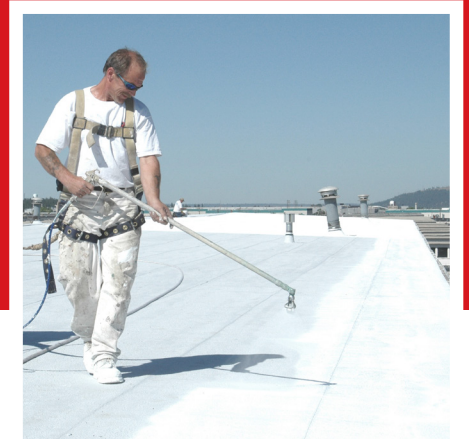
- **Substrate** should be dry, clean, and free from oil, grease, and other contaminants
- **Pressure-wash** to remove all dust and debris, and allow to dry
- **Examine substrate** to receive new roofing and conduct test patches to verify adhesion of coating prior to start of work
- **Check for any damaged roof membranes**, including all flashings and penetrations, and repair before coating application commences
- **Priming** of substrate may be required¹

General Application Method:

- **May be applied by** brush, roller, or airless sprayer
- **Apply evenly** at the rate specified for the substrate being coated¹
- **Additional coats may be applied** as soon as the previous coat is dry enough to walk on and should be applied perpendicular to the previous coat to ensure proper coverage
- **Total coverage** is dependent on the substrate¹

Spray Application:

- **Apply product with an airless sprayer**, covering the surface at an even rate. Use an airless spray pump with a 3 gallon-per-minute (11 L/minute) output and 3,500 psi (24,138 kPa) pressure capability, fed with 5:1 transfer pumps.
- **Use a reversible**, self-cleaning tip with orifice size 0.030" (0.76 mm) and a fan angle of 50°. Filter screens should be 30 mesh or larger. Use a ½" (12.7 mm) minimum inside diameter hose.
- **Minimum of 2 coats.** Apply subsequent coats as soon as the previous coat is completely dry.
- **All surfaces must be uniformly coated** and free from voids, pinholes, or blisters



Codes and Compliances:

■ FM Approved	
■ Refer to UL Product iQ for actual assemblies	
■ CRRC Rated (White only)	
■ Meets the requirements contained in ASTM D6694 "Standard Specification for Liquid-Applied Silicone Coating Used in Spray Polyurethane Foam Roofing Systems."	
■ UL Listed to ANSI/UL 790 Class A. Refer to UL Online Certification Directory for actual assemblies.	
■ FM Approved. Refer to FMapprovals.com/RoofNav for actual FM- Approved assemblies	

Safety and Handling:

- For specific information on safe handling of this material, refer to the Safety Data Sheet (SDS)

¹ See gaf.com for more information and specific guidelines



Mixing:

- **Some settling of material** may have occurred during shipment and storage
- **Containers that have been stored for any length of time** may develop a skin/film on top of the coating; this should be removed prior to mixing
- **Take care not to incorporate air into the product**
- **Mix prior to use** with a $\frac{3}{4}$ -horsepower or larger mixer with a blade capable of uniformly mixing the entire container
- **Use immediately** to avoid trace amounts of moisture from causing a reaction in the container
- **For 5-gallon (18.9 liter) pails**, use 3" (76 mm) minimum diameter mixing blades. For 55-gallon (208 liter) drums, use 6" (152 mm) minimum diameter mixing blades.

Cleanup:

- **Use VM&P naphtha or mineral spirits** to thoroughly flush equipment. Leave solvent in the lines and equipment until next use. Do not leave product in the pump or hoses.

Precautions:

IMPORTANT: Repair leaks promptly to avoid adverse effects, including mold growth.

DO NOT:

- Apply on wet substrates
- Heat container
- Attempt to thin product
- Apply if rain, dew, fog, heavy moisture condensation, frost, or freezing temperatures are in the 8-hour forecast

Physical Properties:

	Test Method	GAF Unisil HS Silicone Roof Coating (Approximate Values ²)
Solids by Weight	ASTM D1644	81%
Solids by Volume	ASTM D2697	71%
Tensile Strength	ASTM D2370	300 psi
Elongation	ASTM D2370	550%
Tear Strength	ASTM D624	31 lbf/in.
VOC	D3960	<250 g/L

Product Details:

Packaging	5-gallon (18.9 liter) pail / 55-gallon (200 liter) drum
Colors	White, Light Gray, Dark Gray, Tan
Shelf Life	12 months from date of manufacture in unopened containers, if stored properly in a clean and well-ventilated area at 40°F - 90°F (5°C - 32°C). Storage outside temperature range should shorten shelf life. Keep containers covered when not in use. Do not allow coating to freeze.
Dry Time to Walk On (Approx.)	5 hours at 70°F (21°C) 50% R.H
Application Temperature (Air)	40°F (5°C) and rising
Application Temperature (Surface)	40°F - 110°F (5°C - 43°C)
Thermal Emittance [Initial]	0.89 (White only)
Solar Reflectance [Initial]	0.83 (White only)
Solar Reflective Index (SRI) [Initial]	106 (White only)

² Values stated are approximate and subject to normal manufacturing variations. These values are not guaranteed and are provided solely as a guide.