



Description:

Diathon® Roof Coating is a water-based acrylic top coat for spray polyurethane foam with excellent physical properties, durability, protection against the damaging effects of weather elements and UV rays. Diathon® Roof Coating is a "breathable" coating, allowing moisture vapor to pass through the film while resisting mass water penetration.

Approved Substrates:

New and existing Spray Polyurethane Foam (SPF).

Packaging Sizes:

- 5 gallon (19 liter) pail
- 55 gallon (208 liter) drum
- 275 gallon (1041 liter) tote

Storage and Shelf Life:

Product Storage Temperature:

50°F – 90°F (10°C – 32°C) do not allow coating to freeze.

Shelf Life: 18 months from date of manufacture in unopened containers, if stored properly in a clean and well-ventilated area.

Application Instructions:

Substrate Preparation: Roof must have positive drainage, and be clean and dry with no trapped moisture. Repair damaged SPF, flashings, and penetrations. For additional guidelines for SPF preparation refer to the Substrate Preparation Guide in the GAF Liquid-Applied Manual. For previously coated SPF roofs, conduct test patches to verify adhesion of coating prior to start of work.

Mixing: Mix uniformly for 3 minutes prior to use. Do NOT attempt to thin or self-tint.

Application: Apply by brush, roller, or airless sprayer evenly at the rate of 2 gallons per 100 ft². Do NOT apply more than 1.5 gallons per 100 ft² (6.1 L per 10 m²) in a single coat. Apply additional coats perpendicular to the previous coat once it is dry enough to walk on. See Limited Warranty on GAF Silicone Roof Coatings at gaf.com for complete coverage and restrictions.

Warranty:

Refer to applicable warranties and guarantees, available at gaf.com, for complete coverage and restrictions.

Limitations and Precautions:

Application Air Temperature: min. 50°F (10°C). Do not heat containers.

Application Surface Temperature: 50°F (10°C) and rising. Care should be taken when coating surfaces above 120°F. Contact GAF Design Services if you have application questions. Do NOT apply if rain, dew, fog, heavy moisture, condensation, or freezing temperatures are in the 8-hour forecast to ensure proper cure. Cool temperatures/high humidity may slow curing.

Safety and Handling:

For specific information regarding safe handling of this material, please refer to the Safety Data Sheet (SDS).

Clean Up:

Use water and soap to thoroughly flush equipment.



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For additional information, contact GAF Design Services at 1-877-423-7663 or designservices@gaf.com

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Physical Properties — (ASTM D 6083-21)

Liquid Physical Property Requirements

Type	ASTM Test Method	ASTM Minimum Values (Type 1)	Test Values*
Volume Solids	ASTM D2697	≥50%	55%
Weight Solids	ASTM D1644	≥60%	66%


Film Physical Property Requirements




Type	ASTM Test Method	ASTM Minimum Values (Type 1)	Test Values*
Initial Percent Elongation	ASTM D2370	Min. 100% @73°F	258%
Initial Tensile Strength	ASTM D2370	Min. 200 psi @73°F	284 psi
Final Percent Elongation	ASTM D2370	Min. 100% @73°F	Pass
Permanence	ASTM D1653	Max. 50 perms	22.5 U.S. Perms
Accelerated Weathering	ASTM D4798	No cracking/checking	3,000 hours: Pass
Low Temperature Flexibility	ASTM D522	Min. Pass 0.5" mandrel -15°F	Capable of withstanding 180° bends over a 3/16" (5 mm) mandrel @ -21°F (-30°C).

Additional Physical Properties

Type	ASTM Test Method	Test Values*
VOC	—	<25 g/L
Hardness	ASTM D2240	55 to 65 Shore A
High Temperature Stability	ASTM D794	Did not age-harden or slump at temperatures up to 200°F (93°C).
Bond Strength	ASTM C297	No adhesive failure between the coating and PUF substrate.
Dry Time	ASTM D 5895	To Touch: 65 Minutes, 72°F (24°C), 50% RH @30 wet mils [ASTM D5895] Dry times will increase with higher humidity and/or lower temperature
Resistance to Wind Driven Rain	Federal Specification TTC-555 B]	After 40 hours of continuous testing, no apparent moisture penetrated the coating.
Service Temperature Limits (Installed Coating)	—	-30°F – 200°F (-35°C – 93°C)
Standard Colors	—	White, Light Gray, Tan, and Light Tan

Approvals

 CRRC (Cool Roof Rating Council) coolroofs.org	Product ID		Smooth White: 0676-0106	
	Type	Solar Reflectance	Thermal Emittance	Solar Reflectance Index (SRI)
	Initial	0.83	0.92	105
Aged	0.71	0.90	87	

 UL Listed ANSI/UL 790 Class A. Refer to UL Product iQ for actual assemblies.	Title 24 Can be used to comply with Title 24, Part 6, Cool Roof Requirements of the California Code of Regulations.	 Miami-Dade Approved 24-0402.08
 FM Approved Approval Standard 4470, Including as a component of Class 1-SH (Severe Hail) rated assemblies. Refer to RoofNav for actual assemblies.	State of Florida Approved FL620, FL20663	

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