



Product Data Sheet (PDS):

GacoFlex™ S42 Series

Revised: 06/2025

GACOFLEX™ S42 SERIES™ HIGH-ADHESION 100% SILICONE COATING

A. PRODUCT DESCRIPTION:

GacoFlex S42 Series coatings are high-adhesion, solvent-free, single-component waterproof elastomeric moisture-curing silicone coatings that do not require a primer over most substrates.

B. RECOMMENDED USE:

GacoFlex S42 Series are ideal for use as a maintenance coating system over metal roofs, weathered single ply membranes, and polyurethane foam roofs (including GacoRoofFoam™). GacoFlex S4200* is ideal for use over aged SBS, APP, and built-up roofing**. Use is restricted to circumstances where the membrane surface is in sound condition but requires a renewal of the membrane surface due to the normal effects of use and aging.

GacoFlex S42 Series coatings may also be used over concrete and existing elastomeric coatings with an appropriate GacoFlex primer. When properly applied, the GacoFlex S42 coating system provides a seamless, weather-tight seal that protects the roofing substrate from degradation caused by UV, water, and other normal weathering hazards. A roof coated with GacoFlex S42 Series Silicone Coating is ideal for use as part of a rainwater catchment system.

**Note: Do not use colored silicone coatings over asphalt substrates.*

***Includes mineral cap sheets but excludes gravel-surfaced built-up roofs. GacoFlex A4271 BleedTrap™ Base Coat is recommended for all asphalt substrates prior to coating with GacoFlex S4200. A4271 BleedTrap Base Coat is required for all warranted applications over SBS.*

C. APPROVALS:

Underwriters Laboratory –UL790-Class A
Cool Roof Rating Council – CRRC 0740-0012
FM Approval – No.: PR450562
Miami-Dade County NOA No.: 18-1030.01
NSF P151 – Certification of rainwater catchment system components



CEMENTS AND COATINGS FOR ROOFING SYSTEMS
CLASSIFIED BY UNDERWRITERS LABORATORIES INC.
AS TO AN EXTERNAL FIRE EXPOSURE ONLY 60PO



D. LIMITATIONS:

GacoFlex A4271 BleedTrap Base Coat is recommended over asphaltic substrates to reduce the potential for discoloration caused by asphaltic oil migration into the GacoFlex S4200. May require a suitable primer on some single ply membranes such as TPO. Please contact Technical Services for specific recommendations.

E. PACKAGED PRODUCT DATA*:

PROPERTY	OBSERVED VALUE / DESCRIPTION	
COLORS	S4200 – White S4222 – Gray S4248 – Tan S4229 – Dark Gray	
THEORETICAL COVERAGE	315 ft ² /gal/mil (140.6 m ² /3.8 L/0.025 mm)	
WEIGHT PER GALLON	10.63 lb/gal (4.82 kg)	
SOLIDS	Weight: 96 %	ASTM D1644
	Volume: 95 %	ASTM D2697
V.O.C.	EPA Method 24 < 50 g/l (< 0.417 lb/gal)	
FLASH POINT	178 °F (81.1 °C) ASTM D3278	
STORAGE STABILITY	Two (2) years from date of manufacture when stored in original, sealed/unopened containers and between 0 – 80 °F (-17.7 – 26.6 °C)	
TOXICITY	Not for use in contact with edible substances or for long-term storage of potable water	

F. APPLIED PRODUCT DATA*:

PROPERTY	TEST	REQUIREMENT	RESULT
ADHESION	Excellent adhesion to polyurethane foam, such as GacoRoofFoam, aged asphaltic roofs, concrete, and aged single ply membranes. An anti-corrosive metal primer may be used on ferrous metal roofs to help prevent corrosion from% spreading, followed by a light dusting of GacoFlex E5320 2-Part Two-Part 2-Component Two-Component Epoxy Primer/Filler		
TENSILE STRENGTH @ 73 °F (22.8 °C)	D2370	275 psi (1.9 MPa)	Pass
ELONGATION AT BREAK @ 73 °F (22.8 °C)	D2370	196 %	Pass
TENSILE STRENGTH @ 0 °F (-17.7 °C)	D2370	275 psi (1.9 MPa)	Pass
ELONGATION AT BREAK @ 0 °F (-17.7 °C)	D2370	275 psi (1.9 MPa)	Pass
TEAR RESISTANCE (DIE C)	D624	20 minutes @ 24 lb/in (4203 N/m)	Pass
WET ADHESION			ASTM D6694 REQUIREMENT
SPRAY POLYURETHANE FOAM	C794 / D903	2.0 min	Pass
ACRYLIC COATING			
GALVANIZED METAL WITH E5320 PRIMER			
BUR WITH E5320 PRIMER			
EPDM WITH E5320 PRIMER			
PVC WITH E5320 PRIMER			
WATER SWELLING, MASS %	D471	0 %	Pass

WATER VAPOR PERMEABILITY, 20 MILS (0.5 MM) DET	E96	6.4 Perms	Water Vapor Permeability, 20 mils (0.5 mm) DET
SOLAR PERFORMANCE			
SOLAR REFLECTANCE (INITIAL)	C1549	0.87	Pass
SOLAR REFLECTANCE (3 YEAR)	D7897-15, C1549	0.69	Pass
THERMAL EMITTANCE (INITIAL)	C1371	0.89	Pass
THERMAL EMITTANCE (3 YEAR)	D7897-15, C1371	0.90	Pass
SOLAR REFLECTIVITY INDEX (SRI) – (INITIAL)	E1980	110	Pass
SOLAR REFLECTIVITY INDEX (SRI) – (3 YEAR)	D7897-15, E1980	84	Pass

NOTE: GacoFlex S4200 (White) meets the cool roof requirements of California Title 24 and the International Energy Conservation Code.

G. PRODUCT INSTALLATION:

STEP	INSTRUCTIONS
MIXING	Mix properly prior to application to ensure uniform color and consistency.
THINNING	Thinning is not recommended under normal conditions.
SEALER	<u>FOR CONCRETE:</u> Apply GacoFlex™ E5691 Epoxy Primer/Sealer per instructions found on its Product Data Sheet (PDS).
APPLICATION	<p>Apply by brush or ¾ in (19 mm) nap woven roller as received. For spray application, consult GW-6-5 GacoFlex Spray Guide for important information regarding application via this method – available at Gaco.com. Do not apply if rain is expected within one (1) hour or ambient / substrate temperature is above 120 °F (48.8 °C). For applications where the building will be occupied during application and/or cure times, any HVAC units in the vicinity should be turned off during application and remain off until coating has cured sufficiently.</p> <p><u>SMOOTH SURFACES:</u> Apply one coat by brush or ¾ in (19 mm) nap woven roller at an approximate rate of 1.25 gal / 100 ft² (4.7 L / 9.3 m²) to achieve a minimum of 18 mils (0.45 mm) Dry Film Thickness (DFT). Coat all surfaces including expansion joint covers and flashings. Extra material is required at all edges and penetrations.</p> <p><u>GRANULATED / ROUGH SURFACES:</u> Apply one coat by brush or ¾ in (19 mm) nap woven roller at an approximate rate of 1.75 gal / 100 ft² (6.6 L / 9.3 m²) to achieve a minimum of 18 mils (0.45 mm) Dry Film Thickness (DFT). Coat all surfaces including expansion joint covers and flashings. Extra material is required at all edges and penetrations in addition to the overall increased application related to overall substrate roughness.</p>

	<p>NOTE: Application rate is job-specific and losses due to overspray, surface profile, and wind may occur. Additional material may be required to achieve a minimum of 18 mils (0.45 mm) Dry Film Thickness (DFT).</p> <p>NOTE: For Cold Weather application, ensure material is kept at least 65 °F (18.3 °C) or warmer prior to application and throughout the entire installation process. Do not proceed with application when ambient and/or substrate temperature is below 32 °F (0 °C).</p>
DRY TIME	Coating should be allowed to cure twenty-four (24) to forty-eight (48) hours, depending on temperature and humidity, before any light foot traffic is permitted.
CLEAN-UP	Clean application tools and equipment with GacoFlex T5135 Silicone Solvent. Recirculate through lines and gun until residual coating is removed. DO NOT USE WATER OR RECLAIMED SOLVENTS.

** For specific Safety and Health information please refer to the appropriate Safety Data Sheet that is associated with this product.*