GacoFlex™

Application Specification:

ASP-129-32-15
Revised: 05/2026

DIVISION 07 01 50.61:
GACOFLEX™ 129 SERIES ACRYLIC ROOF COATING FOR RESTORING MODIFIED BITUMEN AND SMOOTH BUILT-UP ROOFING SYSTEMS

PART 1 - GENERAL

1.1 SUMMARY

A. This specification provides a remedial roof coating for application over existing smooth and granule-surfaced modified bitumen and smooth built-up roofing membranes (BUR), including mineral surfaced cap sheets using GacoFlex 129 Series Acrylic Roof Coating. Application is restricted to circumstances in which the substrate is in sound condition but requires a renewal of the surface due to the normal effects of aging and use.

NOTE: THIS SPECIFICATION EXCLUDES GRAVEL-SURFACED BUILT-UP ROOF SUBSTRATES.

NOTE: Not intended for low-slope applications (< 2:12) or over surfaces prone to ponding water

B. This specification is intended only as a guide for the development of a project specification for the application of GacoFlex 129 Series Acrylic Roof Coating. The suitability of this specification for a project must be determined by a qualified representative of the owner.

Conditions to check and corrections to consider are:

1. The type of existing system must be identified.
2. All existing membranes must be fully adhered or mechanically attached and intact.
3. The structural decking must be sound.

C. Adhesion tests are strongly recommended prior to bidding, with special attention to determine if a primer is necessary given the condition of the existing substrate. A Coating Applicator that is licensed by the product manufacturer should perform wet and dry adhesion tests as instructed in GacoFlex General Instructions GW-1-3 Adhesion Testing Procedures using the products listed in Section 2.2.

1.2 RELATED SECTIONS

A. Cast-In-Place Concrete:	Division 03 30 00	**F. Vapor/Air Barriers:**	Division 07 25 00
B. Flashing/Sheet Metal:	Division 07 60 00	**G. Board Insulation:**	Division 07 22 00
C. Roof Accessories:	Division 07 72 00	**H. Skylights:**	Division 08 60 00
D. Rough Carpentry/Wood Blocking:	Division 06 10 00	**I. Metal Decking:**	Division 05 30 00
E. Drains, Vents and Penetrations:	Division 22 14 26.13		

1.3 SUBMITTALS

A. **PRODUCT DATA:**
Submit manufacturer's standard submittal package including specification, installation instructions, and general information for each waterproofing material.

B. **APPLICATOR QUALIFICATIONS:**
Submit current Letter of Good Standing from the specified waterproofing manufacturer.

C. **SUBSTRATE CONDITIONS:**

1. Applicator to present to owner a completed inspection report verifying substrate condition and any noted defects not specifically addressed regarding the installation of the coating.

2. Surface shall be free from loose dirt, stone, debris, moisture, and shall be in stable condition. Any work on the area to receive this application shall be completed prior to the installation of the coating.

3. Applicator shall complete a substrate inspection prior to the start of the installation of the coating. The architect/owner and Applicator shall accept the substrate. Start of the work constitutes acceptance.

1.4 QUALIFICATIONS

A. Primary waterproofing materials shall be the products of a single manufacturer. Secondary materials shall be recommended by the primary manufacturer. The manufacturer shall have a minimum of ten (10) years' experience in the manufacture of materials of this type.

B. Applicators shall have a minimum of five (5) years' experience in the application of waterproofing materials of the type specified. Applicator shall possess a current Letter of Good Standing from the specified waterproofing manufacturer.

C. **PRE-BID CONFERENCE:**
Ten (10) working days prior to the bid opening there is to be a mandatory Pre-Bid Conference. Those not attending the Pre-Bid Conference will not be allowed to bid the project. All products considered an equal to the specified product or any changes in the scope of work, installation, or specifications must be presented at the Pre-Bid Conference. If a change in the specifications is accepted, it will be considered as an alternate and will be presented as a bid addendum issued five (5) working days prior to the bid opening. No other changes to the specification or bid documents will be accepted.

D. Materials other than those specified shall be submitted to the architect/owner for approval no later than ten (10) days prior to the bid date. In requesting prior approval, it shall be necessary to submit:

1. A letter of certification, signed by an officer of the manufacturer, stating that the alternate material is equal to or better than the specified product.
2. Independent laboratory test data giving physical property values in comparison to the specified material.

E. **PRE-INSTALLATION CONFERENCE:**
Just prior to the commencement of the installation, meet at the jobsite with a representative of the coating manufacturer, Applicator, general contractor, architect, and other parties affected by this section. Review the methods and procedures, substrate conditions, scheduling, and safety.

1.5 DELIVERY, STORAGE AND HANDLING

A. Owner/owner's representative shall reject damaged or non-conforming materials. Rejected materials must be removed immediately from the job site.

B. Store the coating materials as recommended by the manufacturer and conforming to applicable safety regulatory agencies: town or city, state, and federal. Refer to all applicable data including, but not limited to: Safety Data Sheets, Product Data Sheets, product labels, and specific instructions for personal protection.

C. Provide adequate ventilation, protection from hazardous fumes, and overspray potential to workers and associated trades near of the site application.

1.6 WARRANTY

A. Manufacturer warrants that the material supplied will meet or exceed physical properties as published. The Applicator guarantees that workmanship will be free of defects in coating application. Since performance of previously applied coatings is beyond the control of Manufacturer and Applicator, requests for additional warranty coverage shall be subject to prior approval by Manufacturer.

B. **A TEN (10) YEAR LABOR AND MATERIAL WARRANTY MUST BE OBTAINED THROUGH THE MANUFACTURER.**

C. **PROTECTION OF BUILDING AND OCCUPANTS**:

1. All surfaces not to receive the coating specified shall be protected from overspray hazard, e.g., windows, doors, exterior surfaces and facades, parking lots, and vehicles. Protective coverings shall be secured against wind and shall be vented if used in conjunction with applications preventing collection and moisture.
2. Applicator to post signs noting potential overspray hazard within 400 ft (122 m) of applications.
3. All air intake ventilation equipment shall be turned off to prevent fumes from entering building.

4. Surfaces damaged during application shall be restored at no expense to the owner.
5. No smoking signs to be posted as mandated by local fire officials.

D. **SUBSTRATE:**
Proceed with work as specified only after substrate construction, preparation, and detail work has been completed.

E. **EQUIPMENT:**
All equipment used during operations shall be located so as not to adversely affect the daily operations or endanger occupants, structure, or materials on-site. All spray equipment must be grounded during operations.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

ACCEPTABLE MANUFACTURERS:
Gaco, www.gaco.com – Manufactured by Amrize Building Envelope LLC
Other brands manufactured by Amrize Building Envelope LLC as noted.

2.2 MATERIALS

A. **PRIMER:**
GacoFlex Acrylic Asphalt Primer

B. **FLASHING**:
1.) GacoFlex 133 Crack & Joint Extreme Acrylic Sealant
2.) GacoFlex 103 Crack & Joint Acrylic Sealant
3.) TieTex Polyester Fabric
C. 4.) ERSystems® H.E.R.

D. **ACRYLIC COATING:**
Meets the following minimum physical property specifications:

GacoFlex 129 Series | Acrylic Roof Coating		
PROPERTY	***VALUE***	***TEST METHOD***
TENSILE STRENGTH (1000 hours)	>= 200 psi (1.4 MPa)	ASTM D2370
ELONGATION AT BREAK (1000 hours)	255 %	ASTM D2370
SOLIDS	Weight: 68.0 % Volume: 53.0 %	ASTM D1644 ASTM D2697
VOC	< 50 g / L	EPA Method 24
REFLECTANCE (INITIAL)* **129 White*	0.83	C1549

PART 3 - EXECUTION

3.1 EXAMINATION

A. A moisture survey is strongly recommended to identify any wet roofing materials. All wet roofing materials must be removed and replaced prior to the coating application.

B. Repairs to the structural components of the roof should be complete.

C. Verify that drains, vents, ducts, gutters, metal cap flashing, or other penetrations have been replaced or modified as needed.

3.2 PREPARATION

NOTE: IT IS EXTREMELY IMPORTANT FOR THE ROOF TO BE CLEAN AND DRY.

A. Prepare the roof surface by high pressure washing with water at a pressure of 2,000 psi to 3,000 psi to remove dirt, miscellaneous soils, oily films, and the brown chalky residue, which develops on the surface of many smooth Modified Bitumen membranes over time.

NOTE: For previously coated asphalt substrates, please contact Technical Services for additional surface preparation requirements.

B. **BIOLOGICAL CONTROL:**
Areas of algae, mildew or fungus on the roofing membrane should be treated with a solution of 1-part household bleach to 3-parts water, followed by a rinse using clear water. After cleaning, examine the application area to determine that no ponding or standing water remains before applying the coating.

NOTE: WITH THE EXCEPTION OF CLEANING TO REMOVE BIOLOGICAL RESIDUE**, DO NOT WASH THE ASPHALT ROOFING SUBSTRATE – INCLUDING PRESSURE WASHING AND THE USE OF CLEANERS –** EXCEPT AT THE DIRECTION OF TECHNICAL SERVICES.

3.3 INSTALLATION

A. **TECHNICAL ADVICE:**
The installation of the GacoFlex 129 Series Acrylic Roof Coating will be accomplished with the advice of the manufacturer's technical representative. Contact Technical Services for assistance.

B. **REPAIRS:**

1. Inspect the roofing system for open field seams, open side laps, open flashings, or voids and perform repairs using granule surfaced APP membrane that is torch-applied, or heat fused, regardless of the existing asphalt membrane type. Fish mouths should be cut and allowed to lie flat prior to repair.
2. Areas of delaminated, warped, bowed, or saturated insulation must be removed down to the structural decking, replaced with compatible materials, and appropriately attached. The roofing membrane should be repaired using granule surfaced APP membrane that is torch-applied, or heat fused, regardless of the existing asphalt membrane type.
3. Repair or replace defective edge attachments or base tie-ins and wall or penetration flashings using granule surfaced APP membrane that is torch-applied, or heat fused, regardless of the existing asphalt membrane type.
4. Remove defective pitch pan filler, metal flashing sealants or termination caulking, and replace with appropriate materials.

   NOTE: Only torch-applied or heat fused granule surfaced APP membrane may be used for repairs to the asphalt roofing substrate prior to the installation of GacoFlex 129 Series Acrylic Roof Coating, regardless of the existing asphalt membrane type. Do not use SBS, smooth APP or self-adhering membranes. Do not use asphalt mastics or cold adhesives as part of remedial roof repairs. If torch-applied or heat fused granule surfaced APP membrane is used for repairs , these areas need to receive two coats of GacoFlex Acrylic Asphalt Primer applied at 1.0 gallon per 100 square feet with an overnight cure between coats.

C. **AT ALL FLASHING SEAMS, CORNERS, AND VERTICAL/SIDE LAPS, CHOOSE ONE OF THE FOLLOWING:**

1. Over all seams and laps apply GacoFlex 133 or GacoFlex 103 at a minimum rate of 4 in (102 mm) wide, crested and centered at the seam, with a minimum thickness at the center of 64 wet mils (approx. 70 LF / gal (22 LM / 3.8 L)). Allow to cure for 4-6 hours (longer in overcast or low humidity conditions) before proceeding to the next step of installation.

   NOTE: Refer to manufacturer's product instructions and/or data sheet for important information regarding drying times and other important factors to consider regarding application.

D. **ROOF EQUIPMENT (HVAC / SLEEPERS)**:
FOR EXISTING HVAC UNITS AND OTHER EQUIPMENT ON CURBS WITH A FLASHING: The flashing must be coated up to the bottom of the metal cap of the unit and sealed underneath with a roof system compatible sealant. Curbs must be a minimum of 8 in (203 mm) above the roofing substrate. Any units that

are sitting on 4 in (102 mm) x 4 in (102 mm) wooden sleepers will be lifted so that the substrate underneath the units can be cleaned, primed (when required due to unsuccessful adhesion test) and coated following application instructions within this document. An approved slip sheet shall be placed under the sleepers to protect the coating system. If the units are not lifted off the deck to be able to accomplish this procedure, the untreated area will be excluded from the warranty.

E. **ACRYLIC COATING:**

PRIME COAT:
GacoFlex 121 Acrylic Asphalt Primer is applied to the properly prepared surface at the rate of 1.0 gallon (3.8 liters) per 100 square feet. **Back rolling will assist in acquiring a uniform membrane thickness.** Allow to dry for a minimum of 6 hours (at 75 ºF (24 °C) and 50% RH). Apply GacoFlex 129 Series Acrylic Roof Coating within 72 hours.

BASE COAT:
Apply GacoFlex 129 Series Acrylic Roof Coating at the average rate of 1.5 gal / 100 ft² (5.7 L / 9.25 m²) to obtain 242mil Wet Film Thickness (WFT) / 12 mil Dry Film Thickness (DFT). Do not apply at an application rate greater than 1.5 gal / 100 ft² (5.7 L / 9.25 m²). GacoFlex 129 Series Acrylic Roof Coating may be applied with a 3/8 in (10 mm) nap roller, brush, or airless sprayer. Coat all surfaces including expansion joint covers and flashings. At all edges and penetrations, an extra coat must be applied. Allow appropriate drying time as adjusted for environmental conditions (see note below). If roof temperature exceeds 100 ºF (38 °C), a light mist of water may be used to increase working time.

FIRST TOPCOAT:
Apply GacoFlex 129 Series Acrylic Roof Coating at the average rate of 1.5 gal / 100 ft² (5.7 L / 9.25 m²) to obtain 24 mil Wet Film Thickness (WFT) / 12 mil Dry Film Thickness (DFT). Do not apply at an application rate greater than 1.5 gal / 100 ft² (4.7 L / 9.25 m²). GacoFlex 129 Series Acrylic Roof Coating may be applied with a 3/8 in (10 mm) nap roller, brush, or airless sprayer. Coat all surfaces including expansion joint covers and flashings. At all edges and penetrations, an extra coat must be applied. Allow appropriate drying time as adjusted for environmental conditions (see note below). If roof temperature exceeds 100 ºF (38 °C), a light mist of water may be used to increase working time.

SECOND TOPCOAT:
Apply GacoFlex 129 Series Acrylic Roof Coating at the average rate of 1.0 gal / 100 ft² (3.8 L / 9.25 m²) to obtain 16 mil Wet Film Thickness (WFT) / 8 mil Dry Film Thickness (DFT). Do not apply at an application rate greater than 1.5 gal / 100 ft² (4.7 L / 9.25 m²). GacoFlex 129 Series Acrylic Roof Coating may be applied with a 3/8 in (10 mm) nap roller, brush, or airless sprayer. Coat all surfaces including expansion joint covers and flashings. At all edges and penetrations, an extra coat must be applied. Allow appropriate drying time as adjusted for environmental conditions (see note below). If roof temperature exceeds 100 ºF (38 °C), a light mist of water may be used to increase working time.

NOTE: Granule Application (optional): Granules may be placed into the finish coat to produce a tougher, more durable and weather resistant surface. Embed 30-40 lbs. of No. 11 Roofing Granules into a tack coat of 1/2 gallon (1.89 liters) per 100 square feet of GacoFlex 129 finish coat.

NOTE: MINIMUM DRY TIME PER COAT IS 4 – 6 HOURS AT 75 ºF (24 °C) AND 50% RH. Longer dry times are needed in lower temperatures or higher humidity conditions. Do not apply GacoFlex 129 Series Acrylic Roof Coating when precipitation or heavy dew is expected within 4 hours (6-8 hours in high humidity conditions). Apply product in the morning to allow for maximum dry time during daylight hours.

NOTE: ADDITIONAL COATS OF MATERIAL MAY BE REQUIRED OVER ROUGH OR GRANULAR SURFACES TO ACHIEVE THE OVERALL MINIMUM DRY FILM THICKNESS (DFT) REQUIREMENT. Modified bitumen and built-up roofs have varying degrees of cracks in the surface of the asphalt and bleed out at the seams. With this application it is highly recommended that a test patch be installed to determine how much coating will be needed because asphalt roof surface profiles vary due to weathering and other factors. Applications that do not meet the minimum DFT will not be eligible for coverage under the labor and material warranty provided by product manufacturer.

NOTE: FOR USE OF AIRLESS SPRAYERS: General recommendation of 2,000 – 3,000 psi (13.8 MPa – 20.7 MPa) at the gun tip, 1.0 –3.0 gal / min (3.8 L – 11.4 L / min) flow rate, and tip sizes ranging from 0.025 – 0.040 in (0.64 – 1 mm). Larger spray units will allow for longer hoses on larger jobs. Contact Technical Services if further assistance is required in determining the optimal equipment for project-specific requirements.

3.4 FIELD QUALITY CONTROL

A. Any variations from the specified limits found by the Applicator or owner's representative shall be corrected by the Applicator.

B. **MINIMUM DRY FILM THICKNESS (DFT) REQUIREMENT:**
Gaco recommends adding a 10% variance factor to obtain the minimum DFT mil thickness required. It is the Applicator's responsibility to calculate the amount of coating needed to obtain the minimum DFT mil thickness.

C. No traffic shall be permitted on the coated surface for a minimum of three (3) days. Damage to the surface by other trades shall not be the responsibility of the Applicator.