

Section : 7120
GACOFLEX URETHANE ALIPHATIC COATING SYSTEM
PLYWOOD OR CONCRETE ROOFS

PART 1 - GENERAL

1.1 SUMMARY

- A. Note to Architects and Engineers: This specification covers the construction of an elastomeric, waterproof and weather resistant surface suitable for plywood or concrete roofs.
- B. This application specification is prepared in a brief form so that it can be incorporated in the roofing section of a building specification. It is necessary only to make the selections indicated to complete the specification.
- C. Pre-Bid Conference: 10 working days prior to bid opening there is to be a mandatory Pre-Bid Conference. Anyone 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 amendment issued 5 working days prior to the bid opening. No other changes to specification or bid documents will be accepted.

1.2 RELATED SECTIONS

- A. Flashing and Sheet Metal: Section 07600
- B. Drains, Vents, and Penetrations: Section 07700

1.3 SUBMITTALS

- A. Product Data: Submit manufacturers standard submittal package including specification, installation instructions, and general information for each waterproofing material.
- B. Applicator Qualifications: Submit current "Qualified Applicator" certificate from the specified waterproofing manufacturer.

1.4 QUALIFICATIONS

- A. Primary waterproofing materials shall be products of a single manufacturer. Secondary materials shall be recommended by the primary manufacturer. Manufacturer shall have a minimum of 10 years experience in the manufacture of materials of this type.
- B. Applicators shall have a minimum of 5 years experience in the application of waterproofing materials of the type specified. Applicator shall possess a current "Qualified Applicator" certificate from the specified waterproofing manufacturer.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Store all coating materials in the original unopened containers at 50° - 80°F (10° - 27°C) until ready for use.
- B. Follow the special handling or storage requirements of the manufacturer for cold weather, hot weather, etc.
- C. Safety: Refer to all applicable data, including, but not limited to MSDS sheets, PDS sheets, Product labels, specific instructions for specific personal protection requirements.
- D. Ventilation: Provide adequate ventilation to prevent the accumulation of hazardous fumes during application.

- E. Environmental requirements: Proceed with work of this section only when existing and forecasted weather conditions will permit the application to be performed in accordance with the manufacturer's recommendations.

1.6 WARRANTY

- A. Gaco Western guarantees that the material supplied will meet or exceed physical properties as published.
- B. The contractor shall guarantee that all work performed will be free from defects in materials and workmanship. Upon notice of defect in writing to the contractor within one year after completion of work, the contractor shall, at his own expense, make necessary repairs or replacements of the defective work in question.
- C. A 5-year joint warranty is available with this system provided a Gaco Western Qualified Applicator has installed it. Application for warranty must be made prior to start of the job.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- Acceptable Manufacturers:
Gaco Western, Inc.

2.2 MATERIALS

- A. Expansion Joint Covers: Where called for on drawings, expansion joint covers will be GacoFlex Neoprene Sheet, 1/16" (1.6 mm) thick, using GacoFlex N-1207 Neoprene Adhesive, in a width of _____ (to be stated in the published specification. If none stated, bids will be based on 12" (30 cm)). Apply in accordance with Gaco Western's General Instructions Installation Details.
- B. Elastomeric Roof Coating Material:
1. Urethane Base Coat: GacoFlex UB-64 two component urethane base coat.
 2. Urethane Top Coat: GacoFlex UA-60 two component aliphatic urethane top coat.
- C. Primers: Prime concrete with E-5320 primer. Prime steel, aluminum and ferrous metals with E-5320. Prime copper and copper alloys with U-5677. Prime synthetic surfaces with E-5320.
- D. Other Materials: Thinner and cleaner, reinforcing materials, caulking and flashing compounds as required shall be supplied or approved by Gaco Western, Inc.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that substrate is ready to receive work; surface is clean, dry and free of substances that could affect bond.
- B. Surfaces shall be dry and free from grease, oil, paint, asphalt, projections, depressions, loose scale, sand, curing compounds, and other foreign deposits. Construction work on the roof shall be completed with drains, ducts and other roof penetrations installed.
- C. After the concrete has cured, the deck shall be allowed to dry for two to four weeks before coating. If rain occurs after the drying period and prior to application of the primer, allow at least two days of good drying weather. Work will not be started when precipitation threatens or when the temperature is under 40°F (4°C).
- D. Verify that all other work involved with this area, done under other sections, has been completed and accepted by the architect and general contractor prior to starting the waterproofing application.

3.2 PREPARATION

- A. Clean substrate to remove any and all surface contaminants. Refer to Gaco Western's General Instructions GW-1-1 (formerly GW-1, 1B), Surface Preparation.
- B. Mask off all adjoining areas that are not to receive the fluid applied waterproofing.
- C. Provide a suitable workstation to mix the coating materials.

3.3 INSTALLATION

- A. Technical Advice: The installation of this waterproofing membrane shall be accomplished in the presence of, or with the advice of the manufacturer's technical representative. Contact the nearest regional office for assistance.
- B. Concrete Primer/Sealer: Prime entire deck surface and all vertical or sloping surfaces of curbs, cants, parapets, etc., which are to receive coatings with one coat GacoFlex U-5677 Sealer at a rate of one gallon per 300 square feet (3.8 L / 30 m²). Allow drying a minimum of 1 hour and no more than 72 hours before applying sealer coat.

Apply one coat of GacoFlex E-5320 by roller at the rate of ½ gallon per 100 square feet (2 L / 10 m²). Allow drying a minimum of 24 hours. For maximum solvent resistance, see drying time directed in Gaco Western's General Instructions GW-2-2 (formerly GW-1 Section II).

Note: Plywood does not require a primer.

- C. Taping: Apply UB-64 base coat by brush in a five to six inch wide stripe coat centered over all joints, cracks and changes of plane to be taped. While this coat is still tacky, unroll 66B tape into the coating and apply a coat of UB-64 over the tape, smoothing out wrinkles and fishmouths. Allow to cure a minimum of 1-1/2 hours before proceeding to next step. On plywood substrates, taping application will require approximately 1/3 gallon per 100 square feet (1.3L/10m²) of UB-64 base coat .

- D. Elastomeric Base Coating: Apply 2 coats of GacoFlex UB-64 base coat at a rate of 1 gallon per 100 square feet per coat (3.8L/10m²) (16 wet mils (.4 mm)) to achieve a nominal film thickness of 24 total dry mils (20 mils minimum (.5 mm)).

- E. Elastomeric Top Coating: Apply one coat of GacoFlex UA-60 top coat at a rate of 1 gallon per 100 square feet (3.8L/10m²) (16 wet mils (.4 mm)) to achieve a nominal thickness of 12 dry mils (.3 mm)(10 mils minimum).

- F. Traffic Access: No traffic shall be permitted on the coated roof surface for a minimum of 3 days. Damage to the surface by other trades shall not be the responsibility of the roofing contractor.

3.4 FIELD QUALITY CONTROL

- A. The contractor for work under this section shall maintain a quality control program specifically to verify compliance with this specification. A daily log shall be kept to record actions in the field.

- B. Inspections: A minimum of three (Substrate, Application and Final) inspections, by an approved manufacturers representative, will be required on all projects requiring a warranty.

- C. Thickness: The thickness of the coating shall measure a minimum of 30 dry mils (.8 mm) with an average of 32 dry mils (.8 mm). Rough texture of the substrate which increases surface profile will require proportional increases in coating to maintain average dry film thickness.