

# Gaco Western

S I N C E 1 9 5 5

## General Instructions:

**GW-3-5**  
**August 2015**

### GacoFlex U61 Application Instructions

GacoFlex U61 is a 1:1 ratio dual component polyurea/polyaspartic hybrid liquid-applied elastomer. This consists of a pigmented POLY (polyaspartic ester and polyetheramine) component and slightly opaque ISO (isocyanate) component. When properly combined and applied they cure to form tough, high-strength membranes. These instructions cover the use of rapid cure materials. The use of standard cure materials is covered in GW-3-3 and applicable Product Data Sheets.

The GacoFlex Quick Return to Service Deck (GacoQRSDeck) Systems were developed with products designed to allow a very fast return to service. Under ideal conditions this can be as fast 12 hours for foot traffic and 24 hours for vehicular traffic. This system requires rapid cure materials and careful planning and job coordination by the contractor.

#### Sample Application Rates

GacoFlex Product	Vehicular	Pedestrian
E5990	8 mils (0.5 gallons/100 ft <sup>2</sup> )	8 mils (0.5 gallons/100 ft <sup>2</sup> )
U61	20 mils WFT (1.25 gallons/100 ft <sup>2</sup> )	12 mils WFT (0.75 gallons/100 ft <sup>2</sup> )
Gacoshell Granules	4-6 pounds per 100 ft <sup>2</sup>	4-6 pounds per 100 ft <sup>2</sup>
U61	20 mils WFT (1.25 gallons/100 ft <sup>2</sup> )	12 mils WFT (0.75 gallons/100 ft <sup>2</sup> )

#### Notes:

1. Rates are determined by using undiluted material. If material is thinned WFT must be increased by the same amount.
2. Actual application rates should be based on job specific specifications.

#### A. MIXING

- 1) The following tools/equipment are required:
  - i) Polyethylene/polypropylene mixing buckets with markings
  - ii) Jiffy type mixers
  - iii) Power mixer ½" Chuck min.
  - iv) Stopwatch
  - v) Stir sticks/scrapers
  - vi) Notched and Flat squeegee
  - vii) 18" roller and heavy duty frame
  - viii) Roller covers oil based 3/8" nap
  - ix) Chip brushes
  - x) Proper PPE (nitrile gloves, respirators etc)
  - xi) Coatings spikes for boots
  - xii) Other paint sundries as needed

**Note:** GacoFlex U61 cures rapidly. Cleaning of roller covers and brushes is usually impractical. Applicators should have extra roller covers and brushes on hand and ready for use

- 2) Prepare the surface using the instructions on the E5990 PDS.
- 3) Partial containers of GacoFlex U61 ISO cannot be stored longer than one or two days as exposure to atmospheric moisture induces cure. When repackaged into smaller containers with minimal exposure to air, leftover ISO may be usable for up to several weeks. Keep ISO containers covered whenever possible.
- 4) GacoFlex U61 POLY contains color pigments and requires thorough mixing for 3-5 minutes to suspend pigment prior to mixing equal volumes of POLY and ISO. Care must be taken to scrape sides of container periodically. Polyethylene or polypropylene mixing containers are recommended because they allow material that has cured to be easily removed.
- 5) Pour equal volumes of both POLY and ISO into different measuring containers. Before pouring components together make sure the substrate is properly prepped and you have all required equipment is ready.
- 6) Pour pre-measured ISO into a separate larger container and fully empty its contents using a scraper. Pour pre-measured POLY into ISO and use scraper to ensure full amount of POLY is put into the larger container. Take care to clean scraper on each component bucket and not on the mixing pail as this can lead to unequal ratios.
- 7) Start timing with stop watch when the power mixer begins mixing. Take extra care to make sure that sides are fully drawn into the vortex. This is when 10% of GacoFlex T5110 may be added if necessary. Mix for exactly 1 minute. Mixture is now ready for application.

## B. APPLICATION OF BASE COAT WITH GRANULES

- 1) Prior to the application it is necessary to perform a dry run of installation to ensure all applicators and equipment are ready and accessible. This requirement is in place due to the rapid cure of the GacoFlex U61. During this dry run have the assigned applicators perform their task and demonstrate the timeline required for each task. This will allow everyone to understand the timing required for successful application of this rapid cure product.
- 2) After installation of GacoFlex E5990 and 66B/NF621 tape as specified, it is recommended to grid the area to manage the job. Grid dimensions should be 10' x 10' or 100 sq. ft. This is used to check proper application rate (gallons/square).
  - a. **Note:** Do not install U61 when temperature is within 5° F of dew point as this can lead to adhesion issues.
- 3) For detail work mix a batch (less than 0.5 gallon combined) of GacoFlex U61 that has been thinned a minimum of 10% with GacoFlex T5110 compliant solvent. This will be used to cut in edges and detail work. Workflow should be managed to ensure that the coating maintains a wet edge between batches. Prior to any application of coating a dry run should be completed.
- 4) Apply base coat of GacoFlex U61 at appropriate rates for either vehicular or pedestrian uses (see table).
  - a. Mix only enough product for 100 sq. ft. following the mixing instructions outlined above. It is not recommended to mix more than 2 total gallons due to the rapid cure of this product.
    - i. Empty the entire contents onto the substrate to form large pool within designated grid.
    - ii. Pull the coating with the notched squeegee until evenly spread.
    - iii. Backroll quickly to knock down high areas to ensure coating uniformity. Apply GacoFlex U61 in a uniform thickness without skips or holidays.
    - iv. Check installed material with a wet mil gauge to confirm required film thickness is achieved.
  - b. It is important to establish a continuous process to ensure that a wet edge is maintained to tie in to subsequent grids.
  - c. Extend each coat over cants and up vertical surfaces of pads, curbs, walls and parapets. The top of curbs and equipment pads shall be similarly coated. In the case of walls and parapets, extend coating to the point where counter flashings enter the masonry. Where no counter flashing is specified, hold the base coats just short of the termination line at edge of deck to avoid seeping under masking tape or spilling on adjacent unprotected surfaces.

- 5) If the entire coat cannot be completed without interruption and a tie in is necessary consult Gaco Western Representative.
- 6) Better films are usually produced with less entrapped air so take steps to minimize air introduction and entrapment.
- 7) Apply GacoShell Granules
  - a. Carefully monitor coating cure to ensure proper timing for the application of GacoShell Granules. **WARNING:** Failure to monitor coating cure will result in a missed application window and will not allow the acceptance of GacoShell.
  - b. Coating will draw a string when touched with a gloved finger (between 2-10 minutes after application). This indicates coating is ready to accept granules.
  - c. Broadcast GacoShell immediately by throwing aggregate high into the air for even distribution in the coating. Do not apply GacoShell if GacoFlex U61 has progressed past tack free time. If this occurs call a Gaco Western Representative before proceeding.
- 8) Allow base coat with GacoShell to cure sufficiently for foot traffic before applying additional GacoFlex U61 coating. This level of cure can be developed in two to four hours. Longer times may be required depending on environmental conditions, temperatures and amount of thinner used.

### C. TOP COAT APPLICATION

- a. Apply topcoat of GacoFlex U61 at appropriate rates for either vehicular or pedestrian uses (see table).
  - i. Prior to application of topcoats, prep area by removing any loose GacoShell with mechanical blowers or brooms.
  - ii. Inspect for damage prior to the application of topcoat. Any surface damage must be repaired by re-flashing, re-taping and replacing of base coat so that a continuous membrane in substantially uniform thickness covers the entire surface prior to topcoat application.
  - iii. Mix only enough product for 100 sq. ft. following the mixing instructions outlined above. It is not recommended to mix more than 2 total gallons due to the rapid cure of this product.
  - iv. Empty the entire contents onto the substrate to form large pool within designated grid.
  - v. Pull the coating with a flat squeegee until evenly spread.
  - vi. Backroll quickly to knock down high areas to ensure coating uniformity. Apply GacoFlex U61 in a uniform thickness without skips or holidays.
  - vii. Check installed material with a wet mil gauge to confirm required film thickness is achieved.
  - viii. It is important to establish a continuous process to ensure that a wet edge is maintained to tie in to subsequent grids.
  - ix. Remove masking tape at edges of coating area when wet. By removing the tape while the coating is wet, it will not be necessary to cut it off to avoid damage to the edge of the coating. Any seepage under the tape on rough surfaces can be wiped off with thinner while wet.
  - x. While careful color matching procedures are used, different batches of polyurethane may vary slightly in hue. This variation will be too slight to be perceptible if changes are made at natural breaks in the surface. Inter-mixing of batches may be necessary or desirable to assure consistency in topcoat color.
- (1) Extend each coat over cants and up vertical surfaces of pads, curbs, walls and parapets. The top of curbs and equipment pads shall be similarly coated. In the case of walls and parapets, extend coating to the point where counterflashings enter the masonry.

If the entire coat cannot be completed without interruption and a tie in is necessary consult Gaco Western Representative.

**NOTE:** Be aware the recoating window for GacoFlex U61 is up to 48 hours. Contact Gaco Western Technical Department if recoat time will be longer than 48 hours.

**D. COLD WEATHER APPLICATION**

During cold weather, special precautions must be taken in applying GacoFlex U61. The coating should not be applied to surfaces 40° F (4° C) or colder. Store materials above 65° F (18° C) prior to use.

*Observe cautions on the label about frozen components.* Examine both POLY and ISO for graininess. If graininess is observed warm the entire contents of the container to 65° F (18° C) or higher, and mix until smooth.

**E. HOT WEATHER APPLICATION**

Product workability and cure time are provided for materials at 75° F (24° C). At temperatures above 75° F (24° C) workability and cure time will decrease proportionately as temperature increases. Caution must be used when applying product onto substrates over 85° F (29° C). Do not apply when substrate is over 105° F (41° C). Store materials out of direct sun.

**F. CLEAN UP**

Clean up tools and equipment with GacoFlex T5110 or acetone.