

Since 1955

GACO WESTERN

Application Specification:

GW-13-GC
July 2011
Supersedes 6/09

SECTION 07120: GACO WESTERN GACOCRETE ACRYLIC MODIFIED TOPPING

PART 1 - GENERAL

1.1 DESCRIPTION

- A. GacoCrete cementitious topping is a quick curing acrylic latex modified overlay system that provides a hard durable substrate suitable for the application of most GacoFlex coating systems. When added to locally obtained sand and cement, GacoFlex A-17 acrylic polymer adds strength, adhesion, flexibility and toughness to the GacoCrete System.
- B. GacoCrete is effectively used over structurally sound concrete to repair a damaged or worn surface or enhance slope to drain. GacoCrete is also used with mechanically fastened fiberglass scrim over plywood or other structural wood products to cover a substandard or weathered surface. GacoCrete is recommended to overlay existing coatings which are unknown or in poor condition prior to the application of a GacoFlex coating system.

1.2 RELATED SECTIONS

- A. Cast-In-Place Concrete: Section 03300
- B. Flashing and Sheet Metal: Section 07600
- C. Drains, Vents, and Penetrations: Section 07700

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 "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 manufacturer 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.
- C. Pre-Bid Conference: Ten 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

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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.

- D. Pre-Installation Conference: Just prior to commencement of the fluid application waterproofing system, meet at the site with a representative of the coating manufacturer, the waterproofing contractor, the general contractor, the architect and other parties affected by this section. Review methods and procedures, substrate conditions, scheduling, and safety.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Protect GacoFlex A-17 acrylic polymer modifier from freezing. Store cement and sand away from moisture.
- B. Avoid breathing dust from sand or cement. Refer to safety precautions on container or manufacturer's MSDS.
- C. Application temperatures must be above 50°F (10°C). Application must be protected from moisture or rain for 24 hours.

PART 2 – PRODUCTS

2.1 MANUFACTURERS

Acceptable Manufacturers:
Gaco Western

2.2 MATERIALS

- A. GacoFlex scrim is a woven 3/8" x 3/8" fiberglass mesh weighing 4 ½ ounces per sq. yd. It is supplied in rolls 48 inches wide by 100 feet in length.
- B. GacoFlex A-17 is an elastomeric, water borne acrylic which adds strength, adhesion and toughness to cementitious materials.
- C. Type I cement is commonly available in 96 pound bags (Cement marked Type I & II is also acceptable).
- D. Clean washed and graded silica sand is available in 100 pound bags.
- E. GacoCrete requires a primer sealer system prior to the application of any GacoFlex system.

2.3 MIXES

- A. GacoCrete is most effectively mixed in batches of approximately 3 ½ gallons each. Coverage for each batch will vary depending upon the thickness desired and filling or leveling requirements. A 3 ½ gallon batch will result in 80 square feet coverage at 62 mils (1 1/16 inch) or 20 square feet at 250 mils (1/4 inch).
- B. Material requirements per batch:
30 lbs 40 to 50 mesh sand (9 quarts)
15 lbs. Type I Portland cement (6quarts)
4 pints GacoCrete A-17 latex
4 pints water
- C. Combine sand and cement, mixing thoroughly to prevent lumps. Blend water and acrylic latex together in equal volumes then add to mix as needed to produce a thin mortar consistency. Start with approximately 6 pints A-17 / water blend and add more liquid as needed. Allow the GacoCrete to slake for 5 minutes, then remix. If mortar is too thick to place, add small amounts of A-17 blend to achieve desired consistency. NOTE: Once GacoCrete is mixed it has a pot life of 4 hours at 70°F (21°C.) Higher temperatures will shorten pot life accordingly. Do not add water or A-17 blend after initial mixing, as this will weaken and may cause cracking in the GacoCrete.
- D. Application temperatures must be above 50°F (10°C). Application must be protected from moisture or rain for 24 hours.

PART 3 - EXECUTION

3.1 EXAMINATION

Plywood to be covered must be structurally sound, properly fastened and free of rot, splinters or chips and without plywood delaminations (See GW-2-3). When overlaying previously coated wood, remove blisters and loose material. GacoCrete relies on mechanical fasteners for attachment when applied over existing coating and is not recommended over coated concrete.

Concrete must be clean and free of curing compounds or sealers. Existing coatings on concrete must be removed before application of GacoCrete. Grinding, scarification, shot blasting and hydro blasting have found to be effective for this purpose.

3.2 PREPARATION

- A. Clean substrate to remove all surface compounds, sealers and contaminates.
- B. Provide a suitable work station to mix the coating materials.

3.3 INSTALLATION ON WOOD SURFACES

- A. Position scrim at deck edge and stretch to eliminate wrinkles. Fasten with 3/8 inch galvanized or stainless steel staples 4" on center. Overlap subsequent passes 3" and continue stapling pattern.
- B. Scrim coat: Apply GacoCrete with a 12 inch to 16 inch long steel finishing trowel. Hold trowel at a 15 degree angle from the surface and using a semicircular or arching motion. Screed mixture evenly to insure GacoCrete completely fills scrim mesh and covers the scrim itself. Make a second trowel pass with the trowel nearly flat and with downward pressure to create a smooth finish. Some slight trowel marks are inevitable in the scrim coat and they can be addressed with the finish coat. Coverage will be approximately 80 square feet per standard batch. Allow to dry thoroughly. This may be as little as one hour in direct sun or as long as overnight under minimal drying conditions or interior applications.
- C. Finish coat: Make sure first coat is clean and dry. Remove any trowel ridges in scrim coat by scraping with a trowel edge. Sweep and vacuum surface to remove debris. Spread GacoCrete in passes using smooth and even trowel pressure to create a smooth finish. Coverage will be approximately 120 square feet per batch. It is necessary to dampen the surface of the first coat immediately before placing finish coat material. Use a fine water mist from a pressure tank garden sprayer, taking care not to puddle water. Additional water is sprayed into pass line while troweling in order to eliminate ridging at laps.
- D. Drying and Curing: GacoCrete relies upon both hydration of cement and coalescing of the latex modifier to achieve full strength and cure. Satisfactory performance requires that GacoCrete is cured and dry before application of the coating system. Allow two to three days drying time under good weather conditions. Cool or wet weather will increase drying time.

3.4 INSTALLATION ON CONCRETE SURFACES

- A. GacoCrete can be applied to sound structural concrete in lifts of 1/4 inch to 1 inch or slightly over. When the application thickness approaches 1 inch, the mesh must be embedded in the middle of the GacoCrete installation. Consult with Gaco Western for alternative systems. Use a level or string screed lines when needed to establish slope to drain.
- B. Prime clean and dry concrete with A-17 / water blend prior to applying GacoCrete. Entire surface should be primed and allowed to dry.

3.5 PRIMER/ SEALER OVER CURED GACOCRETE

- A. 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 (3.78 L / 27.9 m²). Allow drying a minimum of 1 hour and no more than 24 hours before applying sealer coat. All applications of U-5677 are to be top coated with either E-5320, or other GacoFlex UV-stable coatings prior to sunset the same day. High-humidity areas accelerate the rate of cure of U-5677 and can cause poor intercoat adhesion if left without a top coat. After 24 hours intercoat adhesion can be poor.
- B. Apply one coat of GacoFlex E-5320 by roller at the rate of ½ gallon per 100 square feet (1.89 L / 9.3 m²). Allow drying a minimum of 24 hours. For maximum solvent resistance, see drying time directions in Gaco Western's General Instructions GW-2-2.

Alternative Concrete Primer/Sealer: Apply one coat of GacoFlex E-5511 to all surfaces to receive the fluid applied waterproofing, except areas previously caulked, flashed or fabric reinforced. Apply at a rate of one gallon per 150 sq. ft. (3.78 L / 13.9 m²) and allow curing at least 6 hours, but no more than 24 hours before applying the basecoat.