

# Gaco Western

S I N C E 1 9 5 5

## General Instructions:

GW-2-2

August 2013

Supersedes 07/09

### PRIMING

Gaco Western elastomeric coatings frequently require a primer. The preferred primer varies with the substrate and conditions as described below. Guide specifications explain specific primer requirements. Product Data Sheets contain application instructions and precautions for each product.

Gaco Western has many different types of specifications for the roofing and waterproofing industry. As a general guide the following methods of priming the various substrates are recommended.

#### A. CONCRETE

**1. Sealing Exterior Concrete:** Most concrete has surface porosity that is caused by several factors; among them water content, drying rate, aggregate type, and trowelling action. When elastomeric coatings are applied over concrete, there is a risk that blisters will form from out-gassing through surface pores. This risk is virtually eliminated by the use of a sealer-primer system.

The GacoFlex sealer-primer system should be applied on all light weight structural concrete and dense aggregate structural concrete which might be exposed to sunlight during a coating application,

Prime the entire deck surface and all vertical or sloping surfaces of curbs, cants, parapets, etc. which are to receive a roof coating with one coat of GacoFlex U-5677 Concrete Sealer by roller or spray. The coverage rate is 1/3 gallon per 100 square feet (1.3L/10m<sup>2</sup>). Allow the sealer to dry a minimum of one hour. Do not allow GacoFlex U-5677 Concrete Sealer to sit overnight without being coated.

Apply one coat of GacoFlex E-5320 Primer at the rate of 1/2 gallon per 100 square feet (2L/10m<sup>2</sup>). The most efficient sealing is obtained when GacoFlex E-5320 Primer is applied late in the day when temperatures are decreasing. GacoFlex E-5320 Primer is a two-component water based epoxy. Both components must be thoroughly mixed separately for 3 to 5 minutes. Place the "B" component in an empty pail. Then add the "A" component for 3 to 5 minutes. The pot life is 1 1/2 hours at 75°F (24°C). This can be extended to two hours by thinning with water to achieve the original consistency. Pot life at 55°F (13°C) is double, but at 100°F (38°C) it is reduced to forty-five minutes. GacoFlex E-5320 Primer can be applied to surfaces with temperatures up to 110°F. The normal minimum surface temperature for application of GacoFlex E-5320 Primer is 50°F (13°C).

*Alternative Concrete Primer/Sealer:* Apply one coat of GacoFlex 5511 Primer 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. (3.78L/15m<sup>2</sup>) and allow it to cure for at least 6 hours, but no more than 3 days before applying the basecoat.

Surface temperature is more important than air temperature. When the surface is cooler than 50°F (13°C) DO NOT apply the sealer primer system unless special instructions are received from Gaco Western LLC.

Cure should be verified as follows: When the daily maximum surface temperature is at or near its peak, apply regular thinner to a sealed surface. Let the area soak for three to five minutes, then scrape with a dull knife or spatula. Scrape from a dry area into the wet area. If softening in the wet area is noted, additional cure time is needed. Softening in the area that has solvent is most easily detected by a change in the sound of the knife as it passes from the dry area to the wet area.

**2. Interior Concrete:** On dense aggregate concrete used for interior construction or exterior areas which are not exposed to sunlight, GacoFlex U-5677 Sealer and GacoFlex E-5320 Primer can be used.

*Alternative Concrete Primer/Sealer:* Gaco Western's Zero VOC 100% solids, two-component epoxy E-5511 Primer.

Prime the entire deck surface and all vertical or sloping surfaces of curbs, cents, parapets, etc., which are to receive coatings, with one liberal coat of primer applied by roller or spray. Sufficient quantity shall be used to flow into all remaining holes and cracks in the surface of the slab. Allow a minimum drying time of two hours. The coverage rate is 1/2 gallon of primer per square (2L/10m<sup>2</sup>).

**3. Concrete Block:** To fill and prime concrete block, use Gaco Western GacoFlex E-5320 Primer two-component water based epoxy.

Mix one volume of component "A" with one volume of component "B". Mix thoroughly. Power mixing is recommended for quantities over two gallons (7 liters). The pot life is 1 1/2 hours at 75°F (24°C). This can be extended to 2 hours by thinning with water to achieve the original consistency. Pot life at 55°F (13°C) is doubled, but at 100°F (38°C) it is reduced to 45 minutes. Use long nap (1" to 1 1/4") (3cm to 3.2cm) roller covers when filling porous concrete. If blow holes form as the primer dries, do a second pass with a relatively dry roller. Allow five to ten minutes between passes. Hypalon and polyurethane coatings can be applied over GacoFlex E-5320 Primer as soon as it is thoroughly set. This degree of dryness is normally achieved in two to three hours. GacoFlex NF-621 Neoprene Sheet Flashing should not be applied directly to GacoFlex E-5320 Primer until it has cured over night.

## B. WOOD

GacoFlex NF-621 Neoprene Sheet Flashing and GacoFlex E-5320 Primer are self-priming when applied to new wood construction. Soiled or weather checked wood requires that the first coat be thinned with the appropriate thinner. This procedure provides optimum adhesion and can also be used on new, clean wood surfaces.

## C. STEEL

GacoFlex E-5320 Primer two-component epoxy may be brush or roller applied as mixed when the temperature is 65°F (18°C) or higher. For most applications and for spraying, it is desirable to reduce GacoFlex E-5320 Primer 10 to 20% with water. Coverage per gallon is 300 to 400 sq. ft. (3.78L/30 to 40 m<sup>2</sup>)

The minimum temperature for a proper application and cure is 50°F (10°C). Approximately two dry hours after the application is needed to develop resistance to rain. Allow eight hours cure time before coating with neoprene and two hours for Hypalon and polyurethane coatings.

Primed surfaces should be protected from dust and moisture prior to the coating application.

Light dust deposits, which collect on the surface, may be removed with a clean dry brush. Standing moisture may cause rust which must be removed and the surface primed again.

## D. NON-FERROUS METAL AND GALVANIZED STEEL

Use GacoFlex E-5320 Primer applied by brush roller or spray as described in Section C.

**NOTE:** Galvanized Steel can have a process or rolling oil present which should be removed by solvent wiping prior to the application of the primer.

## E. POLYESTER LAMINATE, GLASS OR EPOXY

Gaco Western has two primers that perform extremely well on these substrates: GacoFlex E-5320 Primer and GacoFlex E-5511 Primer. The coverage rate per gallon is 300-400 sq. ft. (3.78L/ 30-40m<sup>2</sup>). Because of its extended recoat time, GacoFlex E-5320 Primer is the primer of choice. Apply both primers by brush, roller or spray. Allow the primers to dry before applying polyurethane foam or coatings.

## **F. POLYURETHANE FOAM**

While a primer is not usually required before coating polyurethane foam, unusual foam conditions may demand special consideration. For specific recommendations consult with Gaco Western LLC.

## **G. COATED SURFACES**

Gaco Western LLC has specifications for recoating existing polyurethane foam and coating roofs, neoprene/Hypalon deck systems and polyurethane deck systems. These are located in their respective sections in the catalog.

As a rule, any well adhered material that is sound may be recoated with the appropriate primer. GacoFlex U-5677 Sealer is usually used for all recoats except for existing silicone. Coverage rate is usually 1 gallon per 300 sq. ft. (3.78L/30m<sup>2</sup>), drying is as described above.

If the existing coating is unknown it is best to apply a sample to determine compatibility. Contact Gaco Western for recommendations.