



*Application Specification:*

**GW-15-U62**  
**July 2009**  
**Supersedes 02/07**

**Section 07576:  
GACOFLEX ZERO VOC POLYURETHANE ELASTOMERIC COATING  
SYSTEM FOR VEHICULAR TRAFFIC DECKS AND RAMPS**

**PART 1 - GENERAL**

**1.1 SUMMARY**

- A. This section describes the requirements for installing a durable and waterproof surface applied membrane consisting of a 100% volume solids polyurethane elastomer coating system for concrete vehicular traffic decks and ramps. This specification is not intended for use over on grade concrete. It is chemically cured, contains no solvent fumes, allows for high film build and possesses excellent toughness and elongation.

This system meets the requirements of Class A rating on noncombustible substrates when tested under ASTM E-108/UL 790.

**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.
- C. Americans with Disabilities Act (ADA) Recommendations: Prior to installation, submit manufacturers data indicating that the specified waterproofing application conforms to the provisions of the ADA accessibility guidelines as published by the US Access Board, 1331 F St. NW, Suite 1000, Washington, DC 20004-1111.

**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.

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- 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: 10 working days prior to 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 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.
- E. The static coefficient shall exceed the minimum recommendations of the American Disability Act (ADA), for accessible routes, for wet and dry surfaces, and for leather and rubber heel materials.

## **1.5 DELIVERY, STORAGE AND HANDLING**

- A. Store all coating materials in the original unopened containers at 60° to 80°F (16° to 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: General ventilation is recommended; zero VOC materials do not generate flammable vapors.
- 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 warranty is available, jointly between the manufacturer and the contractor. Contractor must be eligible for, and make application to, Gaco Western prior to the start of work under this section.

## **PART 2 - PRODUCTS**

### **2.1 MANUFACTURERS**

Acceptable Manufacturers:

Gaco Western

### **2.2 MATERIALS**

- A. Zero VOC Primer/Sealer: GacoFlex E-5511 two component 100% solids Epoxy Concrete Primer/Sealer.
- B. Zero VOC Polyurethane Coating: GacoFlex U-62 Spray Grade 100% solids, two component, chemically cured polyurethane elastomeric coating.
- C. Flashing and Joint Reinforcing Fabric: Gaco Western 66B and 66S fabric. GacoFlex NF-621 neoprene sheet flashing, and related materials as required for flashing drains, base angles, etc. Consult Gaco Western's GW-1-2 for specific recommendations.

- D. Granule: GacoShell Granule, a hard (90 Rockwell Scale) non-crushable, non-extractable organic granule with a specific gravity of 1.3. Size 12/20 unless otherwise specified.
- E. Misc. Accessories: All items incorporated into this system shall be compatible with and approved by the coating manufacturer.

*Note:* Allow additional material for rough or irregular surfaces and for material loss during application.

## **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. Do not begin work until concrete substrate has cured 28 days, minimum.
- C. Verify that the concrete meets requirements of the coating manufacturer. Refer to Gaco Western's General Instruction GW-2-1 for complete information on the installation and finishing of concrete.
- 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 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: Apply one coat of GacoFlex E-5511 to all surfaces to receive the fluid applied waterproofing. Apply at a nominal rate of one gallon per 150 sq. ft. (3.78 L / 13.9 m<sup>2</sup>) and allow to cure at least 6 hours, but no more than 72 hours before applying the basecoat.
- C. Detail Work: Install approved urethane caulking as required and tool the surface smooth. Install Gaco Western fabric reinforced flashing at all changes of plane using GacoFlex U-62 Series polyurethane with 66S Tape. Treat cracks in the surface with GacoFlex U-62 Series polyurethane and 66B tape.
- D. Polyurethane Base Coat/Granule Wear Course: Apply one coat of GacoFlex U-62 Series polyurethane at a rate of 2 gallons per 100 sq. ft. (7.57 L / 9.3 m<sup>2</sup>) (32 mils (.81 mm) wet or dry) to all areas to receive fluid applied waterproofing, including areas previously caulked, flashed or fabric reinforced and immediately broadcast 8-10 pounds of GacoShell granules, size 12/20, per 100 square feet (3.6 to 4.5 kg / 9.3 m<sup>2</sup>). Allow the wear course to cure for at least 1 ½ hour if applied by plural spray equipment, but no more than 72 hours before applying the finish coat.
- E. Ramps and Turn Radius: Apply one additional coat of GacoFlex U-62 Series polyurethane at a rate of 0.75 gallons per 100 sq. ft. (2.84 L / 9.3 m<sup>2</sup>) (12 mils (.30 mm) wet or dry) and immediately broadcast 8-10 pounds of GacoShell granules, size 12/20, per 100 square feet (3.6 to 4.5 kg / 9.3 m<sup>2</sup>). Allow the wear coarse to cure for at least 1 ½ hours if applied by plural spray equipment, but no more than 72 hours before applying the finish coat.

- F. Finish Coat: Prior to installing the finish coat sweep or vacuum away all loose GacoShell from the surface. Apply one coat of GacoFlex U-62 Series polyurethane at a rate of .75 gallons per 100 sq. ft. (2.84 L / 9.3 m<sup>2</sup>) (12 mils (.30 mm) wet or dry).

### **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 manufacturer's representative, will be required on all projects requiring a warranty.
- C. Thickness: Minimum over all dry film thickness of the completed fluid applied waterproofing, excluding GacoShell will be not less than 42 mils (1.07 mm) with an average thickness of approximately 44 mils (1.12 mm). Thickness including GacoShell will average approximately 60 mils (1.52 mm). Thickness of Ramps and Turn Radius including GacoShell will average approximately 90 mils (2.29 mm).