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GACO WESTERN

Application Specification:

MF-20-U62

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Supersedes 01/02

Section: 09670

ZERO VOC LIQUID POLYURETHANE ELASTOMERIC COATING SYSTEM FOR MECHANICAL ROOM FLOORS

PART 1 - GENERAL

1.1 SUMMARY

This section describes the requirements for furnishing and installing a durable and waterproof membrane surface consisting of a 100% volume solids polyurethane elastomer coating system for concrete mechanical room floors. 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. Mechanical: Division 15

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. The primary manufacturer shall recommend secondary materials. Manufacturer shall have a minimum of 10 years experience in the manufacturing 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: 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,

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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. Store all coating materials in the original unopened containers at 60° - 80°F (16°C 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, and 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 warranty is available for commercial projects only. 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

Gaco Western

2.2 MATERIALS

- A. Zero VOC polyurethane Coating: GacoFlex U-62 100% solids, two component, chemically cured polyurethane elastomeric coating.
- B. Zero VOC Sealer: GacoFlex E-5511 epoxy two component 100% solids polyurethane concrete sealer.
- C. Flashing and Joint Reinforcing Fabric: Gaco Western 66B and 66S fabric.
- D. Granule: GacoShell Granule, a hard (90 Rockwell Scale), non-crushable, non-extractable organic granule with a specific gravity of 1.3. Size 18 on 40 (1 mm on .42 mm) unless otherwise specified.
- E. Misc. Accessories: All items incorporated into this system shall be compatible with and approved by the coating manufacturer.

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. Verify that the concrete meets the 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.
- C. Do not begin work until concrete substrate has cured 28 days, minimum.

- 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 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. 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 square feet (3.78 L / 13.9 m²). Allow to dry for at least 4 hours, but no more than 36 hours before applying the waterproofing.
- C. Detail Work: Install approved polyurethane 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: Apply one coat of GacoFlex U-62 Series Polyurethane at a rate of one gallon per 100 sq. ft. (3.78 L / 9.3 m²), (16 mils (.41 mm) wet or dry) to all areas to receive fluid applied waterproofing, including areas previously caulked, flashed or fabric reinforced. Allow this membrane to dry for at least 12 hours, but no more than 48 hours before applying the non-skid wear course (if required) or finish coat.
- E. Polyurethane / GacoShell Wear Course: Apply one coat of GacoFlex U-62 Series Polyurethane at a rate of .5 gallons per 100 sq. ft. (1.89 L / 9.3 m²), (8 mils (.2 mm) wet or dry) and immediately broadcast 4 to 6 pounds (1.8 kg to 2.7 kg) of GacoShell per 100 sq. ft. (9.3 m²) into the wet coating. Back roll immediately to encapsulate the GacoShell.

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: Minimum over all dry film thickness of the completed fluid applied waterproofing will be not less than 20 mils (.51 mm). Thickness including aggregate will average approximately 32 mils (.81 mm).