

## **JOB CONDITIONS**

### **SURFACE PREPARATION - PROTECTION OF WORK**

These instructions cover general job conditions and precautions for protection of work when installing Gaco Western elastomeric construction coatings. Information on specific coatings and systems are contained in subsequent sections of these instructions, product data sheets and application specifications. Specification guides with recommendations for concrete and plywood substrates are referenced and available from Gaco Western, Inc.

#### **1. JOB CONDITIONS**

- A.** Construction work such as drains, ducts, skylights, and other roof penetrations should be complete except for flashing and counter-flashing.
- B.** Surfaces must be thoroughly dry to ensure adhesion for all primers and coatings except those designed for moist surfaces. Remove dirt or dust that settles on surfaces before start of work or between coats. Sweeping or blowing may be sufficient, however, washing or damp-mopping is considered the best procedure.
- C.** Temperature should be above 40°F (4°C) because cooler surfaces may have ice, frost or condensation. Applications of some coatings can be made at lower temperatures provided the surface is free of moisture. (See temperature limitations listed on the product data sheet for specific coatings.)
- D.** Job specifications require that surfaces be accepted by the coating contractor prior to start of work. Substrates which are not structurally sound or which do not meet the specification requirements for surface finish or condition are not acceptable. Correction of surface defects is the general contractor's responsibility. Review of specification requirements and Gaco Western's guide

specifications with the general contractor before the substrate is constructed will minimize problems at the time of acceptance.

#### **2. SURFACE PREPARATION**

**A. Concrete:** See Gaco Western Specification GW-2-1 (formerly GW-2) for recommendations regarding finishing and curing of various types of concrete. Special attention should be given to smoothness of surface and freedom from contaminants including paint or previous coatings. Consult Gaco Western for alternate procedures for coating over existing paint. Such procedures are highly dependent on specific job conditions. Curing compounds if used shall be approved by Gaco Western for compatibility or removed by sandblasting or etching. In the event specifications are not met, the following corrective procedures are recommended.

**1. Surface Contaminants:** Wipe up grease or oil with a solvent and absorbent sweeping material. Disposal of this material should be in accordance with local laws and codes. Wash with solvent-alkaline cleaners diluted one part cleaner and five parts water. Rinse thoroughly with clean water. If evidence of oil film remains as indicated by water "beading," etch surface with 10% solution muriatic acid. Agitate etch with stiff bristle broom; then rinse with clean water.

Remove curing compounds by etching with 10% muriatic acid and sweeping, followed by clean water rinse. Allow to thoroughly dry before applying coating.

Grinding or sandblasting can remove heavy deposits of contaminants.

Any residual traces of asphalt stains must be sealed with Gaco Western's E-5320 Primer to avoid staining of light colored tope coats. Apply sealer in two coats and allow a minimum of 48 hours cure time.

**2.Fins and Projections:** Grind smooth.

**3.Rock Pockets and Depressions:** Commercially available concrete patching compounds can be used provided they contain no bitumastic binders. Only those patching com-pounds utilizing a binder are recommended for patching. Neat cement sacking is NOT an acceptable surface preparation for coatings.

The leveling grout (below) can also be used to fill rock pockets and depressions up to two inches (5 cm) in thickness.

**4.Leveling Grout, Epoxy Sand:** Use either a. or b.

a. **Leveling Grout:** Use 100% solids low viscosity epoxy mix with three to four volumes of fine, dry sand (70 mesh (.21) or finer). This epoxy is usually available from masonry supply firms as a patching compound. Three volumes sand provides a semi-fluid mix, and four volumes sand is a stiffer mix. Calculate volume of fill needed on the basis of sand only.

b. **Epoxy Sand:** Prime areas to be filled with E-5320 and allow to dry free of water. Usually ½ hour at 70°F (21°C) to two hours at 45°F (7°C) is adequate drying time. After primer is dry, mix E-5320 and sand - one part A, one part B and two to three parts sand. (Two parts sand is semi-fluid and three parts sand is stiffer.) Use fine, dry sand 70 mesh (.21 mm) or finer. Do not thin with water.

Apply grout to level line by flat trowel and allow to cure 48 hours before applying coating system.

**B. Plywood:** Plywood surfaces should be protected from moisture that may raise surface grain, cause checking or interfere with coating adhesion. During wet weather, consideration should be given to percolating the plywood with a base coat prior to installation to assure dry panels. Plywood surface must be clean.

Damaged panels shall be repaired or replaced prior to coating. Small areas can be repaired with appropriate caulking. For large voids or resurfacing leveling grout per section 4 can be used.

**1. Plywood Grades:** See Gaco Western Specification GW-2-3 (formerly GW-3) for recommendations for selection and installation of plywood. The acceptable grades of plywood are APA A/C EXT or APA B/C EXT. For commercial installations APA A/C EXT with plugged cross band under face offers the most resistance to punctures from high-heel shoes, table legs, etc. Other grades including APA C/D EXT, APA C/C EXT plugged, OSB and waferboard are unsuitable as a substrate for liquid applied coating membrane.

**NOTE:** The above plywood grades are called out in compliance with the American Plywood Association's Standards for member mills or to U.S. Product Standards PS 1-83 for construction and industrial plywood from the Product Standard Section of the National Bureau of Standards. Plywood grading which does not reference APA or PS 1-83 markings may not be a suitable grade. Suppliers in this case must certify that plywood will meet the Product Standard PS 1-83 B/C EXT minimum.

### 3.PROTECTION OF WORK

**A.** While work is under way, and for 72 hours thereafter, traffic from other trades should be stopped, if possible. Roofers and other essential mechanics should wear rubber-soled shoes. Shoes and clothing should be free from bitumastic materials - even a small piece can discolor through many layers of coating. A piece of burlap or floor mat should be kept at the foot of ladders or stairs so that dirt or foreign material will not be tracked onto the work surface.

**B.** Material on the roof should be stored on plywood or non-asphalt insulation board. Special care must be exercised in pouring thinner to avoid spillage on coated surfaces.

**C.** Adjacent surfaces not to be coated, such as walls, thresholds, fascias, etc., should be carefully masked before priming and coating. Mask vertical surfaces at the line detailed in the drawing or, if none is shown, mask 6" (15 cm) up from the deck. When coatings are applied by spray, caution is necessary - particularly during windy weather - to prevent overspray damage.