

# FlexGround FlexTrail

## Poured In Place Safety Surfacing

### Manufacturer's Specifications

This document provides the specifications for a poured in place single-pour recreational surfacing system. There may be variations in the final specifications as required by the Client.

#### **PART 1 – GENERAL**

##### **1.01 Work Included**

Provide all labor, materials, and tools necessary for the complete installation of a poured in place recreational surfacing system as outlined in these specifications. The system should consist of but not necessarily be limited to the following:

- A. Section includes: Single pour recreational poured in place surfacing system.
- B. Quality Assurance: Manufacturer should have manufactured and installed poured in place recreational surfaces for a minimum of 5 years. The installation of the poured in place product should be completed by FLEXGROUND. Manufacturer's detailed installation procedures should be submitted to the Architect and made part of the Bid Specifications.

##### **1.02 Submittals**

Prospective manufacturers and/or installers of the poured in place recreational surfacing system should be required to comply with the following:

- A. The manufacturer must be experienced in the manufacturing of a poured in place recreational surfacing system and provide references of five (5) specific installations in the last three (3) years.
- B. The installer must provide competent workmen skilled in this type of poured in place recreational surfacing. The designated supervisory personnel on the project must be competent in the installation of this material, including mixing of the materials, and spreading and compacting the materials correctly.
- C. Manufacturer should provide written instructions for recommended maintenance practices.
- D. Manufacturer should submit color samples for customer verification. Color samples shall be per client selection or specification, or submitted in 6-8 oz clear plastic jars with specified colored granule(s) and pea gravel mix.

#### **ARIZONA**

Lic #288687 & 283192  
602.954.0000

#### **CALIFORNIA**

Lic #1003439  
916.474.5431

#### **NEVADA**

Lic #0076764 & 0077757  
702.303.8701

### 1.03 Definitions

- A. SBR: Styrene-butadiene or styrene-butadiene rubber (SBR) describe families of synthetic rubbers derived from styrene and butadiene
- B. EPDM granules: EPDM rubber (ethylene propylene diene monomer (M-class) rubber), a type of synthetic rubber, is an elastomer characterized by a wide range of applications. The M refers to its classification in ASTM standard D-1418; the M class includes rubbers having a saturated chain of the polymethylene type.
- C. TPV: Thermoplastic Vulcanized Elastomer. Developed using resin and synthetic rubber with higher UV stabilization.

### 1.04 Maintenance and Warranty

- A. The bidder and/or poured in place recreational surfacing manufacturer must provide the following:
- B. The poured in place recreational surfacing manufacturer should provide a warranty to the owner that covers defects in materials and workmanship of the rubber for a period of **FIVE (5) years** from the date of Substantial Completion. Warranty requires system installation by Flexground Surfaces, Inc. trained employees.
- C. The manufacturer's warranty should include general wear and tear. The warranty should specifically exclude vandalism, high heel punctures, acts of war or acts of nature beyond the control of the owner or the manufacturer.
- D. All poured in place warranties should be limited to repair or replacement of the affected areas and should include all necessary materials, labor, transportation costs, etc. to complete said repairs. All warranties are contingent on the full payment by the owner of all pertinent invoices and adherence to any required maintenance procedures.
- E. The manufacturer should instruct the owner's personnel on proper maintenance and repair of the FLEXGROUND recreational surface.

## PART 2 – FLEXGROUND MATERIAL

**The FLEXGROUND poured in place recreational surfacing system should be in accordance with the following:**

- A. A single-pour poured in place system. The finished surface should be porous and capable of being installed at varying thickness.
- B. FLEXGROUND primer is a 100% solids urethane primer/sealer. It is designed with low viscosity and penetrating abilities making this an ideal priming urethane.

- C. The single pour system shall be comprised of a 50/50 mixture of 3/8" pea gravel (50lbs) and black SBR rubber granules (55 lbs) mixed with a 100% solids moisture cured Polyurethane binder or Aliphatic (12% per mix = 12.6 pounds) installed at the appropriate thickness.
- D. If desired, colored TPV or EPDM rubber granules may be used in place of, or in addition to, black SBR rubber granules.
- E. The system color should be selected by owner prior to bid.

### **PART 3 – SITE PREPARATION AND BASE**

**The FLEXGROUND site preparation and base should be in accordance with the following:**

- A. The sub-base will have a slope of 2%.
- B. The base aggregate should consist of a minimum of four inches (4") free-draining stone compacted to 95%. Finish slope of porous aggregate should be 2% from the centerline of the area to the perimeter, and the grade should not vary more than a quarter inch (1/4") in ten feet (10').
- C. The sub base should be installed in two inch (2") lifts to appropriate thickness.
- D. The sub-base should be compacted using vibrating tamper, to approximately 95% Proctor density.
- E. The sub-grade should no longer have any vegetation.
- F. Sublevel grade is to be compacted prior to the ABC aggregate installation. Particular attention should be paid to areas of disturbed earth such as where footers for playground equipment enter the ground. Concrete should be poured to the top of sublevel surface.
- G. The poured in place recreational surfacing manufacturer and architect will accept the aggregate base in writing prior to the installation of the poured in place system.
- H. Any alterations must be agreed between all parties.
- I. For concrete surfaces, shot blast, acid etch or power scarify as required to obtain optimum bond of the cushion layer to the concrete is required. Remove sufficient material to provide a sound surface, free of glaze, efflorescence, or form release agents. Remove grease, oil, and other penetrating contaminants.
- J. For concrete or asphalt surface that is not enclosed (i.e. a curb to curb pour), the concrete shall have keyway cuts 1.5" wide by 1.5" deep so that the system can be bull nosed down into the notch area.

### **PART 4 – EXECUTION AND INSTALLATION**

**The poured in place recreational surfacing installer should strictly adhere to the installation procedures outlined under these sections. Any variance from these requirements should be accepted in writing by the**

**manufacturer's onsite representative and submitted to the architect/owner, verifying that the changes do not in any way affect the warranty.**

#### **4.01 Perimeter**

- A. A urethane primer should be applied to concrete or asphalt surfaces at a rate of 200-250 square feet per gallon. The entire area does not need to be primed at once, instead, prime about 700 square feet at a time. This procedure should be continued until all areas are complete.
- B. The urethane primer should be applied to any equipment that will be surrounded by the poured in place recreational surfacing system

#### **4.02 FlexTrail**

- A. The single pour system shall be comprised of a 50/50 by bag mix of 3/8" pea gravel (50lbs) and black SBR rubber granules (55 lbs) and/or EPDM or TPV colored rubber granules (55 lbs) and mixed with a 100% solids moisture cured Polyurethane binder or Aliphatic at a rate of 12% of the total weight of the materials, ensuring the granules and gravel are covered thoroughly and evenly.
- B. The single pour mix should be spread and troweled to depth per specification immediately after application of primer.
- C. The finished texture should be slip resistant, smooth and even.
- D. The poured in place surface should be allowed to cure for 24-72 hours or until dry to the touch.

### **PART 5 – SITE (GENERAL)**

- A. Trailer/ Large truck access will be necessary for the installation. In the case that access for trailer/truck is not available the owner or general contractor will be responsible for transporting material to the job site.
- B. Crew is responsible for protecting the surface only while on site. General Contractor or owner shall be responsible for the security of the surfacing overnight during installation, as well as during the surfacing's curing period upon completion of the install.
- C. Crew will leave site clean and shall remove all trash and debris.