

FLEXGROUND

Playground Safety Surfacing

Manufacturer's Specifications

1. General

1.1 Section includes: Resilient playground surfacing poured-in-place system.

1.2 Related work: Playground equipment and resilient playground surfacing sub base.

1.3 Description: Provide all necessary materials, labor, tools and equipment to perform the work included in the section for the installation of the poured-in-place resilient playground surfacing.

1.4 Quality Assurance: Manufacturer shall have manufactured and installed playground poured-in-place safety surfaces for a minimum of 5 years, and meet current ASTM F-1292-99 Test Criteria. The installation of the poured-in-place product shall be completed. FLEXGROUND, LLC. Manufacturer's detailed installation procedures shall be submitted to the Architect and made part of the Bid Specifications.

2. Submittals

2.1 Manufacturer's Product Literature and Specification Data.

2.2 ASTM F1292-99 Impact Attenuation Test Certification for the poured-in-place system to be installed in compliance with the Critical Fall Height as determined by the Playground Equipment to be installed in conjunction with the poured-in-place surfacing system.

2.3 ASTM E303 Skid Resistance Test.

2.4 Submit manufacturer's written instructions for recommended maintenance practices.

2.5 Color samples for customer verification.

3. Products

3.1 Product: FLEXGROUND poured-in-place system.

3.2 Description: A dual durometer poured-in-place system with a wearing layer upper membrane and an underlying impact attenuation cushion layer. The

finished surface shall be porous and capable of being installed at varying thickness to comply with Critical Fall Height requirements of playground equipment installed in conjunction with the surface.

3.3 Urethane Primer: FLEXGROUND Primer is 100% solids, two component, urethane primer/sealer. It is designed with a low viscosity and penetrating abilities makes this an ideal priming urethane.

3.4 Materials: Wearing surface-the FLEXGROUND surface system shall be manufactured from peroxide cured epdm virgin colored rubber mixed with FLEXGROUND Binder (100% solids moisture cured polyurethane binder) and Cushion layer-recycled black ground SBR rubber particles (buffings) mixed with 100% solids moisture cured polyurethane binder.

3.5 Cushion Course shall be a mixture of black recycled SBR rubber buffings mixed with a 100% solids moisture cured MDI Polyurethane binder (100 pounds of SBR rubber buffings to 12 lbs of binder) installed at the appropriate thickness. The cushion layer shall be porous.

3.6 Wearing surface shall be a mixture of virgin peroxide cured epdm rubber granules bonded by FLEXGROUND Binder, 100% solids moisture cured Polyurethane binder (110 pounds of EPDM TO 22 LBS of binder), and applied to a minimum thickness of 0.5 inches over the cushion layer. The wear cushion shall be porous.

3.7 Finish Texture: Slip resistant smooth and even.

3.8 Seams: Where seams are required due to color change, a step configuration will be constructed to maintain wear surface integrity.

3.8 Color: Selected from Manufacturer's Color Chart by owner prior to bid.

4. Site Preparation

4.1 Site Elevation: For an on grade installation, the finished height of the FLEXGROUND surface will be equal to or slightly higher than the perimeter grade but not more than one inch higher unless approved by the project engineer. An above grade installation will usually require the use of transition ramps around the perimeters of the area to transit smoothly back to the floor elevation, unless the site terminates at a wall or other vertical surface. For site drainage, when preparing a new hard base, a minimum slope of one inch per ten feet of run should be applied to the finished surface with slope toward the drain basin, drain trough, or down grade of the site. Since fLEXGROUND surfaces are permeable, base drainage must be provided at the slab or floor level for below ground installations.

4.2 Hard Base Construction: For concrete surfaces, shot blast, acid etch or power

scarify as required to obtain optimum bond of the Cushion Layer to the concrete. Remove sufficient material to provide a sound surface, free of glaze, efflorescence, or form release agents. Remove grease, oil, and other penetrating contaminants. Concrete will have a pitch of 0.25 inches per foot and should not have low areas that will hold water under the system. Asphalt shall maintain a slope of at least 0.25 inches per foot and should not have low areas that will hold water under the system. For compacted loose base, the base should be constructed of 4 inches of compacted abc compacted to 95%..

5. Installation

5.1 Materials: Mix resin components and prepare material according to manufacturer's instructions.

5.2 Forms: If forms are required, following the shape of the area, form the perimeter with six by six-wooden planks or railroad ties flush with the surrounding ground area for flush installations. Secure the planks with metal pins through the planks deep enough into the ground to ensure the planks won't move.

5.3 Primer Application: Urethane Primer to concrete, asphalt or wood surfaces at a rate of 200-250 square feet per gallon. Do not prime the whole area at once, prime about 700 square feet and as the installers approach an unprimed area, prime 700 more square feet.

5.4 Base Application: Mix two 50 lb. bags of SBR buffings with 12 lbs of MDI moisture cure Polyurethane binder thoroughly so that binder is evenly dispersed into the rubber base. Spread and trowel the mix to the desired depth and allow to cure for 24 hours.

5.5 Top Coat Application: Apply a coat of Urethane Primer over the cured SBR/polyurethane layer. Mix two 55 lb bags of epdm granules with 20 lbs of Binder so granules are covered thoroughly and evenly. Spread the mix and trowel to a depth of 0.5 inches immediately after the application of primer and let cure for 24-72 hours or until dry to touch.

5.6 Curing, Protection, and Cleaning: Cure according to manufacturer's directions, taking care to prevent contamination during application stages and before completing the curing process. Close application area for at least 24 hours.

6. Cleaning and Demonstration

6.1 Contractor shall clean the jobsite of excess materials and if necessary backfill any excavation around the perimeter with earth or other appropriate fill material.

6.2 The contractor shall instruct the owner's personnel on proper maintenance and repair of the FLEXGROUND safety surface.