

SECTION 32 18 16.14
POURED-IN-PLACE PLAYGROUND SAFETY SURFACING

PART 1 GENERAL

1.01 REFERENCE STANDARDS

- A. ASTM F1292 - Standard Specification for Impact Attenuation of Surfacing Materials Within the Use Zone of Playground Equipment; 2022.

1.02 DESCRIPTION

- A. Provide all materials, installation details, labor, and equipment required to properly install the poured-in-place rubber safety surfacing.

1.03 QUALITY ASSURANCE

Qualifications

- 1. The system shall be warranted by the Manufacturer for any defects in materials and workmanship for a minimum three (3) years from the date of completion.
 - 2. The Safety Surface shall be installed by a certified installer, approved by the Manufacturer.
- B. Design and Detailing
 - 1. The poured-in-place rubber safety surfacing system is utilized when an impact absorbing surface is required within the use zone of the playground equipment. Each system is engineered to meet, ASTM F1292 Impact Attenuation and ASTM F 1951 wheel chair mobility criteria.
 - 2. Substrate over which the poured-in-place rubber safety surfacing may be installed includes concrete paving, or asphalt paving.
 - 3. All other substrates must be approved by the Manufacturer prior to installation
 - 4. The installer shall verify that all proposed substrates meet the requirements for the installations of the poured-in-place rubber safety surfacing system with regard to structural performance.

1.04 SUBMITTALS

- A. Product Data, testing and warranty

1.05 DELIVERY AND STORAGE

1.06 PROTECT MATERIALS FROM WEATHER.

- A. Remove and discard empty containers in accordance with local ordinances.

1.07 INSTALLATION LIMITATIONS

- A. Air temperature shall be > 35 oF (2 oC) Installation shall not commence when rain is imminent.

1.08 ALTERNATES

- A. Or equals shall be approved by the project Landscape Architect prior to bid date.

PART II PRODUCTS

2.01 MANUFACTURER

- A. Playsites + Surfaces, 103 Brightside Ave., Central Islip, NY, 11722, phone: 631-392-0960, fax: 631-392-0959, email: sales@playsiteplus.com, playsiteplus.com
- B. Or Approved Equal.

2.02 MATERIALS

- A. Primer: A single component, moisture cured polyurethane.
- B. Binder: A MDI based, elastomeric, polyurethane pre-polymer with low order and exceptional weathering and binding attributes.
- C. SBR Black base layer
 - 1. Recycled SBR rubber buffing

2. 3/8" sieve with < 4% dust (6-16 mesh)
 3. Containment Bags shall provide ample moisture protection
- D. EPDM wear surface
1. UV Stabilized virgin EPDM rubber, 1/2" thick.
 2. EPDM shall be full color. No coated rubber is permitted.
 3. Available in sieve's of .5 - 0.06 inch, 1 - 0.12 inch or 1- 0.16 inch
- E. Poured-In-Place System
1. Independently tested to ASTM F1292 standards for head injury criteria.
 2. Slip resistant in wet and dry conditions
 3. Abrasion resistant
 4. Fire Retardant
 5. Fungal resistant
 6. Resistance to weathering and aging
 7. Complies with ADA accessibility standards

2.03 MIXING AND PREPARATION

- A. Binder/SBR and binder/EPDM mix ratios shall be determined by the specified system (see Product Data Sheet application rates).

PART III EXECUTION

3.01 INSPECTION

- A. Before applying the poured-in-place rubber safety surfacing the installer will evaluate the substrate and site conditions. No work will commence until discrepancies are corrected.

3.02 Poured-IN-PLACE SYSTEM

- A. Primer: when required apply primer using a 3/8" nap roller at a rate 300 sf/gallon. Do not apply over crush stone base. Prime all vertical interfaces of curbs, etc.
1. SBR base layer
 - a. Binder to rubber ratio shall be 14/86 (16 %) by weight to achieve proper resiliency.
 - b. Mix binder and SBR rubber in a paddle type mixer for 1 to 2 minutes or until rubber particle is encapsulated.
 - c. Spread this mix to the desirable thickness using a screed bar.
 - d. Using a steel trowel uniformly compact the mix. Periodically lubricate the trowel with mineral spirits as work progresses. Do not saturate the rubber surface with cutting agents.
 - e. Allow base layer to cure to point of supporting foot traffic without deforming the base layer and before proceeding with the EPDM wear surface.
 2. EPDM Wear Surface
 - a. Binder to rubber ratio shall be 18/82 (21.9%) by weight to achieve maximum durability.
 - b. Mix EPDM and binder in paddle type mixer for 1 to 2 minutes or until materials are thoroughly encapsulated. Using a screed bar, level the mix over the base layer.
 - c. Using a steel trowel uniformly compact the mix. Periodically lubricate the trowel with soapy water as work progresses. Do not saturate the rubber surface with cutting agents.
 - d. Allow wear surface to cure 24 to 72 hours before opening the area for play. The surface must be tack free before attempting to walk on the surface.

3.03 CLEANUP

- A. Clean all tools with mineral sprits.

3.04 GENERAL PRECAUTIONS

- A. Wear protective clothing and safety glasses when handling materials. Follow all safety precautions on packaging labels. Refer to MSDS sheets for safety information.

END OF SECTION 32 18 16.14