

Poured In Place Architectural Specification

Part 1 General

1.01 Description

Provide all materials, installation details, labor, and equipment required to properly install the Kinetic Play Surface pour-in-place system

1.02 Quality Assurance

A. Warranty

1. The Kinetic Play Surface PIP system shall be warranted by Kinetic Play Surface for any defects in materials and workmanship for a minimum Five (5) years from the date of completion. Warranty is focused on product safety (ASTM F1292-18) and accessibility (ASTM 1951-14) and does not cover normal wear and tear. Urethane roll coats are highly recommended to protect the warranty of this product.

B. Design and Detailing

- 1. The Kinetic Play Surface PIP system is utilized when an impact absorbing surface is required within the use zone of playground equipment. Each system is engineered to meet Kinetic, ASTM F 1292 Impact Attenuation and ASTM F 1951 wheelchair mobility criteria.
- 2. Substrate over which Kinetic Play Surface may be installed includes concrete, asphalt and compacted aggregate.
- 3. All other substrates must be approved by Kinetic Play Surface prior to installation
- 4. The installer shall verify that all proposed substrates meet the requirements for the installations of the Kinetic Play Surface system with regard to structural performance. C.IPEMA Certification Required: "In the Interest of playground safety, the International Play Equipment Manufacturers Association (IPEMA) provides a Third Party Certification Service whereby a designated independent laboratory, TÜV SÜD America Inc., (TÜV), validates a surfacing manufacturer's certification of conformance to ASTM F1292, Standard Specification for Impact Attenuation Under and Around Playground Equipment.

1.03 Submittals

- A. Upon request, samples of the proposed material for this project.
- B. A listing of at least five installations where products similar to those proposed for use have been installed and have been in service for a minimum period of 3 years. This list shall include owner or purchaser, address of installation, date of installation, contact person, and phone number.
- C. One original hard copy of the submittal package will be provided. Additional copies are available by request. All specifications/details/testing data can be obtained from your sales representative or found on the KPS website www.kineticplaysurfaces.com.

1.04 Delivery and Storage

- A. Protect materials from weather.
- B. Remove and discard empty containers in accordance with local ordinances.

1.05 Installation Limitations

- A. Air temperature shall be between 45-90 Degrees F. Humidity shall not exceed 90% B.Installation shall not commence when rain is imminent.
- C.Installation of surfacing shall be seamless up to 2,000 square feet per day.

Part II Products

2.01 General: No substitution of other materials shall be permitted.

2.02 Thickness

System Thickness Critical Height

- 1. 1.5 inches 4 feet
- 2. 2.5 inches 5 feet
- 3. 3.0 inches 6 feet
- 4. 3.5 inches 7 feet
- 5. 4.0 inches 8 feet
- 6. 4.5 inches 9 feet

2.03 Materials

- A. Primer: A single component, moisture cured polyurethane.
- B. Binder: A MDI based, aromatic, elastomeric, polyurethane pre-polymer with low order and exceptional weathering and binding attributes. Aliphatic urethane is recommended for certain colors (blue, teal, purple, pearl, eggshell and grays) because aromatic binder "yellows" slightly upon exposure to ultraviolet rays. Most of this thin layer of urethane wears off with foot traffic and weathering typically within two to six months. This characteristic applies industry-wide.
- 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
 - 2. EPDM shall be full color. No coated rubber is permitted.
 - 3. Available in sieve sizes of .5 1.5 mm, 1 3 mm or 1- 4 mm
- E. Pour-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 Kinetic Play Surface PIP, installer will evaluate the substrate and site conditions. No work will commence until discrepancies are corrected.

3.02 Pour-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 crushed stone base. Prime all vertical interfaces of curbs, etc.

- B. SBR base layer
 - 1. Binder to rubber ratio shall be 14/86 (16 %) by weight to achieve proper resiliency.

- 2. Mix binder and SBR rubber in a paddle type mixer for 1 to 2 minutes or until rubber particle is encapsulated.
- 3. Spread this mix to the desirable thickness using a screed bar.
- 4. 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.

C. EPDM Wear Surface

- 1. Binder to rubber ratio shall be 18/82 (21.9%) by weight to achieve maximum durability.
- 2. 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.
- 3. 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.
- 4. 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.

D. Cleanup

1. Clean all tools with mineral spirits.

E. General Precautions

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

NOTICE: These specifications are merely guides for use by Landscape Architects, engineers, contractors. It is hoped that these specifications will be of particular value to those who do not have detailed knowledge of synthetic safety flooring and that it will aid in maintaining high construction standards. Kinetic, its agents and employees do not warrant the specifications as proper under all conditions.