



RUBBERIZED SURFACING FOR PLAYGROUNDS

PART 1 – GENERAL

RUBBER PLAYGROUND SURFACING

- 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: Crew chiefs shall show evidence of installing installed playground poured-in-place surfacing systems for a minimum of 5 years, and be subject to annual IPEMA project safety audit. Manufacturer shall meet current ASTM F-1292-13 Test Criteria and Consumer Product Safety Commission (CPSC) Publication 325.
- 1.5 The installation of the poured-in-place product shall be completed by **Manufacturer Certified Contractors or by direct employees of the Manufacturer's Installation Division**. Manufacturer's detailed installation procedures shall be submitted to the Architect and made a part of the Bid Specifications.

PART 2 – SUBMITTALS

- 2.1 Manufacturer's Product Literature and Specification Data.
- 2.2 ASTM F1292-13 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 C1549-04 Solar Reflectance Index near Ambient Temperatures
- 2.4 ASTM E303 Skid resistance
- 2.5 ASTM E1980-01 Solar Reflective Index / Low Slope opaque
- 2.6 ASTM F1551-03 Water Permeability
- 2.7 ASTM F1951 Wheelchair Accessibility
- 2.8 IPEMA Certification

- 2.9 Statement of Warranty for a with detailed Warranty Claim requirements of the owner and specific procedures to be followed by the manufacturer in terms of response and repair of warranty claims.

PART 3 – PRODUCTS

- 3.1 Product: **MaxPour™ Safety Surfacing** or approved equal. Equals shall be submitted for review no less than 10 days before bid. No exceptions to this 10-day prior approval requirement are allowed.

Contact: **Chris Wolf** at PlayMax Surfacing, Inc., (“PlayMax”) phone (951) 250-6039 or fax (951) 356-6550 cwolf@playmaxsurfacing.com , or visit PlayMax on the web at www.playmaxsurfacing.com .

- 3.2 Description: A dual-durometer poured-in-place system with an upper wearing layer 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.

[Specifier Note – Use either paragraph 3.3 aromatic or 3.3 aliphatic binder below, and omit the unused paragraph. Aliphatic polyurethane is a higher-cost alternative binder which may be specified to use on lighter colors to avoid yellowing of the granules by the standard aromatic binder. This is not an issue with many colors. Over time, this becomes less of an issue as the binder eventually gets scuffed and weathered off the surface granules. Additional cost impact (year 2014-based) of substituting aliphatic binder in the top layer is approximately \$2.00 per s.f. See PlayMax Tech Center for photo images of the two binders for comparison purposes. If browser settings allow it, you may view the binder comparison by clicking the following link:

<https://nebula.wsimg.com/1b9dc14ba5bb6bbc272a0b5c1123ecee?AccessKeyId=5CE9B656B40A0D17C5BF&disposition=0&alloworigin=1>]

- 3.3 Materials: The MaxPour™ play surface shall be manufactured from a precise blend of color MaxPour™ TPV rubber granules by Rosehill, mixed with MaxPour™ **AROMATIC** polyurethane binder. Polyurethane binder containing any TDI shall not be allowed due to environmental regulations. For hot, humid climates which may accelerate the cure of polyurethanes, PlayMax may substitute a slower-curing version of this binder. Systems requiring color mixes containing black shall use black EPDM granules for this purpose.
- 3.4 **Top layers shall in all circumstances be MINIMUM ½” THICK. Systems advertising “nominal ½” thick”, or “3/8” – ½ thick” shall be grounds for rejection. Systems advertising “minimum weight / s.f. top layers” shall be grounds for rejection. In all cases, top layer thickness shall be a MINIMUM ½” THICK, irrespective of advertised system “weight”.**
- 3.5 MaxPour™ wearing surface (top layer) shall be a mixture of MaxPour™ TPV 1-4 mm rubber granules by Rosehill, or black EPDM rubber 1-3.5 mm granules bonded by MaxPour™ polyurethane binder applied to 100% of the granules and applied to a minimum thickness of 1/2" over the cushion layer.
- 3.6 MaxPour™ cushion course (bottom layer) shall be a precise blend of MaxPour™ SBR rubber particles of heterogeneous distribution bonded by MaxPour™ aromatic polyurethane binder applied to 100% of the

rubber and installed to a designated thickness as required by the Consumer Product Safety Commissions Guidelines and ASTM F1292-13 Test Criteria.

- 3.7 MaxPour™ Geotextile Fabric by Mirafi, shall be used on systems installed directly over Type 2 road base similar sub-base materials. MaxPour™ Geotextile Fabric by Mirafi is not used over concrete or asphalt substrates.
- 3.8 Finish Texture: Pebble grain.
- 3.9 Color choice and/or blend ratios of color shall be selected by the owner or architect.
- 3.10 Color: As indicated on drawings.

SUB-BASE REQUIREMENTS

PART 1 – GENERAL

- 1.1 Preparation: The sub-base of the entire area to be surfaced shall be cleared of any foreign materials and treated to eliminate growth of grass, weeds, shrubbery, trees, etc.
- 1.2 The native sub-base shall be graded to allow for proper water drainage that will prevent sub-base erosion.
- 1.3 The native sub-base shall be compacted to a 90% rating.
- 1.4 Curbing shall be installed at the perimeter of the area to be installed and may be concrete or other acceptable system that will not deteriorate over the anticipated life of the system. Curbing shall be set at an acceptable grade level to permit proper drainage and contain the area.

PART 2 - SUB-BASE SURFACE OPTIONS

- 2.1 Asphalt/Concrete: A minimum three (3) inch layer may be applied over the sub-base materials to a finished tolerance of (+/-) 1/8" when measured with a ten foot straight edge. The concrete surface shall cure a minimum of twenty eight (28) days. Asphalt cure shall be a minimum of six (6) weeks prior to application of surfacing.
- 2.2 Aggregate Sub-Base: Installation of a minimum four (4) inch layer of aggregate crushed rock or road base shall be completed and compacted to a 90% rating and a (+/-) 1/4" tolerance when measured with a ten foot straight edge in any direction. The compaction shall be completed in two-inch lifts after the area has been water sprayed. The entire area shall be graded at a minimum of 1.5 - 2% for drainage in compliance with existing site conditions. Aggregate base other than Type 2 road base must be submitted to PlayMax for approval.
- 2.3 Compacted Aggregate Sub-Base: PlayMax™ Geotextile Fabric by Mirafi shall be applied over the compacted and graded stone sub-base. The application of the poured-in-place system shall be applied over the PlayMax™ Geotextile Fabric.

PART 3 – CORRECTIONS

- 3.1 Any portion of the above stated work shall be inspected by PlayMax prior to application of the safety surfacing materials.
- 3.2 Any corrections deemed necessary by PlayMax or the Architect shall be completed by the parties responsible for the appropriate portion of the work prior to the installation of the Safety Surfacing system.
- 3.3 Under no circumstances shall PlayMax assume responsibility nor warranty cost for any failure of work completed by others (see Statement of Warranty.)