

3-Part Specification: PlayBound™ Tile



SURFACEAMERICA®

Surface America, Inc. • PO Box 157 • Williamsville, NY 14231
Phone: (800) 999-0555 • Phone: (716) 632-8413 • Fax: (716) 632-8324
info@surfaceamerica.com • www.surfaceamerica.com

PART 1 – GENERAL

1.01 SUMMARY

A. Section Includes: Rubber tile playground surfacing system.

Specifier Note: Revise paragraph below to suit project requirements. If a reader of this section could reasonably expect to find a product or component specified in this section, but it is actually specified elsewhere, then the related section number(s) should be listed in the paragraph below. In the absence of related sections, delete paragraph below.

Specifier Note: Site materials and methods, drainage, playground equipment, fencing, substrate preparation and similar work are provided by others and are described in other sections. Consult manufacturer for specific substrate preparation requirements. Edit, retain or delete paragraph below to suit project requirements and specifier practice.

B. Related Sections: Division 2 Sitework Sections: Materials and Methods, Excavation, Asphalt Paving, Concrete Paving, Sub-Drainage, Storm Drainage, Fencing, Playground Equipment and Structures.

Specifier Note: Article below may be omitted when specifying manufacturer's proprietary products and recommended installation. Retain References Article when specifying products and installation by an industry reference standard. If retained, list standard(s) referenced in this section. Indicate issuing authority name, acronym, standard designation and title. Establish policy for indicating edition date of standard referenced. Conditions of the Contract or Division 1 References Section may establish the edition date of standards. This article does not require compliance with standard. It is a listing of all references used in this section.

1.02 REFERENCES

A. American Society for Testing and Materials (ASTM):

1. ASTM D412 Standard Test Methods for Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Elastomers-Tension.
2. ASTM D624 Standard Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers.
3. ASTM D2047 Standard Test Method for Static Coefficient of Friction of Polish-Coated Floor Surfaces as Measured by the James Machine.
4. ASTM D2859 Standard Test Method for Flammability of Finished Textile Floor Covering Materials.
5. ASTM E303 Standard Test Method for Measuring Surface Frictional Properties Using the British Pendulum Tester.

6. ASTM F1292 Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment.

7. ASTM F1951 Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment.

Specifier Note: Article below should be restricted to statements describing design or performance requirements and functional (not dimensional) tolerances of a complete system. Limit descriptions to composite and operational properties required to link components of a system together and to interface with other systems.

1.03 SYSTEM DESCRIPTION

A. Performance Requirements: Provide a single layer rubber tile playground surfacing system which has been designed, manufactured and installed to meet the following criteria:

1. Shock Attenuation (ASTM F1292):
 - a. Gmax - Less than 200.
 - b. Head Injury Criteria - Less than 1000.
2. Flammability (ASTM D2859) - Pass.
3. Tensile Strength (ASTM D412) - 60 psi (413 kPa).
4. Tear Resistance (ASTM D624) - 140%.
5. Water Permeability: 0.4 gal/yd²/second.
6. Accessibility: Comply with requirements of ASTM F1951.

Specifier Note: Article below includes submittal of relevant data to be furnished by Contractor before, during or after construction. Coordinate this article with Architect's and Contractor's duties and responsibilities in Conditions of the Contract and Division 1 Submittal Procedures Section.

1.04 SUBMITTALS

A. General: Submit listed submittals in accordance with Conditions of the Contract and Division 1 Submittal Procedures Section.

B. Product Data: Submit manufacturer's product data and installation instructions.

C. Verification Samples: Submit manufacturer's standard verification samples of 9" x 9" (229 x 229 mm) minimum.

D. Quality Assurance/Control Submittals: Submit the following:

1. Certificate of qualifications of the playground surfacing installer.

E. Closeout Submittals: Submit the following:

1. Warranty documents specified herein.

Specifier Note: Article below should include statements of prerequisites, standards, limitations and criteria that establish an overall level of quality for products and workmanship for this section. Coordinate article below with Division 1 Quality Assurance Section.

1.05 QUALITY ASSURANCE

A. Qualifications: Utilize an installer having experience with projects of similar scope and complexity.

Specifier Note: Article below should include specific protection and environmental conditions required during storage. Coordinate article below with Division 1 Product Requirements Section.

1.06 DELIVERY, STORAGE & HANDLING

A. General: Comply with Division 1 Product Requirement Section.

B. Delivery: Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.

C. Storage and Protection: Store materials protected from exposure to harmful environmental conditions and at a minimum temperature of 20 degrees F (-7 degrees C) and a maximum temperature of 100 degrees F (38 degrees C).

Specifier Note: In article below, state physical or environmental limitations or criteria for installation such as weather, temperature, humidity, ventilation or illumination required for proper installation or application.

1.07 PROJECT/SITE CONDITIONS

A. Environmental Requirements: Install surfacing system when minimum ambient temperature is 40 degrees F (1 degree C) and maximum ambient temperature is 90 degrees F (32 degrees C). Do not install in steady or heavy rain.

Specifier Note: Coordinate article below with Conditions of the Contract and with Division 1 Closeout Submittals (Warranty) Section. Use this article to require special or extended warranty or bond covering the work of this section.

1.08 WARRANTY

A. Project Warranty: Refer to Conditions of the Contract for project warranty provisions.

B. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty document executed by authorized company official. Manufacturer's warranty is in addition to, and not a limitation of, other rights Owner may have under contract documents.

C. Proper drainage is critical to the longevity of the PlayBound Tile surfacing system. Inadequate drainage will cause premature breakdown of the poured system in affected areas; and void the warranty.

Specifier Note: Coordinate subparagraph below with manufacturer's warranty requirements.

1. Warranty Period: 5 years from date of product shipment.

PART 2 – PRODUCTS

Specifier Note: Retain article below for proprietary method specification. Add product attributes, performance characteristics, material standards and descriptions as applicable. Use of such phrases as "or equal" or "or approved equal" or similar phrases may cause ambiguity in specifications. Such phrases require verification (procedural, legal and regulatory) and assignment of responsibility for determining "or equal" products.

2.01 RUBBER TILE PLAYGROUND SURFACING SYSTEM

Specifier Note: Retain or delete paragraph below per project requirements and specifier's practice.

A. Manufacturer: Surface America, Inc.

1. Contact: PO Box 157, Williamsville, NY 14231; Telephone: (800) 999-0555, (716) 632-8413; Fax: (716) 632-8324; E-mail: info@surfaceamerica.com; website: <http://www.surfaceamerica.com>.

B. Proprietary Products/Systems. Rubber tile playground surfacing system, including the following:

1. PlayBound Tile:

a. Material: 100% post-consumer recycled SBR (Styrene Butadiene Rubber) and pigmented polyurethane.

Specifier Note: The type of playground equipment determines the required tile thickness. Depending on ASTM F1292 requirements for critical fall height 4', 6' or 8' (1.2, 1.8 or 2.4 m), select tile thickness from optional thicknesses 1 3/4", 2 3/8", 3 3/8" or 4" (44, 60, 86 or 102 mm), respectively. Specify project requirements below and coordinate with working drawings.

b. Dimensions: 24" x 24" (609mm x 609mm)

c. Thickness and Weight: [1 3/4", 2 3/8", 3 3/8" or 4" (43, 60, 85 or 100 mm) [26, 36, 44 or 50 lb (12 16, 20 or 23 kg).].

d. Custom thicknesses ranging from 1 1/2" - 4" (38 - 100 mm) are available.

e. Color: [Black] [Terra Cotta Red] [Gray] [Green].

f. Dry Static Coefficient of Friction (ASTM D2047): 1.0.

g. Wet Static Coefficient of Friction (ASTM D2047): 0.9.

h. Dry Skid Resistance (ASTM E303): 89.

i. Wet Skid Resistance (ASTM E303): 57.

Specifier Note: Edit Article below to suit project requirements. If substitutions are permitted, edit text below. Add text to refer to Division 1 Project Requirements (Product Substitutions Procedures) Section.

2.02 PRODUCT SUBSTITUTIONS

A. Substitutions: No substitutions permitted.

Specifier Note: Specify subordinate or secondary items that aid and assist primary products specified above or are necessary for preparation or installation of those items.

2.03 ACCESSORIES

A. Provide accessory items as follows:

1. Surface America EverGrip Adhesive.

2. PlayBound Tile Standard Beveled Edge.

3. PlayBound Tile Corner Piece.

4. PlayBound Tile ADA Beveled Edge.

5. PlayBound Tile Transition Piece.

6. PlayBound Tile Edge Transition Piece.

7. PlayBound Tile Resilient Curb.

PART 3 – EXECUTION

Specifier Note: Revise article below to suit project requirements and specifier's practice.

3.01 MANUFACTURER'S INSTRUCTIONS

A. Comply with the instructions and recommendations of the playground surfacing manufacturer.

Specifier Note: Specify actions to physically determine that conditions are acceptable to receive primary products of the section.

3.02 EXAMINATION

A. Site Verification of Conditions: Verify that substrate conditions are suitable for installation of the playground surfacing system.

B. Do not proceed with installation until unsuitable conditions are corrected.

C. Proper drainage is critical to the longevity of the PlayBound Tile surfacing system. Inadequate drainage will cause premature breakdown of the poured system in affected areas; and void the warranty.

Specifier Note: Specify actions required to physically prepare the surface, area or site or to incorporate the primary products of the section.

3.03 PREPARATION

A. Surface Preparation: Ensure that the concrete or asphalt substrate is level or uniformly sloped since surface variations will be telegraphed through to the rubber tile surface.

Specifier Note: Coordinate article below with manufacturer's recommended installation requirements.

3.04 INSTALLATION

A. Do not proceed with playground surfacing installation until all applicable site work, including substrate preparation, fencing, playground equipment installation and other relevant work, has been completed.

B. Lay rectangular PlayBound Tiles in a quarter-length, staggered pattern. Avoid placement when large temperature swings during the time between adhesive application and final curing are expected, as gapping between tiles may result.

1. Apply adhesive on tight asphalt or concrete at a rate of approximately 65 ft²/gal (1.6 m²/L). Adhesive consumption will increase as asphalt porosity increases.

2. Apply adhesive to the base using a notched trowel.

3. Apply adhesive to tile sides using a putty knife, roller or adhesive tube. Apply adhesive to approximately 60 perimeter inches (1.5 m) of the total 120 perimeter inches (3 m) of the tile to allow for rainwater drainage.

4. Maintain a straight line at the tile joints. To keep lines straight, adjust tiles using a rubber mallet as they are installed.

Specifier Note: Specify provisions for protecting work after installation but prior to acceptance by the owner. Coordinate article below with Division 1 Execution Requirements Section.

3.05 PROTECTION

A. Protect the installed playground surface from damage resulting from subsequent construction activity on the site.