

Play Safe 40

Playground Turf Specification & Warranty

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specifications apply to this section.

1.2 DESCRIPTION OF WORK

A. Provide all materials, labor, equipment and services required to accomplish related work in accordance with the drawings and specifications. The turf system shall be specifically designed, manufactured and installed for high use, public playgrounds. The turf system shall be IPEMA Certified and 100% wheelchair accessible (ASTM F 1951) in the field. The turf system shall drain up to 130 inches per hour (ASTM F 1551), excluding the crushed stone base. The system's shock attenuation shall have a G-max value of less than 200 and a Head Injury Criteria (HIC) less than 1,000 (ASTM F 1292). The turf system shall consist of, but not necessarily be limited to, the following:

1. Synthetic turf consisting of nominal one and a quarter inch (1.25") long polyethylene fibers with thatch that is tufted into a single, dimensionally stable, three component primary backing with a secondary backing consisting of a minimum of 17 ounces of urethane per square yard. Shaw Grass Play 40 with Ultraloc backing or equivalent.

2. Closed cell foam underlayment pads that meet or exceed the standard specification for impact attenuation of surfacing materials within the use zone of playground equipment (ASTM F 1292). Either Brock PlayBase or Brock SSP20 or equivalent depending on various fall height requirements.

3. Synthetic Turf Infill that is designed to cool the playing surface 30-50 degrees as well as prolong the life of the turf fibers shall be used. A combination of two (2) pounds of Turf Chiller (by Shawgrass) and one (1) pound of clean silica per square foot shall be mixed and installed via power broom in at the jobsite.

B. Work included in this Section includes grading necessary to shape and drain the area and base preparation and installation of the synthetic turf in areas shown on Drawings.

PART 2 - PRODUCTS

2.1 SYNTHETIC TURF SAFETY SURFACE

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A. Aggregate Base – Crushed angular hard stone, ¾” minus compactible stone (not clean). (Refer to Section 3.2-B)

B. Synthetic Turf: A nominal 1.25 inch turf specifically designed for high use public park and public school playgrounds and play areas. Play Safe 40 by Shaw Grass, 185 South Industrial Blvd, Calhoun GA 30701: Phone (404) 432-6185, or Architect approved equal.

- a. Fiber Type: Shaw Polyethylene Slit Tape
- b. Fiber Mass: 8000 denier
- c. Thatch: 6 ply TXT, 7300 denier
- d. Tufted Pile Height: 1.25 inches
- e. Color: Olive with Olive thatch
- f. Tufting Gauge: ¼”
- g. Primary Backing: 7 oz/yd² (Stabilized dual layered woven polypropylene)
- h. Secondary Backing: 12 oz/yd² (100% Urethane)
- i. Tufted Face Weight: 40 oz/yd² (ASTM D 418).
- j. Total Product Weight: 69 oz/yd² (ASTM D 418)
- k. Finished Roll Width: 15 feet
- l. Finished Roll Length: Up to 100 feet (standard)
- m. Warranty: 5 year wear, 10-year fade

C. Pad Underlayment System: Bacteria resistant, porous, expanded polypropylene in various thicknesses depending on Critical Fall Height Requirements (ASTM F 1292). Foam pads engineered by Brock International (303) 544-5800 or Architect approved equal.

Brock #SSP20 pad (for 2’-5’ falls-ASTM F 1292)

- a. Expanded polypropylene
- b. 20mm thick (approximately ¾”)
- c. 15.90 square feet (net coverage per pad)
- d. 100% wheelchair accessible (ASTM F 1951)
- e. 100% recyclable
- f. Rainfall capacity: 730 inches per hour (ASTM F 1551)
- g. Life expectancy when used under synthetic turf: 16 years

Brock # PlayBase (for 6’-8’ falls-ASTM F 1292)

- a. Expanded polypropylene
- b. 2.0” thick with impact absorbing pistons and drainage channels
- c. 16.88 square feet (net coverage per pad)
- d. 100% wheelchair accessible (ASTM F 1951)
- e. 100% recyclable
- f. Rainfall capacity: 280 inches per hour (ASTM F 1551)
- g. Life expectancy when used under synthetic turf: 20 years

NOTE: All seams between pads must be taped before synthetic turf is added.

NOTE: A minimal 1 inch per 1 foot slope shall be installed as a smooth transition between fall zones requiring different sized pads. This can be accomplished by staggering the crushed stone base or by mixing and troweling SBR (rubber buffings)/aromatic binder.

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D. Synthetic Turf Infill: TurfChiller™ with Bac-Shield from Shaw Grass, 185 South Industrial Blvd., Calhoun, GA 30701. Phone (404) 432-6185 or Architect approved equal.

- a. Color: Light Brown/Buff
- b. Anti-Microbial
- c. Non-toxic
- d. Grain shape: Hardness: 6-8 Mohs
- e. Krumbein Roundness: 0.8
- f. Krumbein Sphericity: 0.8
- g. Specific Gravity: 2.65 lb per cf
- h. Bulk Density: 97.4 lb/ft³
- i. Mesh Size: 16/30
- j. Porosity: 10-15%
- k. Acid Solubility: < 2.0%
- l. Turbidity (FTU): <250
- m. Temperature Stability Fahrenheit: 1400
- n. Angle of Repose: +30 degrees
- o. Dust: Negligible

NOTE: Turf Chiller™ sand is designed to retain moisture from rainfall, dew or irrigation for days and cool the turf surface temperatures via “evaporative cooling” up to 50 degrees during the hottest times of the year compared to standard synthetic surfaces. Turf Chiller™ sand should be mixed with either Envirofill or clean silica sand at the jobsite as follows: Two (2) pounds of Turf Chiller™ with one (1) pound of Envirofill or clean silica sand per square foot. All sand should be installed using drop spreader and power broom. NOTE: Irrigation (sprinklers) can be set to water the synthetic turf surface once every 3.5 days during the hottest times of the year to achieve maximum results.

E. Splicing Material (seaming tape): Kingsport BV-Holland® 12” wide minimum, spun-bonded polyester or Architect approved equal.

F. Adhesive: Nordot 34G as manufactured by Synthetic Surfaces Inc., Scotch Plains, New Jersey (908-496-6000) or Architect approved equal.

G. Adhesive: Mapei PU2K, 2 part OD adhesive as manufactured by MAPEI Corporation, Deerfield Beach, FL. (800-992-6273) or Architect approved equal.

H. Molded rubber mats: For under all swings and slide exits. Green, 3’ x 3’ x 2”, Beveled edges, 67 lbs., flat back (for glue down). RB Rubber Products, 904 McMinnville, Oregon, 504-472-4691 or Architect approved equal.

PART 3 - EXECUTION

3.1 GROUND PREPARATION

A. General: The ground area to receive synthetic turf safety surface is indicated on the Drawings.

B. Leveling and Site Preparation: All organic material and organic debris to be removed. Soil to be graded level and stabilized (compacted). Compaction shall be done with mechanical

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compactors, including vibratory compactors, and/or powered tampers, and rollers.

3.2 BASE AND SYNTHETIC TURF CONSTRUCTION

A. General: The area to be smooth and graded to allow proper drainage. Refer to grading plan. The overall grade of the playground is not to exceed 3%.

B. Compacted Aggregate Base: Place 4 inches of aggregate base as leveling layer compacted to 90% of max density per AASHTO T99. Compaction shall be done with mechanical compactors, including vibratory compactors, and/or powered tampers, and rollers. Aggregate size should be ¾" minus (compactable).

C. Synthetic Turf: Place turf and cut to fit configuration as shown on Drawings. Splice seams. All seams must be attached with splicing film/fabric and adhesive as approved by the manufacturer for this type of installation of their product.

D. Infill: Apply layers of synthetic turf infill evenly with a spreader and broom the turf fibers with stiff bristle broom to stand fibers up and allow infill to settle into the bottom. Broom in two (2) pounds of Turf Chiller and one (1) pound of clean silica per square foot.

E. Anchoring/Edging: Edges of turf will be secured to ground or concrete curb with mechanical fasteners, stakes or edging.

PART 4 - WARRANTY

4.1 WARRANTY

A. Please refer to the updated Shawgrass warranty for details.

Commercial Playground Limited Warranty for Playsafe 40 Turf

The following is the Commercial Playground Limited Warranty issued by Shaw Industries, Inc. ("Shaw") for our Playsafe 40 Turf made with poly-ethylene sports performance fibers, and coated with a polyurethane unitary backing system.

This Commercial Playground warranty begins when the turf is purchased. **The turf must be installed in accordance with Shaw Industries installation guidelines and specifications.** The turf must be maintained in accordance with Shaw Industries maintenance (turf care) recommendations and such maintenance continues throughout the duration of the original installation.

This Warranty is further limited to the period of time the turf is owned and maintained by the original end-use purchaser. The basis of any warranty related claim is the original authorized Shaw dealer invoice. Damage resulting from the failure to follow these instructions will not be covered under this warranty.

Installation guidelines and specifications along with turf care recommendations can be obtained from
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your dealer or from
The Shaw Information Center at 1-800-441-7429.

Ten year limited warranty coverage:

Fiber – Fiber Degradation - Shaw warrants that the **Playsafe 40 Turf**, when installed and maintained as recommended by Shaw Industries for proper outdoor use, will not display ultraviolet (UV) degradation, resulting in fiber deterioration or loss.

(Failure is defined as the loss of 25 % of the tufted products based on the original weight of the products at the time of manufacturing per test method ASTM D 5848).

Actual degradation will cause a deterioration of the yarn and loss of pile as a result. Failure does not include a decrease in pile height of the face yarn from the original pile height as a result of surface compression due to normal wear.

Five year limited warranty coverage:

Backing - Tuft Bind - Shaw warrants that our **Playsafe 40 Turf**, when installed and maintained as recommended by Shaw Industries, under normal use, will meet industry standards for tuft bind.

Backing - Integrity/Delamination - Shaw warrants that our **Playsafe 40 Turf**, when installed and maintained as recommended by Shaw Industries, under normal use, will not delaminate from the face of the turf.

Note: The construction, fiber and backing system used in these products are designed and engineered for use when installed in playground and general play area applications.

What you should do if any of the above problems occur and you need

warranty service: You (the original purchaser) should notify the authorized Shaw Dealer and/or your Shawgrass representative and submit in writing, the following:

- A valid proof of purchase in the form of a sales receipt or other documents which establish proof of purchase.
- A detailed description of the problem and/or a photograph/sample that clearly shows the warranty problem.

Shaw Industries will designate a representative to inspect the Turf and evaluate the warranty claim.

What Shaw Industries will do should you need warranty service:

Should a defect covered under this warranty be found, the affected area will be repaired to conform to the warranty.

If repair is not commercially practical, Shaw may, at its sole option, replace the affected turf or refund the proportional purchase price for the affected area.

Shaw will pay the reasonable costs for freight and labor. Any costs incurred for the moving of equipment, furnishings, and the like, that were installed over the turf will be at the consumer's expense.

What conditions apply to Shaw Industries Commercial limited Warranty of

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Playsafe 40 Turf:

This commercial playground warranty specifically excludes:

- a) Turf not installed in accordance with Shaw installation guidelines.
- b) General soiling, discoloration and appearance change due to flattening of pile or pattern due to pile distortion.
- c) Staining or fading from exposure to substances or contaminants which degrade or destroy the face fiber or the color of the turf.
- d) Turf installed on stairs/landings or in areas subject to abnormal use.
- e) Turf exposed to abusive wear from abrasion or from pivot points when using inappropriate foot wears i.e. ski boots, metal cleats, hard plastic cleats, metal golf spikes, or sports equipment.
- f) Turf installed in inappropriate applications. i.e. under playground such as swings, slide landing areas or other high friction play equipment, unless rubber mats are placed over the Playsafe 40 Turf and under all swings, slide exits and around all “merry go round” type structures and other high friction play equipment.
- g) Turf installed where standing water, floods and/or flooding conditions exist.
- h) Turf installed on contact sports fields I.E. football, soccer, lacrosse, etc., unless these fields are designed for general purpose recreational play. Example: There is a difference between a general recreation play area where elementary school kids play soccer during recess and a regulation soccer field that hosts high school, college and professional team competitions.
- i) Burns, cuts, accidents, vandalism, abuse, negligence or neglect.
- j) Improper design or failure of the base or sub-base of the landscape.
- k) Wear or abrasion caused by inadequate base or sub-base.
- l) Wear or movement of product due to lack of infill on infilled products.
- m) Use of improper infill products.
- n) Use of improper cleaning agents, pesticides, herbicides, or chemicals, and maintenance methods not recommended by Shaw.
- o) Failure to properly maintain, protect or repair the turf.
- p) Damage caused by reflection (melting) or other flammable materials.
- q) As with any manufactured flooring product, there can be occasional slight differences in color between “dye lots”. Shaw cannot be responsible for any color shading differences between different rolls of turf.

Please note - The warranty is not transferable. It extends only to the original purchaser. Shaw does not grant to any person or entity the authority to create for it any obligation or liability in connection with this product.

Shaw shall not be liable to the consumer or any other person or entity for any incidental, special or consequential damages, arising out of breach of this limited warranty or any implied limited warranty (excluding merchantability).

All implied warranties, including an implied warranty of merchantability or fitness for a particular purpose, are hereby limited to the duration of this limited warranty. Some states do not allow the exclusion or limitation of implied warranties or the limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to the purchaser. This warranty gives the purchaser specific legal rights, such rights may vary from State to State. 1-24-2016 ga