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ROOTZONE 3D3 BLEND 52

AstroTurf's RootZone® 3D3 Blend now features the exciting new TRIONIC monofilament fiber as a standard feature. For the first time in the history of the industry, our experts have molecularly fused Polyethylene and Nylon into a single Trionic fiber. That translates to softness AND durability.

AstroTurf's RootZone 3D Series boasts the RootZone technology. The RootZone is a system of texturized fibers that curl down to create a net-like matrix that encapsulates infill – dramatically reducing infill spray during play and infill migration over time.

The RootZone's benefits are numerous. RootZone 3D fields offer grass-like traction, per independently funded, peer reviewed research by Michigan State University. Plus, by better keeping infill in place, the RootZone promotes more consistent footing and more uniform shock absorption over time. And with a more uniform infill level, UV exposure to the fibers is more consistent across the field, which boosts the field's longevity.

With three unique fibers – the RootZone, Trionic monofilament fibers and ultra-durable slit film fibers— the RootZone 3D3 Trionic Blend offers exceptional durability, player protection and aesthetics.

"We've been thrilled with our new Trionic field from AstroTurf. It's allowed us to utilize Memorial for football, soccer, lacrosse and even PE classes, no matter what the weather has had in store. And with the Trionic field we have the confidence that it'll hold up to the heavy usage we need for years to come."

Ed Ploof, Athletic Director, Bellarmine Prep (Tacoma, WA)

ROOTZONE 3D3 BLEND 52



- ◆ Exclusive, precise in-house fiber masterbatch formulations with cutting edge ultraviolet and heat stabilizers
- ◆ Trionic monofilament fibers featuring a proprietary co-polymer blend of Polyethylene and Nylon in a single fiber
- ◆ Entanglement technology, wherein we entangle molecular side chains to reinforce the fiber and prevent splitting
- ◆ Extremely durable slit film fibers
- ◆ RootZone infill stabilization system
- ◆ Multi-layer woven primary backing
- ◆ The latest polyurethane technology to enhance tuft lock, dimensional stability and fiber adhesion, with polymer formulations engineered in Germany and applied in our own American factory



Boys' Latin School - Baltimore, MD



Oklahoma State University - Stillwater, OK



De La Salle High School - Concord, CA



Kansas State University - Manhattan, KS

FINISH FABRIC	VALUE	ASTM TEST METHOD
Face Yarn Type	Trionic Polyethylene/Nylon blend Monofilament, Polyethylene Slit Film and RootZone	N/A
Yarn Denier	16,000 (6 ends/1,800 per end for Mono, 10,000 per end for Slit Film and 8 ends/700 denier per end for RootZone)	D-1577
Yarn Thickness	330 microns for Mono, 115 microns for Slit Film and 100 microns for RootZone	D-3218
Pile Weight	52 oz per SY	D- 5848
Finished Pile Height	2.0"	D-5823
Standard Field Color	Field Green, Lime Green	None
Construction	Tufted	None
Turf Density	936 oz/yd ³	HUD 44d
Gauge:	3/8"	D-5793
Primary Backing	8 oz per SY Multilayer Polypropylene/Polyester	D- 5848
Secondary Backing	20 oz per SY Polyurethane	D- 5848
Total Carpet Weight	80 oz per SY (+/- 5%)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
Elongation to Break	> 50%	D-2256
Yarn Breaking Strength	> 20 lbs	D-2256
Yarn Melting Point	248° F (Slit Film) / 258° F (Trionic)	D-789
Flammability	TEST PASSED	D-2859

Some of our installations include:

Alamodome (TX)
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 Appleton Area School District (WI)
 Arizona Cardinals Practice Field (AZ)
 Austin ISD (TX)
 Bellarmine Prep (WA)
 Beverly Hills Unified School District (CA)
 Boston College (MA)
 Brother Rice High School (MI)
 Cheyenne Mountain School District 12 (CO)
 Colorado Rapids Youth Soccer Academy (CO)
 Corpus Christi ISD (TX)

Davenport University (MI)
 De La Salle High School (CA)
 University of Delaware (DE)
 DePauw University (IN)
 East Rochester High School (NY)
 El Paso Gridley High School (IL)
 Evangel University (MO)
 Fore Kicks Soccer Complexes (MA)
 Global Premier Soccer (NH)
 Grand Canyon University (AZ)
 Greensboro College (NC)
 Kansas State University (KS)

Los Angeles Unified School District (CA)
 Liberty University (VA)
 Marin Catholic High School (CA)
 The McCallie School (TN)
 Mississippi State University (MS)
 North Broward Prep (FL)
 Oconee County Schools (GA)
 The Ohio State University (OH)
 University of Oklahoma (OK)
 Oklahoma State University (OK)
 Paramus Catholic High School (NJ)
 Penn State University (PA)

Ringgold High School (PA)
 Saint John Bosco High School (CA)
 Salina High School (KS)
 Sam Houston State University (TX)
 Silverlakes Equestrian & Sports Park (CA)
 Texas A&M University (TX)
 Tri-Town High School (ME)
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 University Liggett School (MI)
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ROOTZONE 3D3 BLEND

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AstroTurf's RootZone 3D Series boasts the RootZone technology. The RootZone is a system of texturized fibers that curl down to create a net-like matrix that encapsulates infill – dramatically reducing infill spray during play and infill migration over time.

The RootZone's benefits are numerous. RootZone 3D fields offer grass-like traction, per independently funded, peer reviewed research by Michigan State University. Plus, by better keeping infill in place, the RootZone promotes more consistent footing and more uniform shock absorption over time. And with a more uniform infill level, UV exposure to the fibers is more consistent across the field, which boosts the field's longevity.

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Ed Ploof, Athletic Director, Bellarmine Prep (Tacoma, WA)

ROOTZONE 3D3 BLEND



- ◆ Exclusive, precise in-house fiber masterbatch formulations with cutting edge ultraviolet and heat stabilizers
- ◆ Trionic monofilament fibers featuring a proprietary co-polymer blend of Polyethylene and Nylon in a single fiber
- ◆ Entanglement technology, wherein we entangle molecular side chains to reinforce the fiber and prevent splitting
- ◆ Extremely durable slit film fibers
- ◆ RootZone infill stabilization system
- ◆ Multi-layer woven primary backing
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Yarn Thickness	330 microns for Mono, 115 microns for Slit Film and 100 microns for RootZone	D-3218
Pile Weight	60 oz per SY	D- 5848
Finished Pile Height	2.0"	D-5823
Standard Field Color	Field Green, Lime Green	None
Construction	Tufted	None
Turf Density	1,080 oz/yd ³	HUD 44d
Gauge:	3/8"	D-5793
Primary Backing	8 oz per SY Multilayer Polypropylene/Polyester	D- 5848
Secondary Backing	20 oz per SY Polyurethane	D- 5848
Total Carpet Weight	88 oz per SY (+/- 5%)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
Elongation to Break	> 50%	D-2256
Yarn Breaking Strength	> 20 lbs	D-2256
Yarn Melting Point	248° F (Slit Film) / 258° F (Trionic)	D-789
Flammability	TEST PASSED	D-2859

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ROOTZONE 3D3 BLEND HD

AstroTurf's RootZone 3D3 Blend HD (High Density) features the exciting new Trionic face fiber. For the first time in the history of the industry, our experts have molecularly fused Polyethylene and Nylon into a single fiber. That translates to softness AND durability.

AstroTurf's RootZone® 3D HD Series boasts the RootZone technology. The RootZone is a system of texturized fibers that curl down to create a net-like matrix that encapsulates infill – dramatically reducing infill spray during play and infill migration over time.

The RootZone's benefits are numerous. RootZone 3D fields offer grass-like traction, per independently funded, peer reviewed research by Michigan State University. Plus, by better keeping infill in place, the RootZone promotes more consistent footing and more uniform shock absorption over time. And with a more uniform infill level, UV exposure to the fibers is more consistent across the field, which boosts the field's longevity.

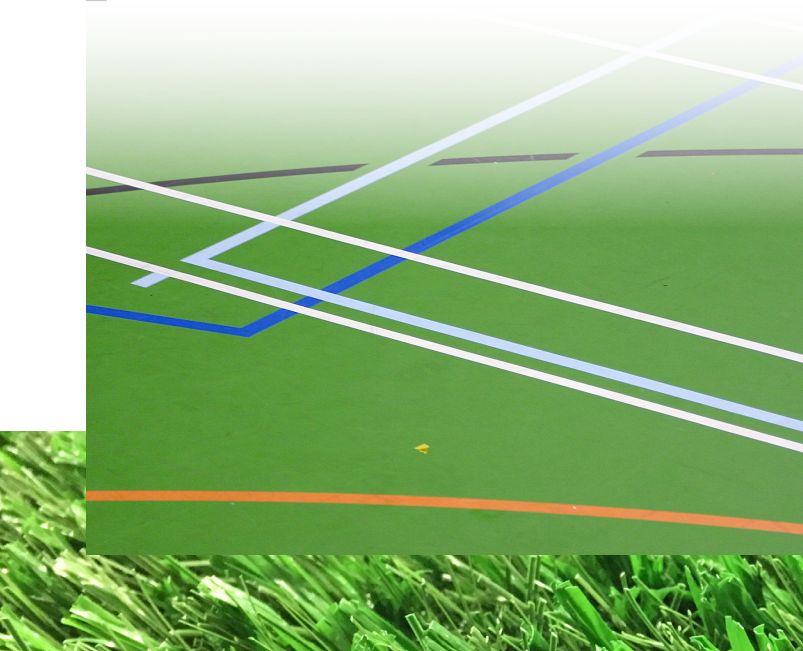
With three unique fibers – the RootZone, Trionic monofilament fibers— the RootZone 3D3 Blend HD offers exceptional durability, player protection, and aesthetics. And at 1.5" tall, this system is even denser, plusher and more durable than its RootZone 3D3 Blend counterpart. It is ideal for use over a pad and with alternative infills.



ROOTZONE 3D3 BLEND HD



- ◆ Exclusive, precise in-house fiber masterbatch formulations with cutting edge ultraviolet and heat stabilizers
- ◆ Trionic monofilament fibers featuring a proprietary co-polymer blend of Polyethylene and Nylon in a single fiber
- ◆ Entanglement technology, wherein we entangle molecular side chains to reinforce the fiber and prevent splitting
- ◆ Extremely durable slit film fibers for resistance to wear
- ◆ RootZone infill stabilization system
- ◆ 1.5" tall for enhanced durability and aesthetics
- ◆ Multi-layer woven primary backing
- ◆ The latest polyurethane technology to enhance tuft lock, dimensional stability and fiber adhesion, with polymer formulations engineered in Germany and applied in our own American factory
- ◆ Ideal for use with alternative infills
- ◆ Pad required



FINISH FABRIC	VALUE	ASTM TEST METHOD
Face Yarn Type	Trionic Polyethylene/Nylon blend Monofilament, Polyethylene Slit Film and RootZone	N/A
Yarn Denier	16,000 (6 ends/1,800 per end for Mono, 10,000 per end for Slit Film and 8 ends/700 denier per end for RootZone)	D-1577
Yarn Thickness	330 microns for Mono, 115 microns for Slit Film and 100 microns for RootZone	D-3218
Pile Weight	52 oz per SY	D- 5848
Finished Pile Height	1.5"	D-5823
Standard Field Color	Field Green, Lime Green	None
Construction	Tufted	None
Turf Density	1,248 oz/yd ³	HUD 44d
Gauge:	3/8"	D-5793
Primary Backing	8 oz per SY Multilayer Polypropylene/Polyester	D- 5848
Secondary Backing	20 oz per SY Polyurethane	D- 5848
Total Carpet Weight	80 oz per SY (+/- 5%)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
Elongation to Break	> 50%	D-2256
Yarn Breaking Strength	> 20 lbs	D-2256
Yarn Melting Point	248° F (Polyethylene) / 258° F (Trionic)	D-789
Flammability	TEST PASSED	D-2859

Some of our installations include:

Bell Branch Park (MD)	Penn State University (PA)
Brandeis University (MA)	Montebello High School (CO)
Bristol Motor Speedway (TN)	North Collier Regional Park (FL)
Collier County Schools (FL)	Roland Park Country School (MD)
Denver Public Schools (CO)	Viera Regional Park (FL)
East High School (CO)	Virginia Youth Soccer Association
Ed DeFore Sports Complex (GA)	Headquarters (VA)
First Baptist Academy (FL)	Westminster College (MO)
Franklin & Marshall College (PA)	Wide World of Sports (MI)
Leon County Public Schools (GA)	Won Sports (MA)



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THE SURFACE SPECIALISTS

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The RootZone's benefits are numerous. RootZone 3D fields offer grass-like traction, per independently funded, peer reviewed research by Michigan State University. Plus, by better keeping infill in place, the RootZone promotes more consistent footing and more uniform shock absorption over time. And with a more uniform infill level, UV exposure to the fibers is more consistent across the field, which boosts the field's longevity.

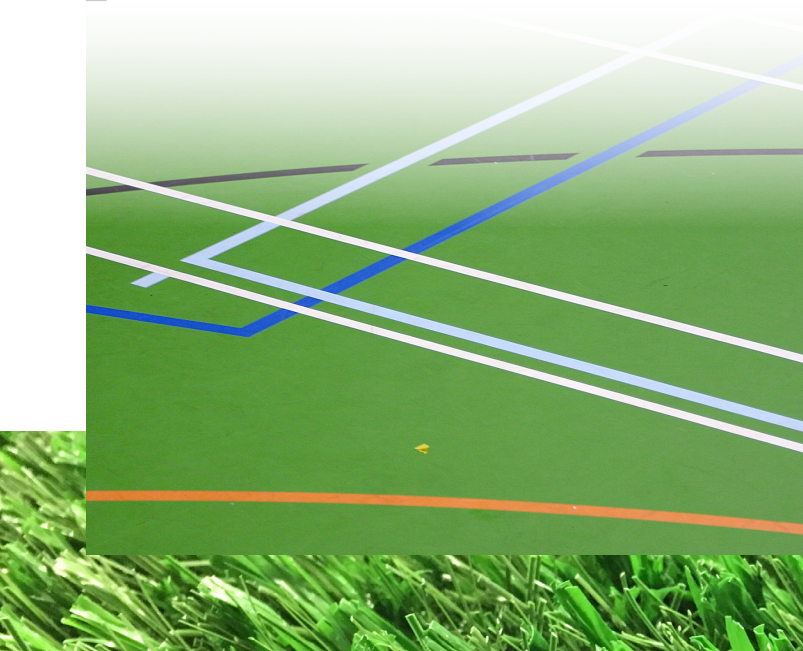
With three unique fibers – the RootZone, Trionic monofilament fibers— the RootZone 3D3 Blend HD offers exceptional durability, player protection, and aesthetics. And at 1.5" tall, this system is even denser, plusher and more durable than its RootZone 3D3 Blend counterpart. It is ideal for use over a pad and with alternative infills.



ROOTZONE 3D3 BLEND HD



- ◆ Exclusive, precise in-house fiber masterbatch formulations with cutting edge ultraviolet and heat stabilizers
- ◆ Trionic monofilament fibers featuring a proprietary co-polymer blend of Polyethylene and Nylon in a single fiber
- ◆ Entanglement technology, wherein we entangle molecular side chains to reinforce the fiber and prevent splitting
- ◆ Extremely durable slit film fibers for resistance to wear
- ◆ RootZone infill stabilization system
- ◆ 1.5" tall for enhanced durability and aesthetics
- ◆ Multi-layer woven primary backing
- ◆ The latest polyurethane technology to enhance tuft lock, dimensional stability and fiber adhesion, with polymer formulations engineered in Germany and applied in our own American factory
- ◆ Ideal for use with alternative infills
- ◆ Pad required



FINISH FABRIC	VALUE	ASTM TEST METHOD
Face Yarn Type	Trionic Polyethylene/Nylon blend Monofilament, Polyethylene Slit Film and RootZone	N/A
Yarn Denier	16,000 (6 ends/1,800 per end for Mono, 10,000 per end for Slit Film and 8 ends/700 denier per end for RootZone)	D-1577
Yarn Thickness	330 microns for Mono, 115 microns for Slit Film and 100 microns for RootZone	D-3218
Pile Weight	60 oz per SY	D- 5848
Finished Pile Height	1.5"	D-5823
Standard Field Color	Field Green, Lime Green	None
Construction	Tufted	None
Turf Density	1,440 oz/yd ³	HUD 44d
Gauge:	3/8"	D-5793
Primary Backing	8 oz per SY Multilayer Polypropylene/Polyester	D- 5848
Secondary Backing	20 oz per SY Polyurethane	D- 5848
Total Carpet Weight	88 oz per SY (+/- 5%)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
Elongation to Break	> 50%	D-2256
Yarn Breaking Strength	> 20 lbs	D-2256
Yarn Melting Point	248° F (Polyethylene) / 258° F (Trionic)	D-789
Flammability	TEST PASSED	D-2859

Some of our installations include:

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With three unique fibers – the RootZone, Legend-shaped monofilament fibers and ultra-durable slit film fibers— the RootZone 3D3 Blend offers exceptional durability, player protection and aesthetics. It's no wonder this is one of our best-selling systems.

"Our players, coaches and staff have been extremely satisfied with our AstroTurf fields at the Sherman Smith Center. When it came time to replace the turf at Boone Pickens Stadium, we decided to stick with AstroTurf."

Mike Holder, Athletic Director, Oklahoma State University

ROOTZONE 3D3 BLEND LEGEND



- ◆ Exclusive, precise in-house fiber masterbatch formulations with cutting edge ultraviolet and heat stabilizers
- ◆ Legend monofilament fibers refract light naturally for a grass-like appearance
- ◆ Entanglement technology, wherein we entangle molecular side chains to reinforce the fiber and prevent splitting
- ◆ Extremely durable slit film fibers
- ◆ RootZone infill stabilization system
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ROOTZONE 3D3 TRIONIC DECADE

AstroTurf's RootZone® 3D3 Trionic Decade is the ultimate value in turf. Featuring a ten year warranty, 3D3 Trionic Decade packages three impressive technologies for ultimate durability and player protection:

Authentic Nylon RootZone – The RootZone is a system of texturized nylon fibers that curl down to create a net-like matrix that encapsulates infill – dramatically reducing infill spray during play and infill migration over time.

The RootZone's benefits are numerous. RootZone 3D fields offer grass-like traction, per independently funded, peer reviewed research by Michigan State University. Plus, by better keeping infill in place, the RootZone promotes more consistent footing and more uniform shock absorption over time. And with a more uniform infill level, UV exposure to the fibers is more consistent across the field, which boosts the field's longevity.

Heavy Duty Fibers – Uses three unique fibers – the authentic nylon RootZone, ultra-durable slit film fibers and the exciting new Trionic monofilament. For the first time in the history of the industry, our experts have molecularly fused Polyethylene and Nylon into a single fiber. That translates to softness and durability.

PreFabrication – The most common maintenance problems are loose inlays. During the short, steamy installation season, the elements are a constant battle. We minimize those variables with our exclusive climate-controlled inlaying process—k PreFabrication. 3D3 Trionic Decade fields arrive from the factory with almost all markings already cut, bonded and reinforced. PreFab has worked for years and is now mandatory with any Decade sale.

“Our players, coaches and staff have been extremely satisfied with our AstroTurf fields at the Sherman Smith Center. When it came time to replace the turf at Boone Pickens Stadium, we decided to stick with AstroTurf.”

Mike Holder, Athletic Director,
Oklahoma State University (Stillwater, OK)

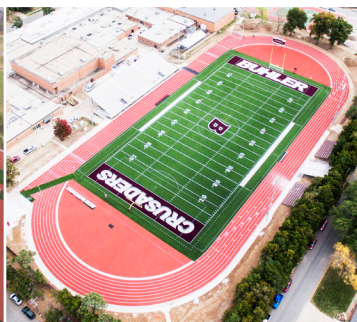
ROOTZONE 3D3 TRIONIC DECADE



- ◆ Ten Year Warranty
- ◆ Exclusive, precise in-house fiber masterbatch formulations with cutting edge ultraviolet and heat stabilizers
- ◆ Ultra-durable slit film fibers
- ◆ Trionic monofilament fibers featuring a proprietary co-polymer blend of Polyethylene and Nylon in a single fiber
- ◆ Entanglement technology, wherein we entangle molecular side chains to reinforce the fiber and prevent splitting
- ◆ RootZone infill stabilization system
- ◆ Multi-layer woven primary backing
- ◆ The latest polyurethane technology to enhance tuft lock, dimensional stability and fiber adhesion, with polymer formulations engineered in Germany and applied in our own American factory
- ◆ Prefabricated inlays



Baldwin Park High School – Baldwin Park, CA



Buhler High School – Buhler, KS



Oklahoma State University – Stillwater, OK



University of South Carolina – Columbia, SC

FINISH FABRIC	VALUE	ASTM TEST METHOD
Face Yarn Type	Trionic Polyethylene/Nylon blend Monofilament, Polyethylene Slit Film and Nylon RootZone	N/A
Yarn Denier	16,400 (6 ends/1,800 per end for Mono, 10,000 per end for Slit Film and 8 ends/750 denier per end for RootZone)	D-1577
Yarn Thickness	330 microns for Mono, 115 microns for Slit Film and 100 microns for RootZone	D-3218
Pile Weight	60 oz/SY	D- 5848
Finished Pile Height	2.0"	D-5823
Standard Field Color	Field Green, Lime Green	None
Construction	Tufted	None
Turf Density	1,080 oz/yd ³	HUD 44d
Gauge:	3/8"	D-5793
Primary Backing	8 oz per SY Multilayer Polypropylene/Polyester	D- 5848
Secondary Backing	20 oz/SY Polyurethane	D- 5848
Total Carpet Weight	88 oz/SY (+/- 5%)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
Elongation to Break	> 50%	D-2256
Yarn Breaking Strength	> 20 lbs	D-2256
Yarn Melting Point	248° F (Slit Film) / 258° F (Trionic) / 428 ° F (RootZone)	D-789
Flammability	TEST PASSED	D-2859

Some of our installations include:

Aurora University (IL)
 Baldwin Park High School (CA)
 Borger ISD (TX)
 Buhler High School (KS)
 Cherokee County Schools (GA)
 City View High School (TX)
 East Chambers High School (TX)
 Fredericksburg ISD (TX)
 Garry Berry Stadium (CO)
 Hampton University (VA)

Independence High School (OH)
 JSerra Catholic High School (CA)
 Kenedy ISD (TX)
 Kohler High School (WI)
 Les Schwab Sports Park (WA)
 Morgan Hill Outdoor Sports Center (CA)
 Nolan Catholic High School (TX)
 Oklahoma State University (OK)
 Riverside-Brookfield High School (IL)
 Sierra Vista High School (CA)

University of South Carolina (SC)
 St. John Bosco High School (CA)
 Temple High School (TX)
 Watford City Events Center (ND)



Note: 1.31.19 SS. Valid through 12/31/2019. Any change from the specified values is considered a special product that will require confirmation from manufacturing prior to ordering. All values are ± 5%. AstroTurf® has the right to modify technical specifications on the above-mentioned product. Delivered products can slightly differ from the technical data. AstroTurf® guarantees the technical quality of the proposed article.



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ROOTZONE 3DM

AstroTurf's RootZone 3DM system features the exciting new Trionic face fiber as a standard offering. For the first time in the history of the industry, our experts have molecularly fused Polyethylene and Nylon into a single fiber. That translates to softness AND durability.

AstroTurf's RootZone® 3D Series also boasts the RootZone technology. The RootZone is a system of texturized fibers that curl down to create a net-like matrix that encapsulates infill – dramatically reducing infill spray during play and infill migration over time.

The RootZone's benefits are numerous. RootZone 3D fields offer grass-like traction, per independently funded, peer reviewed research by Michigan State University. Plus, by better keeping infill in place, the RootZone promotes more consistent footing and more uniform shock absorption over time. And with a more uniform infill level, UV exposure to the fibers is more consistent across the field, which boosts the field's longevity.

With a RootZone and Trionic monofilament fibers, the RootZone 3DM product offers outstanding player protection, excellent durability and superior aesthetics.

"Several key factors were involved in our decision to go with AstroTurf. Chief among those were quality of the playing surface, reputation of the company and its partners, and the ability to complete the project on time. Our research indicated a clear match between our needs and AstroTurf."

Joe Karlgaard, Director of Athletics, Rice University

ROOTZONE 3DM



- ◆ Exclusive, precise in-house fiber masterbatch formulations with cutting edge ultraviolet and heat stabilizers
- ◆ Trionic monofilament fibers featuring a proprietary co-polymer blend of Polyethylene and Nylon in a single fiber
- ◆ Entanglement technology, wherein we entangle molecular side chains to reinforce the fiber and prevent splitting
- ◆ RootZone infill stabilization system
- ◆ Multi-layer woven primary backing
- ◆ The latest polyurethane technology to enhance tuft lock, dimensional stability and fiber adhesion, with polymer formulations engineered in Germany and applied in our own American factory



FINISH FABRIC	VALUE	ASTM TEST METHOD
Face Yarn Type	Trionic Polyethylene/Nylon blend Monofilament and RootZone	N/A
Yarn Denier	16,400 (6 ends/1,800 per end for Mono, 8 ends/700 denier per end for RootZone)	D-1577
Yarn Thickness	330 microns for Mono, 100 microns for RootZone	D-3218
Pile Weight	60 oz per SY	D- 5848
Finished Pile Height	2.0"	D-5823
Standard Field Color	Field Green, Lime Green	None
Construction	Tufted	None
Turf Density	1,080 oz/yd ³	HUD 44d
Gauge:	3/8"	D-5793
Primary Backing	8 oz per SY Multilayer Polypropylene/Polyester	D- 5848
Secondary Backing	20 oz per SY Polyurethane	D- 5848
Total Carpet Weight	88 oz per SY (+/- 5%)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
Elongation to Break	> 50%	D-2256
Yarn Breaking Strength	> 20 lbs	D-2256
Yarn Melting Point	258° F	D-789
Flammability	TEST PASSED	D-2859

Some of our installations include:

Alabama State University (AL)	Hatboro Horsham High School (PA)	Rocky Top Sports World (TN)
Baltimore City College High School (MD)	Hopewell Valley High School (NJ)	Rutgers Camden University (NJ)
Bryan Independent School District (TX)	Judson ISD (TX)	Sacred Heart Preparatory School (CA)
C. Milton Wright High School (MD)	Lewis & Clark College (OR)	Scottsdale Christian Academy (AZ)
Cardinal Gibbons High School (NC)	Magnolia ISD (TX)	St. Rita High School (IL)
Centre College (KY)	University of Massachusetts - Amherst (MA)	Stanford University (CA)
Chaffey USD (CA)	University of Michigan (MI)	Ted Hendricks Stadium (FL)
Columbia High School (IL)	Oregon State University (OR)	Temple High School (TX)
Elizabeth Parks (NJ)	Pomona USD (CA)	University of Tennessee (TN)
Emery Weiner School (TX)	Refugio High School (TX)	Union County Parks (NJ)
Evergreen SportsPlex (VA)	Rice University (TX)	West Ranch High School (CA)
Golden Valley High School (CA)	Ridgeland High School (GA)	Windber Area High School (PA)



Note: 2.12.19 SS. Valid through 12/31/2019. Any change from the specified values is considered a special product that will require confirmation from manufacturing prior to ordering. All values are ± 5%. AstroTurf® has the right to modify technical specifications on the above-mentioned product. Delivered products can slightly differ from the technical data. AstroTurf® guarantees the technical quality of the proposed article.



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ROOTZONE 3DM HD

AstroTurf's RootZone 3DM HD (High Density) features the exciting new Trionic face fiber, now a standard feature. For the first time in the history of the industry, our experts have molecularly fused Polyethylene and Nylon into a single fiber. That translates to softness AND durability.

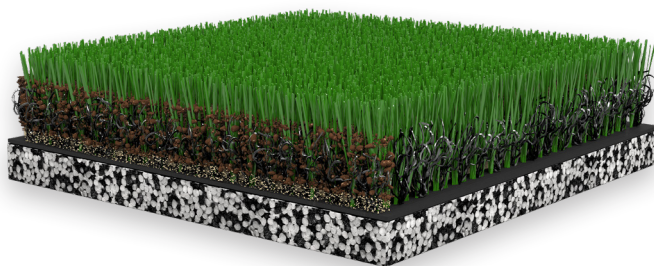
This system also boasts the RootZone technology. The RootZone is a system of texturized fibers that curl down to create a net-like matrix that encapsulates infill – dramatically reducing infill spray during play and infill migration over time.

The RootZone's benefits are numerous. RootZone 3D fields offer grass-like traction, per independently funded, peer reviewed research by Michigan State University. Plus, by better keeping infill in place, the RootZone promotes more consistent footing and more uniform shock absorption over time. And with a more uniform infill level, UV exposure to the fibers is more consistent across the field, which boosts the field's longevity.

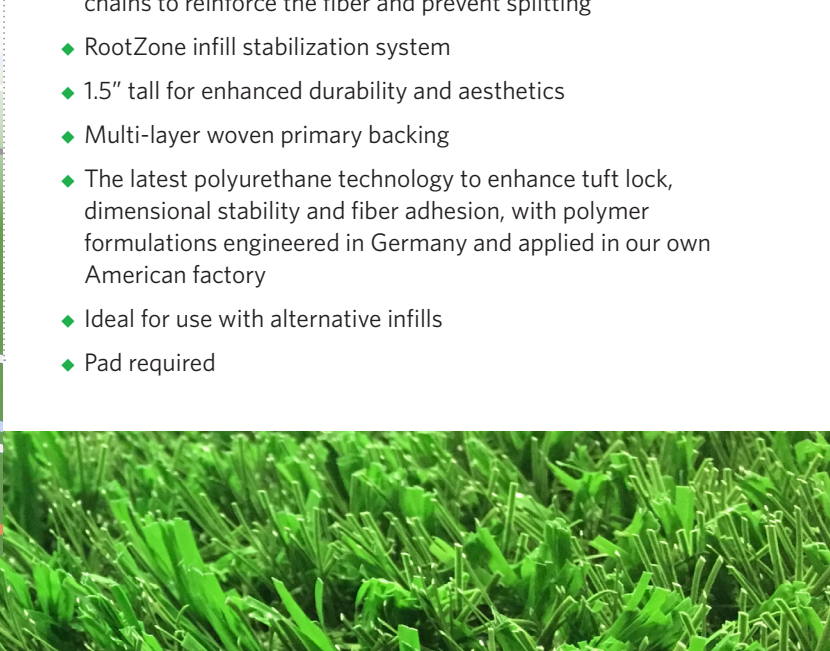
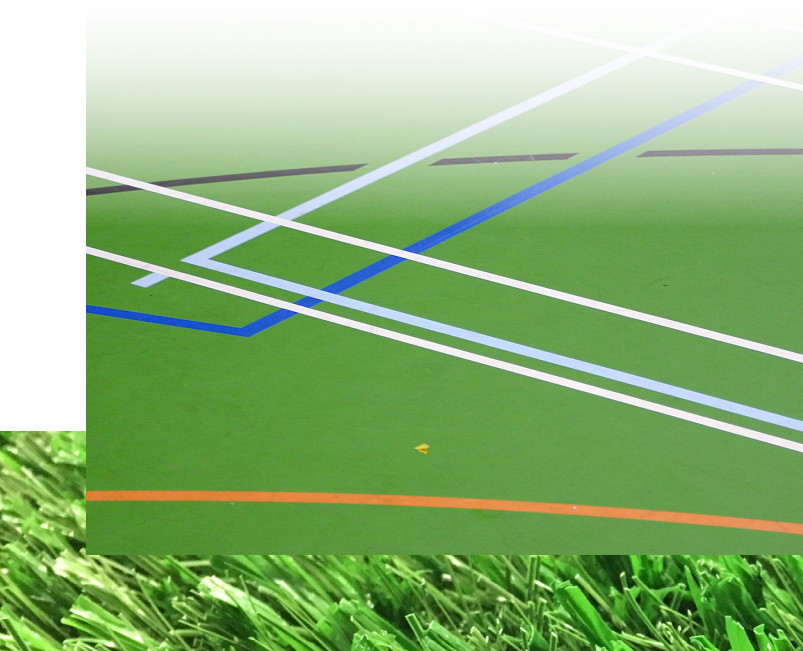
With a RootZone and Trionic monofilament fibers, the RootZone 3DM Trionic HD product offers outstanding player protection, excellent durability and superior aesthetics. And at 1.5" tall, this system is even denser, plusher, and more durable than its RootZone 3DM counterpart. It is ideal for use over a pad and with alternative infills.



ROOTZONE 3DM HD



- ◆ Exclusive, precise in-house fiber masterbatch formulations with cutting edge ultraviolet and heat stabilizers
- ◆ Trionic monofilament fibers featuring a proprietary co-polymer blend of Polyethylene and Nylon in a single fiber
- ◆ Entanglement technology, wherein we entangle molecular side chains to reinforce the fiber and prevent splitting
- ◆ RootZone infill stabilization system
- ◆ 1.5" tall for enhanced durability and aesthetics
- ◆ Multi-layer woven primary backing
- ◆ The latest polyurethane technology to enhance tuft lock, dimensional stability and fiber adhesion, with polymer formulations engineered in Germany and applied in our own American factory
- ◆ Ideal for use with alternative infills
- ◆ Pad required



FINISH FABRIC	VALUE	ASTM TEST METHOD
Face Yarn Type	Trionic Polyethylene/Nylon blend Monofilament and RootZone	N/A
Yarn Denier	16,400 (6 ends/1,800 per end for Mono, 8 ends/700 denier per end for RootZone)	D-1577
Yarn Thickness	330 microns for Mono, 100 microns for RootZone	D-3218
Pile Weight	52 oz per SY	D- 5848
Finished Pile Height	1.5"	D-5823
Standard Field Color	Field Green, Lime Green	None
Construction	Tufted	None
Turf Density	1,248 oz/yd ³	HUD 44d
Gauge:	3/8"	D-5793
Primary Backing	8 oz per SY Multilayer Polypropylene/Polyester	D- 5848
Secondary Backing	20 oz per SY Polyurethane	D- 5848
Total Carpet Weight	80 oz per SY (+/- 5%)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
Elongation to Break	> 50%	D-2256
Yarn Breaking Strength	> 20 lbs	D-2256
Yarn Melting Point	258° F (Trionic)	D-789
Flammability	TEST PASSED	D-2859



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ROOTZONE 3DM HD

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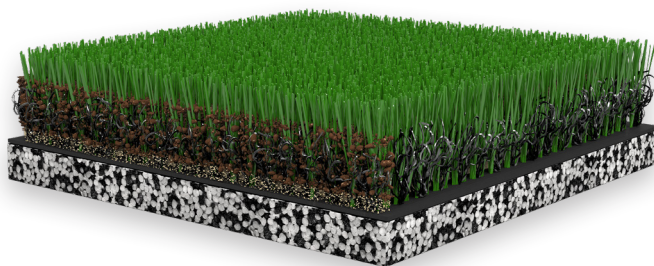
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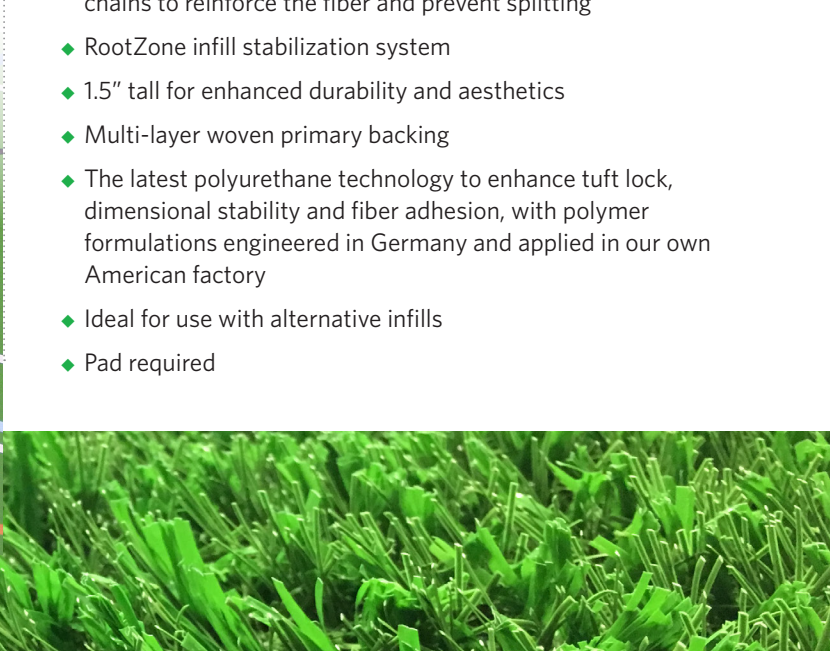
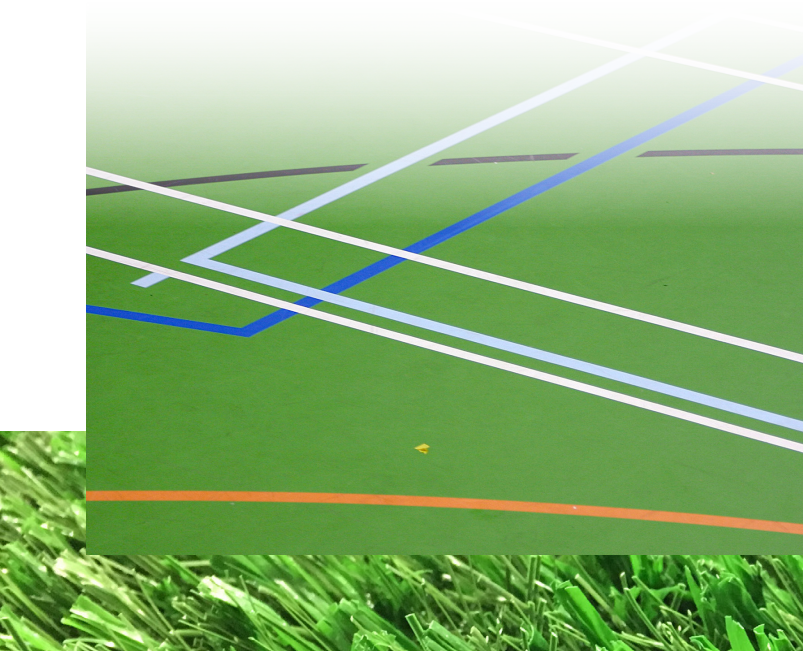
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- ◆ Ideal for use with alternative infills
- ◆ Pad required



FINISH FABRIC	VALUE	ASTM TEST METHOD
Face Yarn Type	Trionic Polyethylene/Nylon blend Monofilament and RootZone	N/A
Yarn Denier	16,400 (6 ends/1,800 per end for Mono, 8 ends/700 denier per end for RootZone)	D-1577
Yarn Thickness	330 microns for Mono, 100 microns for RootZone	D-3218
Pile Weight	60 oz per SY	D- 5848
Finished Pile Height	1.5"	D-5823
Standard Field Color	Field Green, Lime Green	None
Construction	Tufted	None
Turf Density	1,440 oz/yd ³	HUD 44d
Gauge:	3/8"	D-5793
Primary Backing	8 oz per SY Multilayer Polypropylene/Polyester	D- 5848
Secondary Backing	20 oz per SY Polyurethane	D- 5848
Total Carpet Weight	88 oz per SY (+/- 5%)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
Elongation to Break	> 50%	D-2256
Yarn Breaking Strength	> 20 lbs	D-2256
Yarn Melting Point	258° F (Trionic)	D-789
Flammability	TEST PASSED	D-2859



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AstroGrass®



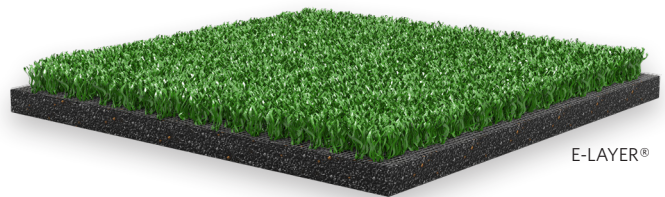
AstroTurf® has a long history of innovation and leadership in the hockey world. It's the brand that changed the sport. And it's the sport that has shaped AstroTurf's history. Our specialized knitting equipment and manufacturing history has kept AstroTurf at the very top of the hockey world's elite surfacing. AstroTurf has been used at every Final Four Tournament since the game left natural grass, and countless international events and Olympics have been hosted on AstroTurf. Today AstroTurf is an FIH Preferred Producer and a vertically integrated manufacturer and installer.

AstroGrass is a proven field hockey system for high level skill development and competition. The tufted nylon fabric construction makes for a fast, smooth surface.

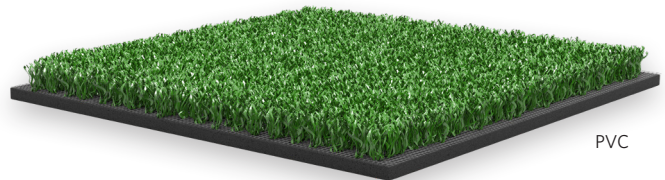
- ◆ Tufted fabric construction
- ◆ Nylon fibers are hydrophilic, meaning they absorb water, which makes the system ideal for wet play
- ◆ Shockpad required
- ◆ Full glue-down required
- ◆ Non-filled

ASTROGRASS®

AstroGrass is a proven field hockey system for high level skill development and competition.



E-LAYER®



PVC

"Everyone wants to play here. We are 24-0 and back to back state championships. What more can I say?"

Mary Werkheiser

Head Coach
Norfolk Academy
(AstroGrass)



Appalachian State University - Boone, NC



University of British Columbia - Vancouver, BC



University of California, Davis - Davis, CA

FINISH FABRIC	VALUE	ASTM TEST METHOD
Face Yarn Type	Texturized Nylon Monofilament	N/A
Yarn Denier	5,200	D-1577
Yarn Thickness	110 microns	D-3218
Pile Weight	48 oz per SY	D- 5848
Finished Pile Height	0.5"	D-5823
Standard Field Color	Stadium Green	None
Construction	Tufted	None
Turf Density	4,320 oz/yd ³	HUD 44d
Gauge:	3/16"	D-5793
Primary Backing	18 PIC 186/ 80 gm. Non-Woven 7 oz./sy	D- 5848
Secondary Backing	20 oz/sy. Polyurethane	D- 5848
Total Carpet Weight	75 oz per SY (+/- 5%)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
Elongation to Break	> 50%	D-2256
Yarn Breaking Strength	> 20 lbs	D-2256
Yarn Melting Point	428° F	D-789
Flammability	TEST PASSED	D-2859

Some of our installations include:

Appalachian State (NC)	Hong Kong International School (HK)
Appleby College (ON)	Keio University (Japan)
Beeston HC (UK)	KMTHC (Belgium)
University of British Columbia (BC)	Messiah College (PA)
University of California – Davis (CA)	Monmouth University (PA)
Canterbury HC (UK)	Nopporo Hockey (Japan)
Gifu Sogo Gakuen High School (Japan)	Norfolk Academy (VA)
HC Dragons (Belgium)	Royal Antwerp (Belgium)
HC Geel Zwart (Netherlands)	St. Andrew's College (Ireland)
HC Rotterdam (Netherlands)	Yoyogi Park (Japan)



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ASTROTURF® 12 over E-LAYER®



AstroTurf® has a long history of innovation and leadership in the hockey world. It's the brand that changed the sport. And it's the sport that has shaped AstroTurf's history. Our specialized knitting equipment and manufacturing history has kept AstroTurf at the very top of the hockey world's elite surfacing. AstroTurf has been used at every Final Four Tournament since the game left natural grass, and countless international events and Olympics have been hosted on AstroTurf. Today AstroTurf is an FIH Preferred Producer and a vertically integrated manufacturer and installer.

AstroTurf 12 is the classic field hockey system for high level skill development and competition. The knitted nylon fabric construction makes for a fast, smooth, non-directional and durable surface.

The AstroTurf 12 turf system must be installed over a shock absorbing underlayment. A great option is the paved-in-place E-Layer®.

"Ours was a very long process but all the guys at AstroTurf worked with us for several years to get us what we need. Now I have a great field. I highly recommend AstroTurf! They are the best!"

Diane Madl

Head Field Hockey Coach

Providence College

(AstroTurf 12 over E-Layer®, installed over parking deck)

ASTROTURF 12 over E-LAYER

AstroTurf 12 is the classic field hockey system for high level skill development and competition.



- ◆ Knitted fiber construction for a monolithic panel. No tufts to pull out. Every fiber is knotted to the next
- ◆ Nylon fibers are hydrophilic, meaning they absorb water, which makes the system ideal for wet play
- ◆ Installed over a paved-in-place E-Layer
- ◆ Full glue-down required
- ◆ Non-filled



Princeton Field Hockey Facility - Princeton, NJ



College of the Holy Cross - Worcester, MA



University of Massachusetts - Lowell, MA



Yale University - New Haven, CT

FINISH FABRIC	VALUE	ASTM TEST METHOD
Face Yarn Type	Texturized Nylon Monofilament	N/A
Yarn Denier	5,200	D-1577
Yarn Thickness	110 microns	D-3218
Pile Weight	60 oz per SY	D- 5848
Finished Pile Height	0.5"	D-5823
Standard Field Color	Stadium Green	None
Construction	Knitted	None
Turf Density	4,320 oz/yd ³	HUD 44d
Gauge:	N/A	D-5793
Primary Backing	5 oz per SY Polyester	D- 5848
Secondary Backing	5 oz per SY Acrylic	D- 5848
Total Carpet Weight	70 oz per SY (+/- 5%)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
Elongation to Break	> 50%	D-2256
Yarn Breaking Strength	> 20 lbs	D-2256
Yarn Melting Point	428° F	D-789
Flammability	TEST PASSED	D-2859

Some of our installations include:

Boston University (MA)
 University of California, Berkeley (CA)
 Cornell University (NY)
 Dartmouth College (NH)
 Davidson College (NC)
 Hamilton College (NY)
 Hobart and William Smith Colleges (NY)
 College of the Holy Cross (MA)
 Keene State College (NH)
 Lafayette College (PA)

Lock Haven University (PA)
 University of Maine (ME)
 University of Massachusetts - Lowell (MA)
 Miami University (OH)
 University of New Hampshire (NH)
 Northeastern University (MA)
 Ohio University (OH)
 University of Pennsylvania (PA)
 Princeton University (NJ)
 Providence College (RI)

Quinnipiac University (CT)
 Rutgers University (NJ)
 University of Vermont (VT)
 Yale University (CT)



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ASTROTURF® 12 SYSTEM 90



AstroTurf
PRODUCT FACT SHEET

AstroTurf® has a long history of innovation and leadership in the hockey world. It's the brand that changed the sport. And it's the sport that has shaped AstroTurf's history. Our specialized knitting equipment and manufacturing history has kept AstroTurf at the very top of the hockey world's elite surfacing. AstroTurf has been used at every Final Four Tournament since the game left natural grass, and countless international events and Olympics have been hosted on AstroTurf. Today AstroTurf is an FIH Preferred Producer and a vertically integrated manufacturer and installer.

AstroTurf 12 is the classic field hockey system for high level skill development and competition. The knitted nylon fabric construction makes for a fast, smooth, non-directional and durable surface.

The AstroTurf 12 turf system must be installed over a shock absorbing underlayment. A good pad option is a 3/8" PVC Nitrile Foam Pad.

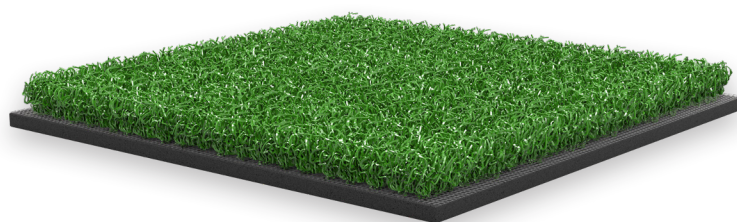
"I love my nylon knit from AstroTurf. It is the best field hockey product in the world. Hands Down! I had it on my last field and I want it on my next."

Missy Meharg

Head Field Hockey Coach
University of Maryland
(AstroTurf 12 System 90)

ASTROTURF 12 SYSTEM 90

AstroTurf 12 is the classic field hockey system for high level skill development and competition.



- ◆ Knitted fiber construction for a monolithic panel. No tufts to pull out. Every fiber is knotted to the next
- ◆ Nylon fibers are hydrophilic, meaning they absorb water, which makes the system ideal for wet play
- ◆ Installed over a 3/8" PVC Nitrile Foam Pad
- ◆ Full glue-down required
- ◆ Non-filled



Boston College - Boston, MA



Duke University - Durham, NC



Penn State University - State College, PA



University of Massachusetts - Amherst, MA

FINISH FABRIC	VALUE	ASTM TEST METHOD
Face Yarn Type	Texturized Nylon Monofilament	N/A
Yarn Denier	5,200	D-1577
Yarn Thickness	110 microns	D-3218
Pile Weight	60 oz per SY	D- 5848
Finished Pile Height	0.5"	D-5823
Standard Field Color	Stadium Green	None
Construction	Knitted	None
Turf Density	4,320 oz/yd ³	HUD 44d
Gauge:	N/A	D-5793
Primary Backing	5 oz per SY Polyester	D- 5848
Secondary Backing	5 oz per SY Acrylic	D- 5848
Total Carpet Weight	70 oz per SY (+/- 5%)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
Elongation to Break	> 50%	D-2256
Yarn Breaking Strength	> 20 lbs	D-2256
Yarn Melting Point	428° F	D-789
Flammability	TEST PASSED	D-2859

Some of our System 90 installations include:

Boston College (MA)	University of Louisville (KY)	Temple University (PA)
Brown University (RI)	University of Maryland (MD)	University of Toronto (ON)
University of California, Berkeley (CA)	University of Massachusetts - Amherst (MA)	Ursinus College (PA)
Colgate University (NY)	Michigan State University (MI)	University of Virginia (VA)
Columbia University (NY)	Northwestern University (IL)	Wake Forest University (NC)
University of Connecticut (CT)	The Ohio State University (OH)	College of William and Mary (VA)
Duke University (NC)	Old Dominion University (VA)	
Field Hockey National Training Center (VA)	Penn State University (PA)	
University of Iowa (IA)	University of Richmond (VA)	
Kent State University (OH)	Stanford University (CA)	



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DIAMOND SERIES HR

AstroTurf's Diamond Series Home Run (HR) baseball system is a good choice for clients that want to increase the playing time and performance of their baseball fields. The HR system benefits from AstroTurf's legendary quality control protocols, industry-leading R&D efforts, start to finish control over manufacturing, civil construction and installation.

The Rhino SF systems utilize top-notch slit film fibers for proven durability and good infill encapsulation.

- ◆ Exclusive, precise in-house fiber masterbatch formulations with cutting edge ultraviolet and heat stabilizers
- ◆ Exceptionally durable slit film fibers for resistance to wear
- ◆ Entanglement technology, wherein we entangle molecular side chains to reinforce the fiber and prevent splitting
- ◆ Multi-layer woven primary backing
- ◆ The latest polyurethane technology to enhance tuft lock, dimensional stability and fiber adhesion, with polymer formulations engineered in Germany and applied in our own American factory

Some of our installations include:

Campbell University (NC)
University of Louisiana at Lafayette (LA)
Southeastern Louisiana (LA)
Troy University (AL)

It's all about the bounce.

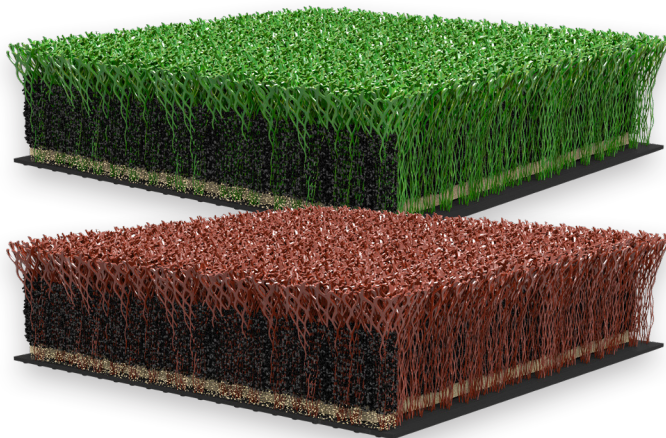


Campbell University - Buies Creek, NC



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PRODUCT FACT SHEET

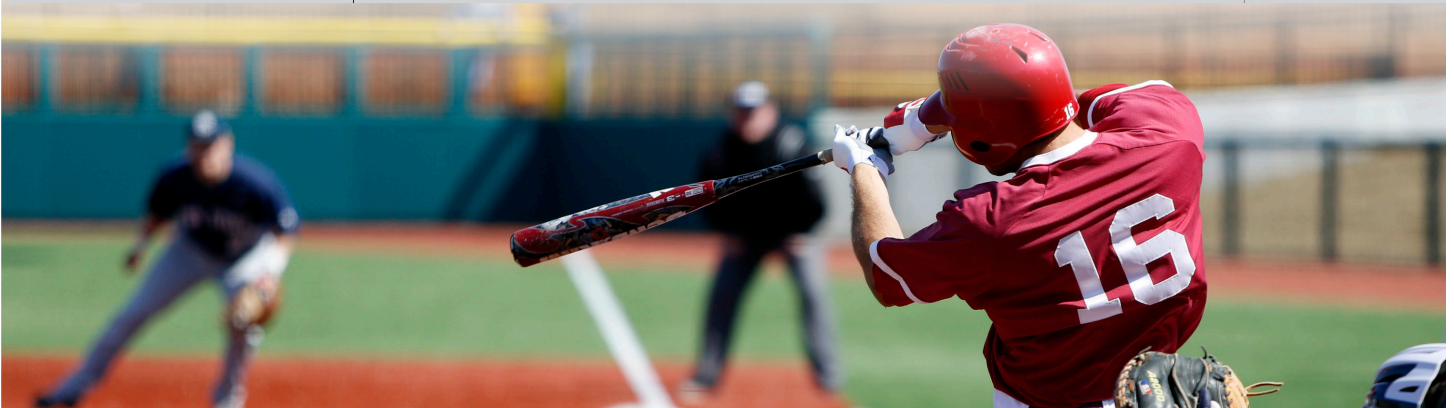
DIAMOND SERIES HR



"This product is no doubt a 5 star in every facet. I was extremely skeptical moving to an artificial surface, but all that was put to ease with the quality of the product and customer service."

Matt Riser, Head Coach, Southeastern Louisiana University - Hammond, LA

FINISH FABRIC	VALUE	ASTM TEST METHOD
Face Yarn Type	Polyethylene Slit Film	N/A
Yarn Denier	10,000	D-1577
Yarn Thickness	115 microns	D-3218
Pile Weight	42 oz per SY	D- 5848
Finished Pile Height	2.0"	D-5823
Standard Field Color	Field Green, Red Clay, Brown	None
Construction	Tufted	None
Turf Density	756 oz/yd ³	HUD 44d
Gauge	3/8"	D-5793
Primary Backing	8 oz per SY Multilayer Polypropylene/Polyester	D- 5848
Secondary Backing	20 oz per SY Polyurethane	D- 5848
Total Carpet Weight	70 oz per SY (+/- 5%)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
Elongation to Break	> 50%	D-2256
Yarn Breaking Strength	> 20 lbs	D-2256
Yarn Melting Point	248° F	D-789
Flammability	TEST PASSED	D-2859



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GREEN SERIES NRG & NRG+



Nike Grind selected AstroTurf as its partner to create cutting-edge turf systems. The brands share a common vision of delivering the most technologically advanced equipment for athletes. A full year of collaboration, research and testing was invested before bringing the NRG System to market.

Nike Grind is a palette of premium recycled materials used in a variety of settings, including synthetic turf infill. Nike Grind offers sustainability and surface performance at the same time. Nike Grind infill is comprised of excess rubber from the manufacturing of shoes. This rubber is engineered for human contact and conforms to Nike's stringent quality standards and Restricted Substances List (RSL). The rubber is chopped up and properly sized for field drainage and uniformity. Finally, the infill is encapsulated with a premium green-colored coating that boosts resiliency and gives NRG fields the consistent and plush appearance clients expect.

The RootZone's benefits are numerous. RootZone 3D fields offer grass-like traction, per independently funded, peer reviewed research by Michigan State University. Plus, by better keeping infill in place, the RootZone promotes more consistent footing and more uniform shock absorption over time. And with a more uniform infill level, UV exposure to the fibers is more consistent across the field, which boosts the field's longevity.

With three unique fibers - the RootZone, the exciting new Trionic face fiber which molecularly fuses Polyethylene and Nylon into a single fiber, and ultra-durable slit film fibers - the NRG System offers exceptional durability, player protection and aesthetics. And at 1.5" tall, this system is dense, plush and durable. A pad is included in the system design. When used over a rubber pad that incorporates Nike Grind materials, we call it an NRG+ system.

"The safety of student-athletes is a top priority, and AstroTurf is an industry leader when it comes to safety, performance and durability for their turf and pad systems."

Renae Hartl - Director of Intercollegiate Athletics,
Luther College (Decorah, IA)

GREEN SERIES NRG & NRG+

With a pad underfoot, shock attenuation is absolutely guaranteed.



- ◆ Exclusive, precise in-house fiber masterbatch formulations with cutting edge ultraviolet and heat stabilizers
- ◆ Trionic monofilament fibers featuring a proprietary co-polymer blend of Polyethylene and Nylon in a single fiber
- ◆ Entanglement technology, wherein we entangle molecular side chains to reinforce the fiber and prevent splitting
- ◆ Extremely durable slit film fibers for resistance to wear
- ◆ RootZone infill stabilization system
- ◆ 1.5" tall for enhanced durability and aesthetics
- ◆ Multi-layer woven primary backing
- ◆ The latest polyurethane technology to enhance tuft lock, dimensional stability and fiber adhesion, with polymer formulations engineered in Germany and applied in our own American factory
- ◆ Nike Grind Infill
- ◆ Pad Required - if a pad is used that also incorporates Nike Grind materials, we call the system NRG+



Luther College - Decorah, IA



Penn State University - Holuba Hall - State College, PA



Petoskey High School - Petoskey, MI



SilverLakes Sports Complex - Norco, CA

FINISH FABRIC	VALUE	ASTM TEST METHOD
Face Yarn Type	Trionic Polyethylene/Nylon blend Monofilament, Polyethylene Slit Film and RootZone	N/A
Yarn Denier	16,000 (6 ends/1,800 per end for Mono, 10,000 per end for Slit Film and 8 ends/700 denier per end for RootZone)	D-1577
Yarn Thickness	330 microns for Mono, 115 microns for Slit Film and 100 microns for RootZone	D-3218
Pile Weight	52 oz per SY	D- 5848
Finished Pile Height	1.5"	D-5823
Standard Field Color	Field Green, Lime Green	None
Construction	Tufted	None
Turf Density	1,248 oz/yd ³	HUD 44d
Gauge:	3/8"	D-5793
Primary Backing	8 oz per SY Multilayer Polypropylene/Polyester	D- 5848
Secondary Backing	20 oz per SY Polyurethane	D- 5848
Total Carpet Weight	80 oz per SY (+/- 5%)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
Elongation to Break	> 50%	D-2256
Yarn Breaking Strength	> 20 lbs	D-2256
Yarn Melting Point	248° F (Polyethylene) / 258° F (Trionic)	D-789
Flammability	TEST PASSED	D-2859

Some of our installations include:

Appleton West High School (WI)	Maryville High School (TN)
Appleton East High School (WI)	Menlo School (CA)
Appleton North High School (WI)	Penn State University Holuba Hall (PA)
Beverly Vista School (CA)	Penn State University Lacrosse Stadium (PA)
Beverly Hills High School (CA)	Petoskey High School (MI)
Blair Academy (NJ)	Silverlakes Park (CA)
Boyd-Buchanan School (TN)	Southwest Christian School (TX)
Denver East High School (CO)	Titletown (WI)
East Rochester High School (NY)	Tri-Town High School (ME)
Edgewood High School (WI)	Wellsboro High School (PA)
Luther College (IA)	



Note: 2.12.19 SS. Valid through 12/31/2019. Any change from the specified values is considered a special product that will require confirmation from manufacturing prior to ordering. All values are ± 5%. AstroTurf® has the right to modify technical specifications on the above-mentioned product. Delivered products can slightly differ from the technical data. AstroTurf® guarantees the technical quality of the proposed article.



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LIGATURF ROOTZONE 3D3 BLEND

LigaTurf is the world's pre-eminent family of turf systems designed specifically for soccer performance. LigaTurf has a large footprint around the globe and can be found at the most elite facilities in Europe, including Bayern Munich, Liverpool and FIFA's World Headquarters.

LigaTurf is now offered in the United States exclusively by AstroTurf Corporation and its partners. The latest LigaTurf systems have emerged as the result of global collaboration of our Research and Development teams across the world, who have focused on polymer chemistry, biomechanics, ball roll, energy restitution and more.

Breakthrough technologies ensure that LigaTurf systems exceed all FIFA standards. And full control over the manufacturing, construction and installation chain ensures that our soccer customers receive the best fields in the industry.

The system boasts the RootZone technology. The RootZone is a system of texturized fibers that curl down to create a net-like matrix that encapsulates infill – dramatically reducing infill spray during play and infill migration over time.

LigaTurf RootZone Blend 1.5" features the exciting new Trionic face fiber. For the first time in the history of the industry, our experts have molecularly fused Polyethylene and Nylon into a single fiber. That translates to softness AND durability.

With three unique fibers – the RootZone, Trionic monofilament fibers and ultra-durable slit film fibers— the LigaTurf RootZone 3D3 Blend offers exceptional durability, player protection and aesthetics.

LIGATURF ROOTZONE 3D3 BLEND

The world's pre-eminent family of turf systems designed specifically for soccer performance.



"We are confident in our selection of AstroTurf for the new playing surfaces on Smith Field and Coaches Field. The technology behind their products is impressive and the emphasis on player protection and safety was paramount in our decision-making process."

Michael Thomas, Athletic Director, Boys' Latin School

- ◆ Exclusive, precise fiber masterbatch formulations with cutting edge ultraviolet and heat stabilizers
- ◆ Trionic monofilament fibers featuring a proprietary co-polymer blend of Polyethylene and Nylon in a single fiber
- ◆ Extremely durable slit film fibers for resistance to wear
- ◆ Entanglement technology, wherein we entangle molecular side chains to reinforce the fiber and prevent splitting

- ◆ RootZone infill stabilization system
- ◆ Multi-layer woven primary backing
- ◆ The latest polyurethane technology to enhance tuft lock, dimensional stability and fiber adhesion, with polymer formulations engineered in Germany and applied in our own American factory



Aviara Park - Carlsbad, CA



Beverly Vista School - Beverly Hills, CA



Boys' Latin School - Baltimore, MD



Fore Kicks Soccer Complex - Taunton, MA

FINISH FABRIC	VALUE	ASTM TEST METHOD
Face Yarn Type	Trionic Polyethylene/Nylon blend Monofilament, Polyethylene Slit Film and RootZone	N/A
Yarn Denier	15,800 (6 ends/1,800 per end for Mono, 10,000 per end for Slit Film and 8 ends/675 denier per end for RootZone)	D-1577
Yarn Thickness	330 microns for Mono, 115 microns for Slit Film and 100 microns for RootZone	D-3218
Pile Weight	52 oz per SY	D- 5848
Finished Pile Height	2.0"	D-5823
Standard Field Color	Field Green, Lime Green	None
Construction	Tufted	None
Turf Density	936 oz/yd ³	HUD 44d
Gauge	3/8"	D-5793
Primary Backing	8 oz per SY Multilayer Polypropylene/Polyester	D- 5848
Secondary Backing	20 oz per SY Polyurethane	D- 5848
Total Carpet Weight	80 oz per SY (+/- 5%)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
Elongation to Break	> 50%	D-2256
Yarn Breaking Strength	> 20 lbs	D-2256
Yarn Melting Point	248° F	D-789
Flammability	TEST PASSED	D-2859

Some of our installations include:

Anne Arundel County Schools (MD)
 Appleton Area School District (WI)
 Arizona Cardinals Practice Field (AZ)
 Austin ISD (TX)
 Bethlehem Area School District (PA)
 Beverly Hills Unified School District (CA)
 Boston College (MA)
 Brother Rice High School (MI)
 UCLA (CA)
 Cheyenne Mountain School District 12 (CO)
 College of Idaho (ID)
 Corpus Christi ISD (TX)

Davenport University (MI)
 University of Delaware (DE)
 DePauw University (IN)
 East Rochester High School (NY)
 El Paso Gridley High School (IL)
 Evangel University (MO)
 Fore Kicks Soccer Complexes (MA)
 Global Premier Soccer (NH)
 Grand Canyon University (AZ)
 Greensboro College (NC)
 Hutchinson Community College (KS)
 Kansas State University (KS)

Los Angeles Unified School District (CA)
 Liberty University (VA)
 The McCallie School (TN)
 Mississippi State University (MS)
 Montoursville High School (PA)
 Moreau Catholic High School (CA)
 North Broward Prep (FL)
 The Ohio State University (OH)
 University of Oklahoma (OK)
 Paramus Catholic High School (NJ)
 Penn State University (PA)
 Saint John Bosco High School (CA)

Salina High School (KS)
 Sam Houston State University (TX)
 Silverlakes Equestrian & Sports Park (CA)
 Starfire Sports Complex (WA)
 Texas A&M University (TX)
 Texas Tech University (TX)
 Tulane University (LA)
 University Liggett School (MI)
 Utah State University (UT)
 The Village School (TX)



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LIGATURF ROOTZONE BLEND 1.5

LigaTurf is the world's pre-eminent family of turf systems designed specifically for soccer performance. LigaTurf has a large footprint around the globe and can be found at the most elite facilities in Europe, including Bayern Munich, Liverpool and FIFA's World Headquarters.

LigaTurf is now offered in the United States exclusively by AstroTurf Corporation and its partners. The latest LigaTurf systems have emerged as the result of global collaboration of our Research and Development teams across the world, who have focused on polymer chemistry, biomechanics, ball roll, energy restitution and more.

Breakthrough technologies ensure that LigaTurf systems exceed all FIFA standards. And full control over the manufacturing, construction and installation chain ensures that our soccer customers receive the best fields in the industry.

LigaTurf RootZone Blend 1.5" features the exciting new Trionic face fiber. For the first time in the history of the industry, our experts have molecularly fused Polyethylene and Nylon into a single fiber. That translates to softness AND durability.

The system also boasts the RootZone technology. The RootZone is a system of texturized fibers that curl down to create a net-like matrix that encapsulates infill – dramatically reducing infill spray during play and infill migration over time.

With three unique fibers – the RootZone, Trionic monofilament fibers and ultra-durable slit film fibers— the LigaTurf RootZone Blend 1.5" offers exceptional durability, player protection and aesthetics. And at 1.5" tall, this system is even denser, plusher and more durable than its LigaTurf RootZone Blend counterpart. It is ideal for use over a pad and with alternative infills.



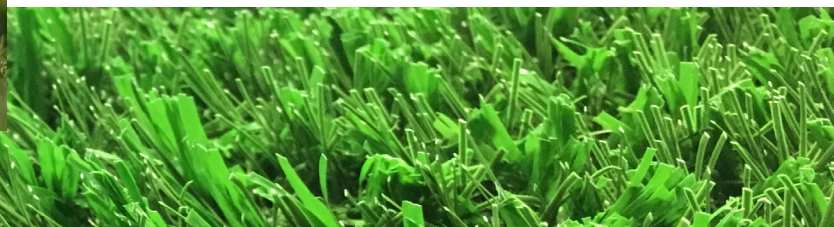
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LIGATURF ROOTZONE BLEND 1.5

LigaTurf RootZone Blend 1.5" features the exciting new TRIONIC face fiber.



- ◆ Exclusive, precise fiber masterbatch formulations with cutting edge ultraviolet and heat stabilizers
- ◆ Trionic monofilament fibers featuring a proprietary co-polymer blend of Polyethylene and Nylon in a single fiber
- ◆ Entanglement technology, wherein we entangle molecular side chains to reinforce the fiber and prevent splitting
- ◆ Extremely durable slit film fibers for resistance to wear
- ◆ RootZone infill stabilization system
- ◆ 1.5" tall for enhanced durability and aesthetics
- ◆ Multi-layer woven primary backing
- ◆ The latest polyurethane technology to enhance tuft lock, dimensional stability and fiber adhesion, with polymer formulations engineered in Germany and applied in our own American factory
- ◆ Ideal for use with alternative infills
- ◆ Pad required



FINISH FABRIC	VALUE	ASTM TEST METHOD
Face Yarn Type	Trionic Polyethylene/Nylon blend Monofilament, Polyethylene Slit Film and RootZone	N/A
Yarn Denier	16,400 (6 ends/1,800 per end for Mono, 10,000 per end for Slit Film and 8 ends/750 denier per end for RootZone)	D-1577
Yarn Thickness	330 microns for Mono, 115 microns for Slit Film and 100 microns for RootZone	D-3218
Pile Weight	52 oz per SY	D- 5848
Finished Pile Height	1.5"	D-5823
Standard Field Color	Field Green, Lime Green	None
Construction	Tufted	None
Turf Density	1,248 oz/yd ³	HUD 44d
Gauge	3/8"	D-5793
Primary Backing	8 oz per SY Multilayer Polypropylene/Polyester	D- 5848
Secondary Backing	20 oz per SY Polyurethane	D- 5848
Total Carpet Weight	80 oz per SY (+/- 5%)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
Elongation to Break	> 50%	D-2256
Yarn Breaking Strength	> 20 lbs	D-2256
Yarn Melting Point	248F (PE) / 258F (Trionic)	D-789
Flammability	TEST PASSED	D-2859



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LIGATURF RS PRO II

LigaTurf is the world's pre-eminent family of turf systems designed specifically for soccer performance. LigaTurf has a large footprint around the globe and can be found at the most elite facilities in Europe, including Bayern Munich, Liverpool and FIFA's World Headquarters.

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Breakthrough technologies ensure that LigaTurf systems exceed all FIFA standards. And full control over the manufacturing, construction and installation chain ensures that our soccer customers receive the best fields in the industry.

LigaTurf RS Pro II features the exciting new Trionic face fiber. For the first time in the history of the industry, our experts have molecularly fused Polyethylene and Nylon into a single fiber. That translates to the softness AND durability.

The LigaTurf RS Pro II product offers outstanding player protection, excellent durability and superior aesthetics. And at 1.5" tall, this system is dense, plush and durable. It is ideal for use over a pad and with alternative infills.



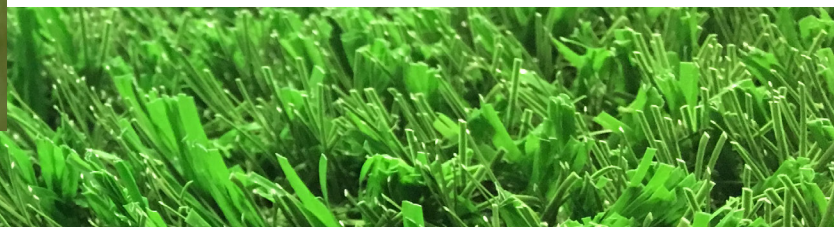
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LIGATURF RS PRO II

The world's pre-eminent family of turf systems designed specifically for soccer performance.



- ◆ Exclusive, precise fiber masterbatch formulations with cutting edge ultraviolet and heat stabilizers
- ◆ Trionic monofilament fibers featuring a proprietary co-polymer blend of Polyethylene and Nylon in a single fiber
- ◆ Entanglement technology, wherein we entangle molecular side chains to reinforce the fiber and prevent splitting
- ◆ 1.5" tall for enhanced durability and aesthetics
- ◆ Multi-layer woven primary backing
- ◆ The latest polyurethane technology to enhance tuft lock, dimensional stability and fiber adhesion, with polymer formulations engineered in Germany and applied in our own American factory
- ◆ Ideal for use with alternative infills
- ◆ Pad required



FINISH FABRIC	VALUE	ASTM TEST METHOD
Face Yarn Type	Trionic Polyethylene/Nylon blend Monofilament	N/A
Yarn Denier	10,800 (6 ends, 1,800 denier per end)	D-1577
Yarn Thickness	330 microns	D-3218
Pile Weight	48 oz per SY	D- 5848
Finished Pile Height	1.5"	D-5823
Standard Field Color	Field Green, Lime Green	None
Construction	Tufted	None
Turf Density	1,152 oz/yd3	HUD 44d
Gauge	1/2"	D-5793
Primary Backing	8 oz per SY Multilayer Polypropylene/Polyester	D- 5848
Secondary Backing	20 oz per SY Polyurethane	D- 5848
Total Carpet Weight	76 oz per SY (+/- 5%)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
Elongation to Break	> 50%	D-2256
Yarn Breaking Strength	> 20 lbs	D-2256
Yarn Melting Point	258° F	D-789
Flammability	TEST PASSED	D-2859



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LIGATURF TRIONIC ROOTZONE 3D3 BLEND WR

LigaTurf is the world's pre-eminent family of turf systems designed specifically to meet World Rugby standards. LigaTurf has a large footprint around the globe and can be found at the most elite facilities in Europe.

LigaTurf is now offered in the United States exclusively by AstroTurf Corporation and its partners. The latest LigaTurf systems have emerged as the result of global collaboration of our Research and Development teams across the world, who have focused on polymer chemistry, biomechanics, ball roll, energy restitution and more.

Breakthrough technologies ensure that LigaTurf systems exceed all World Rugby standards. And full control over the manufacturing, construction and installation chain ensures that our soccer customers receive the best fields in the industry.

LigaTurf Trionic RootZone WR features the exciting new Trionic face fiber. For the first time in the history of the industry, our experts have molecularly fused Polyethylene and Nylon into a single fiber. That translates to the softness AND durability.

The system boasts the RootZone technology. The RootZone is a system of texturized fibers that curl down to create a net-like matrix that encapsulates infill – dramatically reducing infill spray during play and infill migration over time.

With three unique fibers – the RootZone, Trionic monofilament fibers and ultra-durable slit film fibers— the LigaTurf RootZone 3D3 Blend offers exceptional durability, player protection and aesthetics.

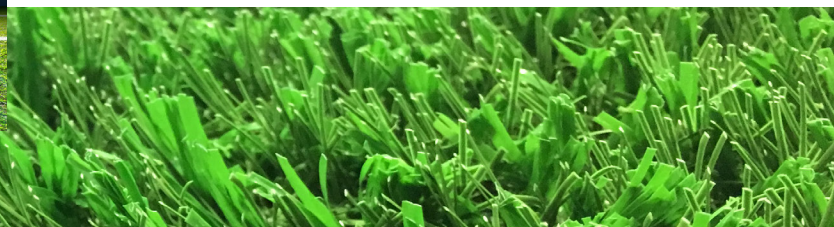


LIGATURF TRIONIC ROOTZONE 3D3 BLEND WR

The world's pre-eminent family of turf systems designed specifically to meet World Rugby standards.



- ◆ Exclusive, precise in-house fiber masterbatch formulations with cutting edge ultraviolet and heat stabilizers
- ◆ Trionic monofilament fibers featuring a proprietary co-polymer blend of Polyethylene and Nylon in a single fiber
- ◆ Extremely durable slit film fibers for resistance to wear
- ◆ Entanglement technology, wherein we entangle molecular side chains to reinforce the fiber and prevent splitting
- ◆ RootZone infill stabilization system
- ◆ Multi-layer woven primary backing
- ◆ The latest polyurethane technology to enhance tuft lock, dimensional stability and fiber adhesion, with polymer formulations engineered in Germany and applied in our own American factory
- ◆ Pad or E-Layer® required



FINISH FABRIC	VALUE	ASTM TEST METHOD
Face Yarn Type	Trionic Polyethylene/Nylon blend Monofilament, Polyethylene Slit Film, Nylon thatch	N/A
Yarn Denier	16,400 (6 ends/1,800 per end for Mono, 10,000 per end for Slit Film and 8 ends/750 denier per end for thatch)	D-1577
Yarn Thickness	330 microns for Mono, 115 microns for Slit Film, 100 microns for RootZone	D-3218
Pile Weight	60 oz per SY	D- 5848
Finished Pile Height	2.375"	D-5823
Standard Field Color	Field Green, Lime Green	None
Construction	Tufted	None
Turf Density	909 oz/yd ³	HUD 44d
Gauge	3/8"	D-5793
Primary Backing	8 oz per SY Multilayer Polypropylene/Polyester	D- 5848
Secondary Backing	20 oz per SY Polyurethane	D- 5848
Total Carpet Weight	88 oz per SY (+/- 5%)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
Elongation to Break	> 50%	D-2256
Yarn Breaking Strength	> 20 lbs	D-2256
Yarn Melting Point	248° F (PE) / 258° F (Trionic) / 428° F (Nylon)	D-789
Flammability	TEST PASSED	D-2859



Note: 1.31.19 SS. Valid through 12/31/2019. Any change from the specified values is considered a special product that will require confirmation from manufacturing prior to ordering. All values are $\pm 5\%$. AstroTurf® has the right to modify technical specifications on the above-mentioned product. Delivered products can slightly differ from the technical data. AstroTurf® guarantees the technical quality of the proposed article.

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LIGATURF TRIONIC ROOTZONE WR

LigaTurf is the world's pre-eminent family of turf systems designed specifically to meet World Rugby standards. LigaTurf has a large footprint around the globe and can be found at the most elite facilities in Europe.

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Breakthrough technologies ensure that LigaTurf systems exceed all World Rugby standards. And full control over the manufacturing, construction and installation chain ensures that our soccer customers receive the best fields in the industry.

LigaTurf TRIONIC RootZone WR features the exciting new Trionic face fiber. For the first time in the history of the industry, our experts have molecularly fused Polyethylene and Nylon into a single fiber. That translates to the softness AND durability.

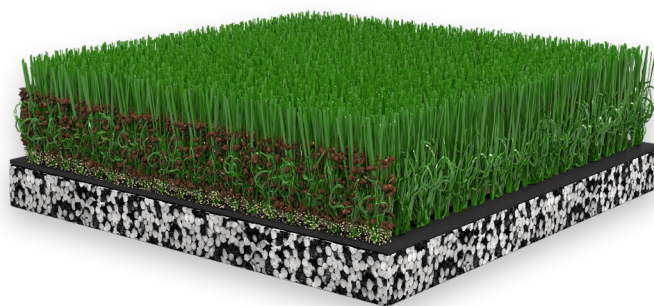
The system boasts the RootZone technology. The RootZone is a system of texturized fibers that curl down to create a net-like matrix that encapsulates infill - dramatically reducing infill spray during play and infill migration over time.

With unique fiber technology, the LigaTurf TRIONIC RootZone WR offers exceptional durability, player protection and aesthetics.

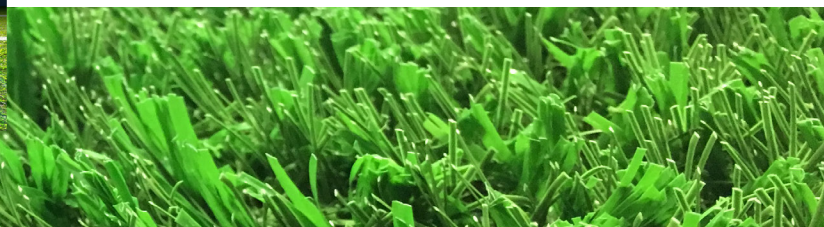


LIGATURF TRIONIC ROOTZONE WR

The world's pre-eminent family of turf systems designed specifically to meet World Rugby standards.



- ◆ Exclusive, precise in-house fiber masterbatch formulations with cutting edge ultraviolet and heat stabilizers
- ◆ Trionic monofilament fibers featuring a proprietary co-polymer blend of Polyethylene and Nylon in a single fiber
- ◆ Entanglement technology, wherein we entangle molecular side chains to reinforce the fiber and prevent splitting
- ◆ RootZone infill stabilization system
- ◆ Multi-layer woven primary backing
- ◆ The latest polyurethane technology to enhance tuft lock, dimensional stability and fiber adhesion, with polymer formulations engineered in Germany and applied in our own American factory
- ◆ Pad or E-Layer® required



FINISH FABRIC	VALUE	ASTM TEST METHOD
Face Yarn Type	Trionic Polyethylene/Nylon blend Monofilament, Nylon RootZone	N/A
Yarn Denier	16,800 (6 ends/1,800 per end for Mono, 8 ends/750 denier per end for RootZone)	D-1577
Yarn Thickness	330 microns for Mono, 100 microns for RootZone	D-3218
Pile Weight	60 oz per SY	D- 5848
Finished Pile Height	2.375"	D-5823
Standard Field Color	Field Green, Lime Green	None
Construction	Tufted	None
Turf Density	909 oz/yd ³	HUD 44d
Gauge	3/8"	D-5793
Primary Backing	8 oz per SY Multilayer Polypropylene/Polyester	D- 5848
Secondary Backing	20 oz per SY Polyurethane	D- 5848
Total Carpet Weight	88 oz per SY (+/- 5%)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
Elongation to Break	> 50%	D-2256
Yarn Breaking Strength	> 20 lbs	D-2256
Yarn Melting Point	258 F (Trionic) /428 F (Nylon)	D-789
Flammability	TEST PASSED	D-2859



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LIGATURF TRIONIC WR

LigaTurf is the world's pre-eminent family of turf systems designed specifically to meet World Rugby standards. LigaTurf has a large footprint around the globe and can be found at the most elite facilities in Europe.

LigaTurf is now offered in the United States exclusively by AstroTurf Corporation and its partners. The latest LigaTurf systems have emerged as the result of global collaboration of our Research and Development teams across the world, who have focused on polymer chemistry, biomechanics, shock attenuation, energy restitution, and more.

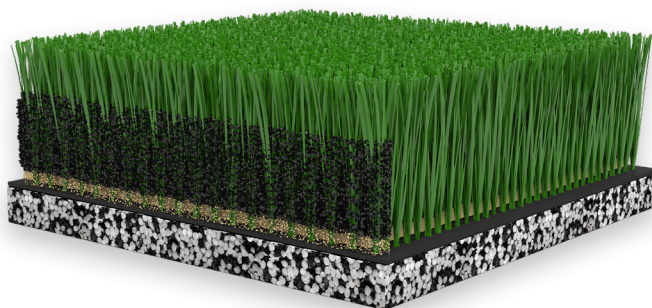
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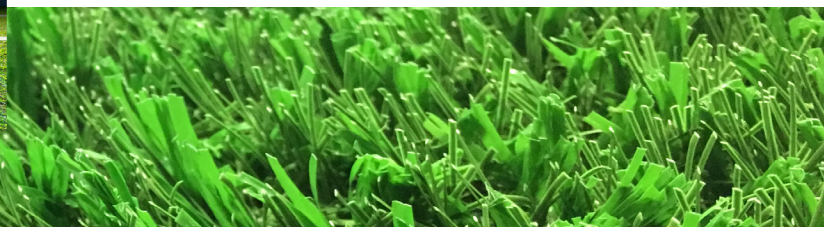
With unique fiber technology, the LigaTurf Trionic WR offers exceptional durability, player protection, and aesthetics.

LIGATURF TRIONIC WR

The world's pre-eminent family of turf systems designed specifically to meet World Rugby standards.



- ◆ Exclusive, precise in-house fiber masterbatch formulations with cutting edge ultraviolet and heat stabilizers
- ◆ Trionic monofilament fibers featuring a proprietary co-polymer blend of Polyethylene and Nylon in a single fiber
- ◆ Entanglement technology, wherein we entangle molecular side chains to reinforce the fiber and prevent splitting
- ◆ Multi-layer woven primary backing
- ◆ The latest polyurethane technology to enhance tuft lock, dimensional stability and fiber adhesion, with polymer formulations engineered in Germany and applied in our own American factory



FINISH FABRIC	VALUE	ASTM TEST METHOD
Face Yarn Type	Trionic Polyethylene/Nylon blend Monofilament	N/A
Yarn Denier	10,800 (6 ends, 1,800 denier per end)	D-1577
Yarn Thickness	330 microns	D-3218
Pile Weight	48 oz per SY	D- 5848
Finished Pile Height	2.375"	D-5823
Standard Field Color	Field Green, Lime Green	None
Construction	Tufted	None
Turf Density	728 oz/yd ³	HUD 44d
Gauge	1/2"	D-5793
Primary Backing	8 oz per SY Multilayer Polypropylene/Polyester	D- 5848
Secondary Backing	20 oz per SY Polyurethane	D- 5848
Total Carpet Weight	76 oz per SY (+/- 5%)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
Elongation to Break	> 50%	D-2256
Yarn Breaking Strength	> 20 lbs	D-2256
Yarn Melting Point	258° F (Trionic)	D-789
Flammability	TEST PASSED	D-2859



Note: 1.31.19 SS. Valid through 12/31/2019. Any change from the specified values is considered a special product that will require confirmation from manufacturing prior to ordering. All values are $\pm 5\%$. AstroTurf® has the right to modify technical specifications on the above-mentioned product. Delivered products can slightly differ from the technical data. AstroTurf® guarantees the technical quality of the proposed article.

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PGPN & PGPN 5 mm



The PGPN system is a dense slit film system supported by a RootZone. This system can be used with or without infill. PGPN is designed for extremely heavy wear, including confined indoor use, pushing sleds, etc.

A shock absorbing pad is required. It may be installed over an existing E-Layer® or other shockpad, or it can be provided from the factory with an attached 5 mm foam polyurethane pad ("PGPN 5 mm").

PGPN and PGPN 5mm systems benefit from AstroTurf's legendary quality control protocols, industry-leading R&D efforts, and start to finish control over manufacturing, civil construction and installation.

- ◆ Exclusive, precise in-house fiber masterbatch formulations with cutting edge ultraviolet and heat stabilizers
- ◆ Exceptionally durable slit film face fibers for resistance to wear
- ◆ Entanglement technology, wherein we entangle molecular side chains to reinforce the fiber and prevent splitting
- ◆ RootZone infill stabilization and fiber support system
- ◆ Multi-layer woven primary backing
- ◆ The latest polyurethane technology to enhance tuft lock, dimensional stability and fiber adhesion, with polymer formulations engineered in Germany and applied in our own American factory
- ◆ Shock absorbing pad required. Available with a 5 mm attached polyurethane pad (PGPN 5 mm)

PGPN & PGPN 5 mm

PGPN and PGPN 5mm systems are dense turf systems and can be used with or without infill.



PGPN



PGPN 5mm



Colored options produced with PE thatch.



Oklahoma State University - Stillwater, OK



Miss Porter's School - Farmington, CT

FINISH FABRIC	VALUE	ASTM TEST METHOD
Face Yarn Type	Polyethylene Slit Film and Nylon RootZone	N/A
Yarn Denier	14,040 (8,040 per end for Slit Film, 8 ends/750 denier per end for RootZone)	D-1577
Yarn Thickness	100 microns	D-3218
Pile Weight	58 oz per SY	D- 5848
Finished Pile Height	0.75"	D-5823
Standard Field Color	Field Green	None
Construction	Tufted	None
Turf Density	2,784 oz/yd ³	HUD 44d
Gauge:	3/16"	D-5793
Primary Backing	8 oz per SY Multilayer Polypropylene/Polyester	D- 5848
Secondary Backing	20 oz per SY Polyurethane (PGPN) / 56 oz per SY Polyurethane foam (PGPN 5 mm)	D- 5848
Total Carpet Weight	86 oz per SY (PGPN) / 122 oz per SY (PGPN 5 mm)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
Elongation to Break	> 50%	D-2256
Yarn Breaking Strength	> 20 lbs	D-2256
Yarn Melting Point	248° F	D-789
Flammability	TEST PASSED	D-2859

Some of our installations include:

Alma Bryant High School (AL)
 Athens Academy (GA)
 Brigham Young University (UT)
 Diamond Indoor Soccer (NC)
 ESPN College GameDay Set
 Facility Suburban Sports Training Center (PA)
 Gilmer County High School (GA)
 City of Lexington (KY)
 Liberty University (VA)
 Miss Porter's School (CT)

Mount St. Joseph High School (MD)
 Oklahoma State University (OK)
 Spooky Nook (PA)
 St. Lawrence Elementary School (CA)
 St. Monica High School (CA)
 Houston Texans Training Turf (TX)
 Texas A&M University (TX)
 University of North Carolina Wilmington Indoor Baseball (NC)



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POLIGRAS® PLATINUM

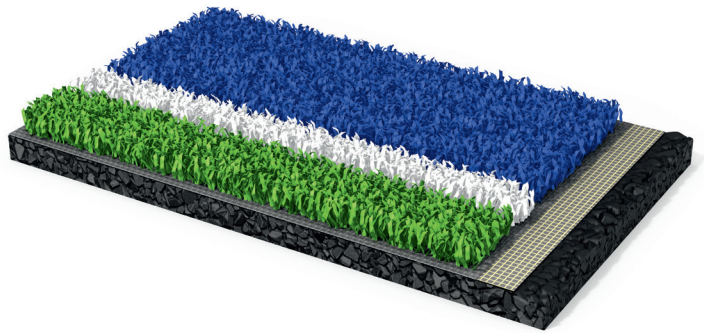
AstroTurf® has a long history of innovation and leadership in the hockey world. It's the brand that changed the sport. And it's the sport that has shaped AstroTurf's history. Our specialized manufacturing equipment and history has kept AstroTurf at the very top of the hockey world's elite surfacing. Today AstroTurf is an FIH Preferred Producer and a vertically integrated manufacturer and installer.

By partnering with our sister company Polytan, we are now able to bring our American clients the Poligras Platinum system -- an elite tufted polyethylene turf surface that has been proven at the highest global levels of competition and commands an exceptional international reputation.

- ◆ Tufted fabric construction
- ◆ Soft polyethylene fibers
- ◆ Shockpad required
- ◆ Full glue-down required
- ◆ Non-filled

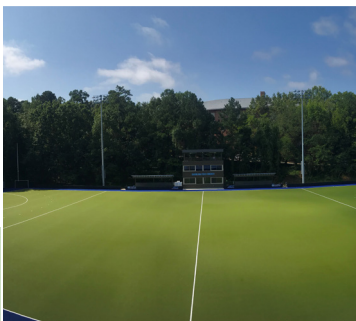
POLIGRAS® PLATINUM

An elite tufted polyethylene turf surface that has been proven at the highest global levels of competition.



"We love our Poligras field from AstroTurf. It plays great. Just what we wanted. "

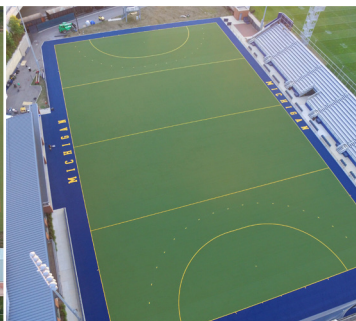
Brandi Kist
Head Coach
Queens University of Charlotte



University of North Carolina - Chapel Hill, NC



Bucknell University - Lewisburg, PA



University of Michigan - Ann Arbor, MI



Queens University of Charlotte - Charlotte, NC



FINISH FABRIC	VALUE	ASTM TEST METHOD
Face Yarn Type	Texturized Polyethylene Monofilament	N/A
Yarn Denier	5,400	D-1577
Yarn Thickness	110 microns	D-3218
Pile Weight	48 oz per SY	D- 5848
Finished Pile Height	.43"	D-5823
Standard Field Color	Field Green	None
Construction	Tufted	None
Turf Density	4,018 oz/yd ³	HUD 44d
Gauge:	3/16"	D-5793
Primary Backing	8 oz./sy Multilayer Polypropylene/Polyester	D- 5848
Secondary Backing	20 oz/sy. Polyurethane	D- 5848
Total Carpet Weight	76 oz per SY (+/- 5%)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
Elongation to Break	> 50%	D-2256
Yarn Breaking Strength	> 20 lbs	D-2256
Yarn Melting Point	248° F	D-789
Flammability	TEST PASSED	D-2859

Some of our installations include:

Bucknell University (PA)
 University of Calgary (AB)
 Harvard University (MA)
 Messiah College (PA)
 University of Michigan (MI)
 University of New England (ME)
 University of North Carolina (NC)
 U.S. Olympic Training Center - Chula Vista (CA)
 Queens University of Charlotte (NC)
 Villanova University (PA)



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PUREGRASS & PUREGRASS 8mm



The PureGrass system is a dense, all-nylon system supported by a RootZone. This system can be used with or without infill. PureGrass is designed for extremely heavy wear, including confined indoor use, pushing sleds, etc.

A shock absorbing pad is required. It may be installed over an existing E-Layer® or other shockpad, or it can be provided from the factory with an attached 8 mm foam polyurethane pad ("PureGrass 8mm").

PureGrass and PureGrass 8mm systems benefit from AstroTurf's legendary quality control protocols, industry-leading R&D efforts, and start to finish control over manufacturing, civil construction and installation.

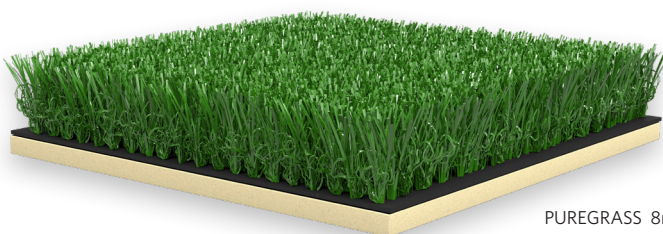
- ◆ Exclusive, precise in-house fiber masterbatch formulations with cutting edge ultraviolet and heat stabilizers
- ◆ Exceptionally durable, non-abrasive nylon face fibers for resistance to wear
- ◆ RootZone infill stabilization and fiber support system
- ◆ Multi-layer woven primary backing
- ◆ The latest polyurethane technology to enhance tuft lock, dimensional stability and fiber adhesion, with polymer formulations engineered in Germany and applied in our own American factory
- ◆ Shock absorbing pad required. Available with an 8 mm attached polyurethane pad (PureGrass 8mm)

PUREGRASS & PUREGRASS 8mm

PureGrass and PureGrass 8mm systems are dense turf systems and can be used with or without infill.



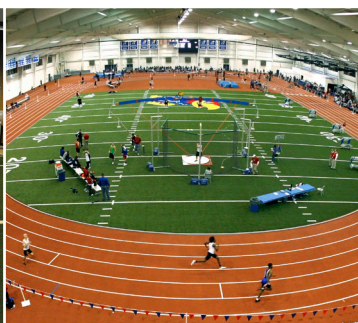
PUREGRASS



PUREGRASS 8mm



Purdue University - Lafayette, IN



University of Kansas - Lawrence, KS



University of South Dakota - Vermillion, SD



William Penn High Charter School - Philadelphia, PA

FINISH FABRIC	VALUE	ASTM TEST METHOD
Face Yarn Type	Nylon Monofilament and Nylon RootZone	N/A
Yarn Denier	8,400	D-1577
Yarn Thickness	100 microns	D-3218
Pile Weight	56 oz per SY	D- 5848
Finished Pile Height	1.25"	D-5823
Standard Field Color	Turf Green	None
Construction	Tufted	None
Turf Density	1,613 oz/yd ³	HUD 44d
Gauge:	3/8"	D-5793
Primary Backing	8 oz per SY Multilayer Polypropylene/Polyester	D- 5848
Secondary Backing	20 oz per SY Polyurethane (PureGrass) / 89 oz per SY Polyurethane foam (PureGrass 8 mm)	D- 5848
Total Carpet Weight	84 oz per SY (PureGrass) / 153 oz per SY (PureGrass 8 mm)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
Elongation to Break	> 50%	D-2256
Yarn Breaking Strength	> 20 lbs	D-2256
Yarn Melting Point	428° F	D-789
Flammability	TEST PASSED	D-2859

Some of our installations include:

Athletic Republic (CA)
 Bemidji State University (MN)
 Binghamton High School (NY)
 Brooklyn Community Arts & Media High School (NY)
 Cathedral Mary Our Queen (MD)
 Dartmouth College (NH)
 Deerfield Academy (ME)
 East Tennessee State University (TN)
 Escondido Sports Center (CA)
 Florida State University (FL)
 Franklin Pierce University (NH)
 George A. Leoni Complex (IL)

Grand Island Community Center (NE)
 Harding County Board of Education (TN)
 Hudson County (NJ)
 Waterfront Park (NY)
 International School of Beijing (China)
 James Monroe High School (NY)
 Kansas State University (KS)
 University of Kansas (KS)
 Lackland Airforce Base (TX)
 Laurel Dell Elementary School (CA)
 Macombs Dam Park (NY)
 McKinney Boyd High School (TX)

McKinney High School (TX)
 Metropolitan High School (NY)
 University of Nebraska (NE)
 New York City Parks and Recreation (NY)
 City of Newark (NJ)
 Oregon State University (OR)
 Penn State University - Abington (PA)
 Purdue University (IN)
 ROC Center (PA)
 Rockaway Beach Park (NY)
 University of South Dakota (SD)
 Spooky Nook (PA)

UNC Wilmington (NC)
 United Soccer Centre (ON)
 William Penn Charter High School (PA)



Note: 4.23.19 SS. Valid through 12/31/2019. Any change from the specified values is considered a special product that will require confirmation from manufacturing prior to ordering. All values are ± 5%. AstroTurf® has the right to modify technical specifications on the above-mentioned product. Delivered products can slightly differ from the technical data. AstroTurf® guarantees the technical quality of the proposed article.



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RHINO BLEND



AstroTurf's Rhino Series synthetic sports turf is a good choice for clients who want to increase the playing time and performance of their sports fields. The Rhino Series systems benefit from AstroTurf's legendary quality control protocols, industry-leading R&D efforts and start to finish control over manufacturing, civil construction and installation.

Rhino Series Blend products combine high quality Legend monofilament fibers and slit film fibers for resistance to wear and aesthetics for your field.

Rhino Series fields play and look so natural, yet provide the easy maintenance and exceptional durability we've become famous for over the past 50+ years.

- ◆ Exclusive, precise in-house fiber masterbatch formulations with cutting edge ultraviolet and heat stabilizers
- ◆ Legend-shaped monofilament fibers that refract light naturally for a grass-like appearance
- ◆ Legend monofilament fibers are 330 microns thick for enhanced durability
- ◆ Exceptionally durable slit film fibers for resistance to wear
- ◆ Entanglement technology, wherein we entangle molecular side chains to reinforce the fiber and prevent splitting
- ◆ Multi-layer woven primary backing
- ◆ The latest polyurethane technology to enhance tuft lock, dimensional stability and fiber adhesion, with polymer formulations engineered in Germany and applied in our own American factory

RHINO BLEND

Rhino Series Blend products combine high quality Legend monofilament fibers and slit film fibers for resistance to wear and aesthetics for your field.



"We're extremely pleased with our new AstroTurf athletic fields. They represent an important part of a world-class multi-sport venue."

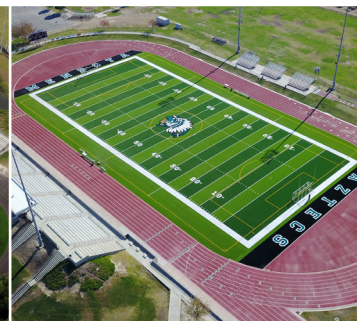
Kerry Martin, President of SOZO Sports (WA)



Allegheny Co. Sports & Athletic Complex - Montour Junction, PA



Lake Howell High School - Winter Park, FL



Mendota High School - Mendota, CA



University of Michigan - Ann Arbor, MI

FINISH FABRIC	VALUE	ASTM TEST METHOD
Face Yarn Type	Legend Polyethylene Monofilament and Polyethylene Slit Film	N/A
Yarn Denier	10,400 (6 ends, 1,800 denier per end for Mono, 10,000 denier per end for Slit Film)	D-1577
Yarn Thickness	330 microns for Mono, 115 microns for Slit Film	D-3218
Pile Weight	38 oz per SY	D- 5848
Finished Pile Height	2.25"	D-5823
Standard Field Color	Field Green, Lime Green	None
Construction	Tufted	None
Turf Density	608 oz/yd ³	HUD 44d
Gauge:	3/8"	D-5793
Primary Backing	8 oz per SY Multilayer Polypropylene/Polyester	D- 5848
Secondary Backing	20 oz per SY Polyurethane	D- 5848
Total Carpet Weight	66 oz per SY (+/- 5%)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
Elongation to Break	> 50%	D-2256
Yarn Breaking Strength	> 20 lbs	D-2256
Yarn Melting Point	248° F	D-789
Flammability	TEST PASSED	D-2859

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Mendota High School - Mendota, CA



University of Michigan - Ann Arbor, MI

FINISH FABRIC	VALUE	ASTM TEST METHOD
Face Yarn Type	Legend Polyethylene Monofilament and Polyethylene Slit Film	N/A
Yarn Denier	10,400 (6 ends, 1,800 denier per end for Mono, 10,000 denier per end for Slit Film)	D-1577
Yarn Thickness	330 microns for Mono, 115 microns for Slit Film	D-3218
Pile Weight	38 oz per SY	D- 5848
Finished Pile Height	2.0"	D-5823
Standard Field Color	Field Green, Lime Green	None
Construction	Tufted	None
Turf Density	684 oz/yd ³	HUD 44d
Gauge:	3/8"	D-5793
Primary Backing	8 oz per SY Multilayer Polypropylene/Polyester	D- 5848
Secondary Backing	20 oz per SY Polyurethane	D- 5848
Total Carpet Weight	66 oz per SY (+/- 5%)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
Elongation to Break	> 50%	D-2256
Yarn Breaking Strength	> 20 lbs	D-2256
Yarn Melting Point	248° F	D-789
Flammability	TEST PASSED	D-2859

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FINISH FABRIC	VALUE	ASTM TEST METHOD
Face Yarn Type	Legend Polyethylene Monofilament and Polyethylene Slit Film	N/A
Yarn Denier	10,400 (6 ends, 1,800 denier per end for Mono, 10,000 denier per end for Slit Film)	D-1577
Yarn Thickness	330 microns for Mono, 115 microns for Slit Film	D-3218
Pile Weight	42 oz per SY	D- 5848
Finished Pile Height	2.25"	D-5823
Standard Field Color	Field Green, Lime Green	None
Construction	Tufted	None
Turf Density	672 oz/yd ³	HUD 44d
Gauge:	3/8"	D-5793
Primary Backing	8 oz per SY Multilayer Polypropylene/Polyester	D- 5848
Secondary Backing	20 oz per SY Polyurethane	D- 5848
Total Carpet Weight	70 oz per SY (+/- 5%)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
Elongation to Break	> 50%	D-2256
Yarn Breaking Strength	> 20 lbs	D-2256
Yarn Melting Point	248° F	D-789
Flammability	TEST PASSED	D-2859

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FINISH FABRIC	VALUE	ASTM TEST METHOD
Face Yarn Type	Legend Polyethylene Monofilament and Polyethylene Slit Film	N/A
Yarn Denier	10,400 (6 ends, 1,800 denier per end for Mono, 10,000 denier per end for Slit Film)	D-1577
Yarn Thickness	330 microns for Mono, 115 microns for Slit Film	D-3218
Pile Weight	42 oz per SY	D- 5848
Finished Pile Height	2.0"	D-5823
Standard Field Color	Field Green, Lime Green	None
Construction	Tufted	None
Turf Density	756 oz/yd ³	HUD 44d
Gauge:	3/8"	D-5793
Primary Backing	8 oz per SY Multilayer Polypropylene/Polyester	D- 5848
Secondary Backing	20 oz per SY Polyurethane	D- 5848
Total Carpet Weight	70 oz per SY (+/- 5%)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
Elongation to Break	> 50%	D-2256
Yarn Breaking Strength	> 20 lbs	D-2256
Yarn Melting Point	248° F	D-789
Flammability	TEST PASSED	D-2859

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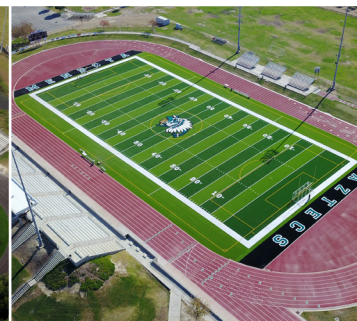
Kerry Martin, President of SOZO Sports (WA)



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University of Michigan - Ann Arbor, MI

FINISH FABRIC	VALUE	ASTM TEST METHOD
Face Yarn Type	Legend Polyethylene Monofilament and Polyethylene Slit Film	N/A
Yarn Denier	10,400 (6 ends, 1,800 denier per end for Mono, 10,000 denier per end for Slit Film)	D-1577
Yarn Thickness	330 microns for Mono, 115 microns for Slit Film	D-3218
Pile Weight	48 oz per SY	D- 5848
Finished Pile Height	2.25"	D-5823
Standard Field Color	Field Green, Lime Green	None
Construction	Tufted	None
Turf Density	768 oz/yd ³	HUD 44d
Gauge:	3/8"	D-5793
Primary Backing	8 oz per SY Multilayer Polypropylene/Polyester	D- 5848
Secondary Backing	20 oz per SY Polyurethane	D- 5848
Total Carpet Weight	76 oz per SY (+/- 5%)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
Elongation to Break	> 50%	D-2256
Yarn Breaking Strength	> 20 lbs	D-2256
Yarn Melting Point	248° F	D-789
Flammability	TEST PASSED	D-2859

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FINISH FABRIC	VALUE	ASTM TEST METHOD
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Yarn Thickness	330 microns for Mono, 115 microns for Slit Film	D-3218
Pile Weight	48 oz per SY	D- 5848
Finished Pile Height	2.0"	D-5823
Standard Field Color	Field Green, Lime Green	None
Construction	Tufted	None
Turf Density	864 oz/yd ³	HUD 44d
Gauge:	3/8"	D-5793
Primary Backing	8 oz per SY Multilayer Polypropylene/Polyester	D- 5848
Secondary Backing	20 oz per SY Polyurethane	D- 5848
Total Carpet Weight	76 oz per SY (+/- 5%)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
Elongation to Break	> 50%	D-2256
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Yarn Melting Point	248° F	D-789
Flammability	TEST PASSED	D-2859

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RHINO SF

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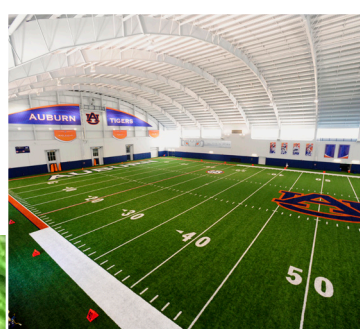
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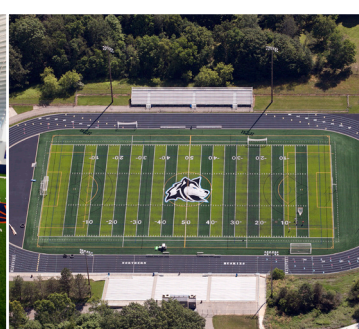


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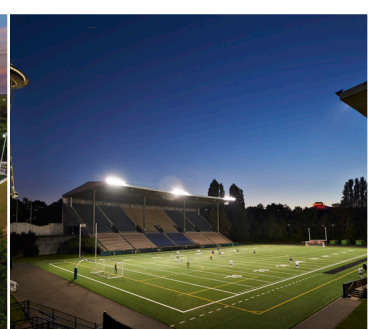
Auburn University - Auburn, AL



Forest Hills High School - Grand Rapids, MI



Robert L. Taylor Sportsfield - Sarasota, FL



Seattle Memorial Stadium - Seattle, WA

FINISH FABRIC	VALUE	ASTM TEST METHOD
Face Yarn Type	Polyethylene Slit Film	N/A
Yarn Denier	10,000	D-1577
Yarn Thickness	115 microns	D-3218
Pile Weight	38 oz per SY	D- 5848
Finished Pile Height	2.25"	D-5823
Standard Field Color	Field Green	None
Construction	Tufted	None
Turf Density	608 oz/yd ³	HUD 44d
Gauge:	3/8"	D-5793
Primary Backing	8 oz per SY Multilayer Polypropylene/Polyester	D- 5848
Secondary Backing	20 oz per SY Polyurethane	D- 5848
Total Carpet Weight	66 oz per SY (+/- 5%)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
Elongation to Break	> 50%	D-2256
Yarn Breaking Strength	> 20 lbs	D-2256
Yarn Melting Point	248° F	D-789
Flammability	TEST PASSED	D-2859

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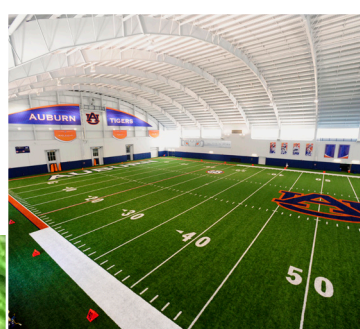
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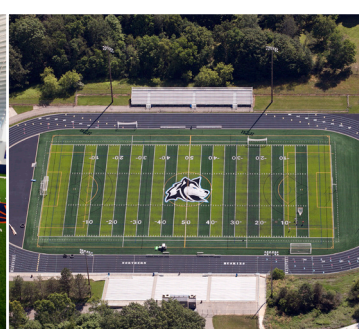


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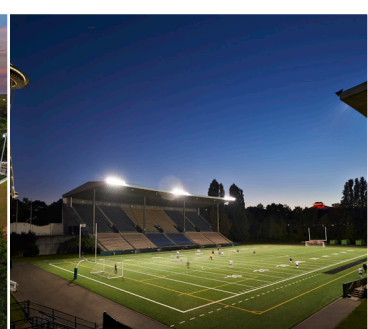
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FINISH FABRIC	VALUE	ASTM TEST METHOD
Face Yarn Type	Polyethylene Slit Film	N/A
Yarn Denier	10,000	D-1577
Yarn Thickness	115 microns	D-3218
Pile Weight	38 oz per SY	D- 5848
Finished Pile Height	2.0"	D-5823
Standard Field Color	Field Green	None
Construction	Tufted	None
Turf Density	684 oz/yd ³	HUD 44d
Gauge:	3/8"	D-5793
Primary Backing	8 oz per SY Multilayer Polypropylene/Polyester	D- 5848
Secondary Backing	20 oz per SY Polyurethane	D- 5848
Total Carpet Weight	66 oz per SY (+/- 5%)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
Elongation to Break	> 50%	D-2256
Yarn Breaking Strength	> 20 lbs	D-2256
Yarn Melting Point	248° F	D-789
Flammability	TEST PASSED	D-2859

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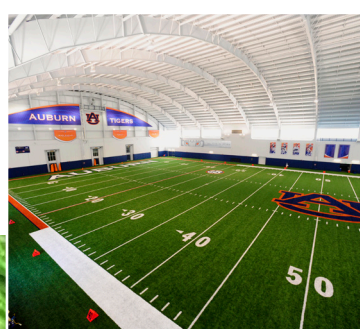
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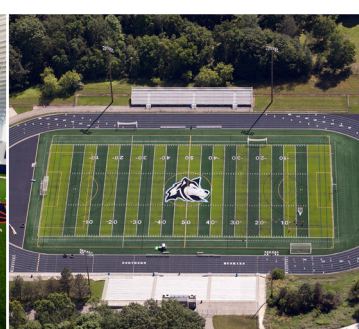


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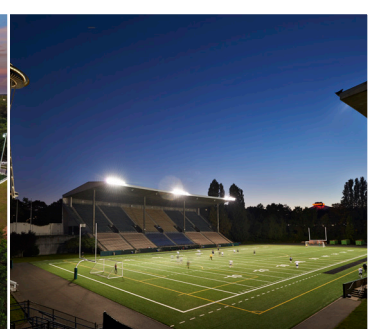
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Robert L. Taylor Sportsfield - Sarasota, FL



Seattle Memorial Stadium - Seattle, WA

FINISH FABRIC	VALUE	ASTM TEST METHOD
Face Yarn Type	Polyethylene Slit Film	N/A
Yarn Denier	10,000	D-1577
Yarn Thickness	115 microns	D-3218
Pile Weight	42 oz per SY	D- 5848
Finished Pile Height	2.25"	D-5823
Standard Field Color	Field Green	None
Construction	Tufted	None
Turf Density	672 oz/yd ³	HUD 44d
Gauge:	3/8"	D-5793
Primary Backing	8 oz per SY Multilayer Polypropylene/Polyester	D- 5848
Secondary Backing	20 oz per SY Polyurethane	D- 5848
Total Carpet Weight	70 oz per SY (+/- 5%)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
Elongation to Break	> 50%	D-2256
Yarn Breaking Strength	> 20 lbs	D-2256
Yarn Melting Point	248° F	D-789
Flammability	TEST PASSED	D-2859

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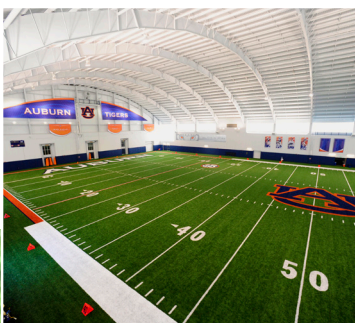
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Seattle Memorial Stadium – Seattle, WA

FINISH FABRIC	VALUE	ASTM TEST METHOD
Face Yarn Type	Polyethylene Slit Film	N/A
Yarn Denier	10,000	D-1577
Yarn Thickness	115 microns	D-3218
Pile Weight	42 oz per SY	D- 5848
Finished Pile Height	2.0"	D-5823
Standard Field Color	Field Green	None
Construction	Tufted	None
Turf Density	756 oz/yd ³	HUD 44d
Gauge:	3/8"	D-5793
Primary Backing	8 oz per SY Multilayer Polypropylene/Polyester	D- 5848
Secondary Backing	20 oz per SY Polyurethane	D- 5848
Total Carpet Weight	70 oz per SY (+/- 5%)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
Elongation to Break	> 50%	D-2256
Yarn Breaking Strength	> 20 lbs	D-2256
Yarn Melting Point	248° F	D-789
Flammability	TEST PASSED	D-2859

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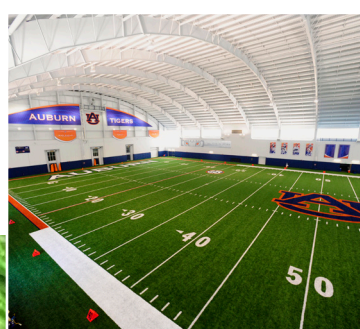
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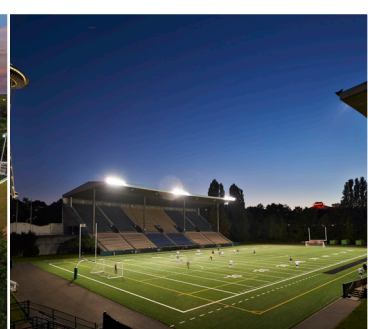
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FINISH FABRIC	VALUE	ASTM TEST METHOD
Face Yarn Type	Polyethylene Slit Film	N/A
Yarn Denier	10,000	D-1577
Yarn Thickness	115 microns	D-3218
Pile Weight	48 oz per SY	D- 5848
Finished Pile Height	2.25"	D-5823
Standard Field Color	Field Green	None
Construction	Tufted	None
Turf Density	768 oz/yd ³	HUD 44d
Gauge:	3/8"	D-5793
Primary Backing	8 oz per SY Multilayer Polypropylene/Polyester	D- 5848
Secondary Backing	20 oz per SY Polyurethane	D- 5848
Total Carpet Weight	76 oz per SY (+/- 5%)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
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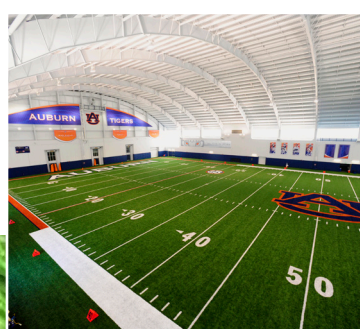
RHINO SF

The Rhino SF systems utilize top-notch slit film fibers for proven durability.

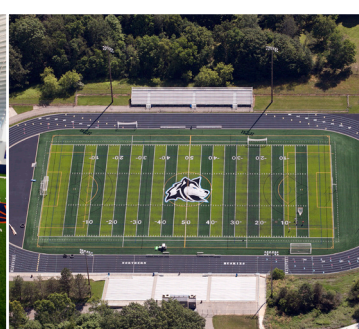


"The playability, consistency, durability, and aesthetics of the AstroTurf surfaces are the best we've seen and allows our players, at all levels, to practice and compete on the best surface in the world."

Ben Oliver, General Manager, Starfire Sports – Tukwila, WA



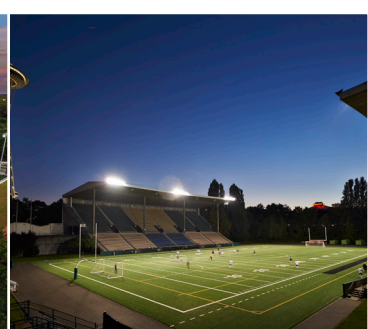
Auburn University – Auburn, AL



Forest Hills High School – Grand Rapids, MI



Robert L. Taylor Sportsfield – Sarasota, FL



Seattle Memorial Stadium – Seattle, WA

FINISH FABRIC	VALUE	ASTM TEST METHOD
Face Yarn Type	Polyethylene Slit Film	N/A
Yarn Denier	10,000	D-1577
Yarn Thickness	100 microns	D-3218
Pile Weight	48 oz per SY	D- 5848
Finished Pile Height	2.0"	D-5823
Standard Field Color	Field Green	None
Construction	Tufted	None
Turf Density	864 oz/yd ³	HUD 44d
Gauge:	3/8"	D-5793
Primary Backing	8 oz per SY Multilayer Polypropylene/Polyester	D- 5848
Secondary Backing	20 oz per SY Polyurethane	D- 5848
Total Carpet Weight	76 oz per SY (+/- 5%)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
Elongation to Break	> 50%	D-2256
Yarn Breaking Strength	> 20 lbs	D-2256
Yarn Melting Point	248° F	D-789
Flammability	TEST PASSED	D-2859

Some of our installations include:

A.C Reynolds High School (NC)	Chicago Park District (IL)	Independence High School (KS)	Ozark High School (AR)
Adrian College (MI)	Connellsville High School (PA)	Jennifer Ross Soccer Complex (GA)	Penn State University (PA)
Auburn University (AL)	University of Delaware (DE)	Jonesboro High School (AR)	Poteau High School (OK)
Bailey Road Park (NC)	Dublin City Schools (OH)	Lamphere High School (MI)	Schaumburg Park District (IL)
Battery Park City (NY)	Elkins High School (AR)	Lincoln Pius X High School (NE)	Skyline High School (WA)
Bethel Park High School (PA)	Escondido High School (CA)	Linden High School (MI)	Steubenville High School (OH)
Boise State University (ID)	Floyd Central High School (KY)	Madonna University (MI)	University of Tennessee (TN)
Boston College High School (MA)	Frederick High School (MD)	Mecklenburg County Parks (NC)	Toledo High School (OR)
Bryan Station High School (KY)	Frank Loria Memorial Ballfield (WV)	Monett High School (MO)	University Liggett School (MI)
Calvary Christian High School (FL)	Gahanna Lincoln High School (OH)	Mount De Sales Academy (MD)	West Texas A&M University (TX)
University of Central Florida (FL)	Grosse Pointe South High School (MI)	New Dorp High School (NY)	University of Wisconsin - Platteville (WI)
Central Michigan University (MI)	Gwinnett County Parks (GA)	New York City Parks (NY)	Wyandotte High School (KS)



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ROOTZONE DIAMOND BLEND OPS

Today's premiere baseball and softball surface, Diamond Series, handles ball bounce like a natural grass field in every area of performance - outfield, infield and base paths. And this can be custom tailored to any coach or facility specifications for speed or bounce.

Diamond Series fields play and look so natural, yet provide the easy maintenance and exceptional durability we've become famous for over the past 50+ years. Outfield, infield, base paths, pitcher's mound, batters' boxes and warning tracks are each surfaced with unique AstroTurf products designed specifically to replicate natural field playability.

This product features three unique fibers - slit film fibers for durability, TRIONIC monofilament fibers for aesthetics and RootZone fibers for playability. The RootZone is a system of texturized fibers that curl down to create a net-like matrix that encapsulates infill - dramatically reducing infill spray during play and infill migration over time. With a RootZone, hops and slaps are more natural because the ball is less susceptible to interference from sand/rubber splash and fly-out. Fewer divots are seen than on other synthetic fields.

Plus, this system now includes the exciting new TRIONIC monofilament fiber as a standard feature. For the first time in the history of the industry, our experts have molecularly fused Polyethylene and Nylon into a single Trionic fiber. That translates to softness AND durability.

It's all about the bounce.

"We couldn't be more pleased with AstroTurf Diamond Series for our baseball field. The follow up and service after the completion is second to none. We're happy to be a part of the AstroTurf family."

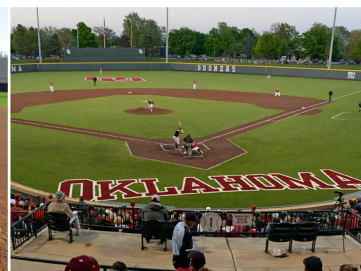
Ryan Folmar, Head Baseball Coach, Oral Roberts University



Northwestern University - Evanston, IL



University of Michigan - Ann Arbor, MI



University of Oklahoma - Norman, OK



Washington State University - Pullman, WA



AstroTurf
PRODUCT FACT SHEET

ROOTZONE DIAMOND BLEND OPS

The RootZone Diamond Blend OPS product is used for the grass portions of baseball and softball fields.



- ◆ Exclusive, precise in-house fiber masterbatch formulations with cutting edge ultraviolet and heat stabilizers
- ◆ Trionic monofilament fibers featuring a proprietary co-polymer blend of Polyethylene and Nylon in a single fiber
- ◆ Extremely durable slit film fibers for resistance to wear
- ◆ Entanglement technology, wherein we entangle molecular side chains to reinforce the fiber and prevent splitting
- ◆ RootZone infill stabilization system
- ◆ Multi-layer woven primary backing
- ◆ The latest polyurethane technology to enhance tuft lock, dimensional stability and fiber adhesion, with polymer formulations engineered in Germany and applied in our own American factory

FINISH FABRIC	VALUE	ASTM TEST METHOD
Face Yarn Type	Trionic Polyethylene/Nylon blend Monofilament, Polyethylene Slit Film and RootZone	N/A
Yarn Denier	16,000 (6 ends/1,800 per end for Mono, 10,000 per end for Slit Film and 8 ends/700 denier per end for RootZone)	D-1577
Yarn Thickness	330 microns for Mono, 115 microns for Slit Film and 100 microns for RootZone	D-3218
Pile Weight	52 oz per SY	D- 5848
Finished Pile Height	1.5"	D-5823
Standard Field Color	Field Green, Lime Green	None
Construction	Tufted	None
Turf Density	936 oz/yd ³	HUD 44d
Gauge	3/8"	D-5793
Primary Backing	8 oz per SY Multilayer Polypropylene/Polyester	D- 5848
Secondary Backing	20 oz per SY Polyurethane	D- 5848
Total Carpet Weight	80 oz per SY (+/- 5%)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
Elongation to Break	> 50%	D-2256
Yarn Breaking Strength	> 20 lbs	D-2256
Yarn Melting Point	248° F	D-789
Flammability	TEST PASSED	D-2859

Some of our installations include:

Baseball Installations:

Abilene Christian University (TX)
 Ball State University (IN)
 Dallas Baptist University (TX)
 University of Delaware (DE)
 Eastern Michigan University (MI)
 University of Iowa (IA)
 University of Michigan (MI)
 Northwestern University (IL)
 University of Oklahoma (OK)
 Oral Roberts University (OK)

University of Portland (OR)
 University of Richmond (VA)
 Sam Houston State University (TX)
 University of San Francisco (CA)
 Seattle University (WA)
 Southern Illinois University (IL)
 Washington State University (WA)
 Western Kentucky University (KY)
 West Virginia University (WV)

Softball Installations:

Abilene Christian University (TX)
 Ball State University (IN)
 Liberty University (VA)
 University of Michigan (MI)



Note: 2.12.19 SS. Valid through 12/31/2019. Any change from the specified values is considered a special product that will require confirmation from manufacturing prior to ordering. All values are ± 5%. AstroTurf® has the right to modify technical specifications on the above-mentioned product. Delivered products can slightly differ from the technical data. AstroTurf® guarantees the technical quality of the proposed article.



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ROOTZONE DIAMOND BLEND RBI



AstroTurf
PRODUCT FACT SHEET

Today's premiere baseball and softball surface, Diamond Series, handles ball bounce like a natural grass field in every area of performance - outfield, infield and base paths. And this can be custom tailored to any coach or facility specifications for speed or bounce.

Diamond Series fields play and look so natural, yet provide the easy maintenance and exceptional durability we've become famous for over the past 50+ years. Outfield, infield, base paths, pitcher's mound, batters' boxes and warning tracks are each surfaced with unique AstroTurf products designed specifically to replicate natural field playability.

This product features three unique fibers - slit film fibers for durability, TRIONIC monofilament fibers for aesthetics and RootZone fibers for playability. The RootZone is a system of texturized fibers that curl down to create a net-like matrix that encapsulates infill - dramatically reducing infill spray during play and infill migration over time. With a RootZone, hops and slaps are more natural because the ball is less susceptible to interference from sand/rubber splash and fly-out. Fewer divots are seen than on other synthetic fields.

Plus, this system now includes the exciting new TRIONIC monofilament fiber as a standard feature. For the first time in the history of the industry, our experts have molecularly fused Polyethylene and Nylon into a single Trionic fiber. That translates to softness AND durability.

It's all about the bounce.

"The look and feel of grass, the encapsulation of the infill, and the speed and play provided by the fiber weight made this the best product for us. I noticed that when I talked to coaches who played on AstroTurf®, they talked about why they liked the brand. Coaches who had other types of fields just talked about the field and not the company."

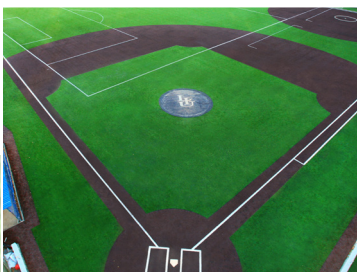
Greg Beals, Head Baseball Coach, The Ohio State University

ROOTZONE DIAMOND BLEND RBI

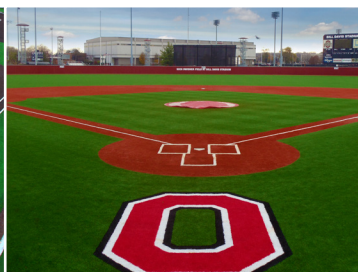
The RootZone Diamond Blend RBI product is used for the grass portions of baseball and softball fields.



- ◆ Exclusive, precise in-house fiber masterbatch formulations with cutting edge ultraviolet and heat stabilizers
- ◆ Trionic monofilament fibers featuring a proprietary co-polymer blend of Polyethylene and Nylon in a single fiber
- ◆ Extremely durable slit film fibers for resistance to wear
- ◆ Entanglement technology, wherein we entangle molecular side chains to reinforce the fiber and prevent splitting
- ◆ RootZone infill stabilization system
- ◆ Multi-layer woven primary backing
- ◆ The latest polyurethane technology to enhance tuft lock, dimensional stability and fiber adhesion, with polymer formulations engineered in Germany and applied in our own American factory



Long Island University - Brooklyn, NY



The Ohio State University - Columbus, OH



Texas A&M Commerce - Commerce, TX



Vanderbilt University - Nashville, TN

FINISH FABRIC	VALUE	ASTM TEST METHOD
Face Yarn Type	Trionic Polyethylene/Nylon blend Monofilament, Polyethylene Slit Film and RootZone	N/A
Yarn Denier	16,000 (6 ends/1,800 per end for Mono, 10,000 per end for Slit Film and 8 ends/700 denier per end for RootZone)	D-1577
Yarn Thickness	330 microns for Mono, 115 microns for Slit Film and 100 microns for RootZone	D-3218
Pile Weight	60 oz per SY	D- 5848
Finished Pile Height	2.0"	D-5823
Standard Field Color	Field Green, Lime Green	None
Construction	Tufted	None
Turf Density	1,080 oz/yd ³	HUD 44d
Gauge	3/8"	D-5793
Primary Backing	8 oz per SY Multilayer Polypropylene/Polyester	D- 5848
Secondary Backing	20 oz per SY Polyurethane	D- 5848
Total Carpet Weight	88 oz per SY (+/- 5%)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
Elongation to Break	> 50%	D-2256
Yarn Breaking Strength	> 20 lbs	D-2256
Yarn Melting Point	248° F	D-789
Flammability	TEST PASSED	D-2859

Some of our installations include:

Baseball Installations:

Boston College (MA)
 Duke University (NC)
 Indiana University (IN)
 James Madison University (VA)
 University of Kansas (KS)
 Kansas State University (KS)
 University of Kentucky (KY)
 Liberty University (VA)
 Long Island University - Brooklyn (NY)
 The Ohio State University (OH)

Southern Illinois University -
 Edwardsville (IL)
 St. John's University (NY)
 St. Joseph's University (PA)
 Tulane University (LA)
 Vanderbilt University (TN)
 Virginia Tech (VA)
 Wake Forest University (NC)
 Wichita State University (KS)

Softball Installations:

Aurora University (IL)
 Boston College (MA)
 Cornell University (NY)
 Creighton University (NE)
 Davenport University (MI)
 Long Island University - Brooklyn (NY)
 Madison College (WI)
 Madonna University (MI)
 Marshall University (WV)



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ROOTZONE DIAMOND ERA OPS



Today's premiere baseball and softball surface, Diamond Series handles ball bounce exactly like a natural grass field in every area of performance - outfield, infield and base paths. And this can be custom tailored to any coach or facility specifications for speed or bounce.

Diamond Series fields play and look so natural, yet provide the easy maintenance and exceptional durability we've become famous for over the past 50+ years. Outfield, infield, base paths, pitcher's mound, batters' boxes and warning tracks are each surfaced with unique AstroTurf products designed specifically to replicate natural field playability.

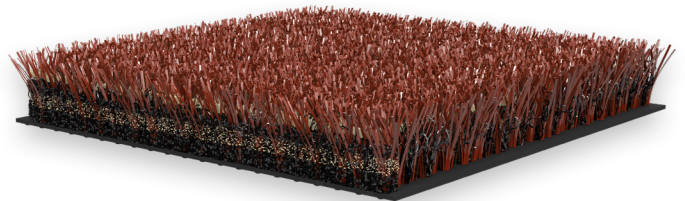
The torque generated in pitching and batting makes these areas the most used and abused of any sports field. But the ERA system is designed to stand up to this heavy use.

ERA stands for Extra Resilience Area. This product features unique fibers packed into an incredibly dense fiber matrix. Diamond-shaped polyethylene face fibers, diamond-shaped nylon face fibers and nylon RootZone fibers comprise the RootZone Diamond ERA OPS. The use of nylon in this area of the field is critical and the durability sets AstroTurf's Diamond Series apart. Plus, eight sets of batters' boxes come with every field!

It's all about the bounce.

ROOTZONE DIAMOND ERA OPS

The RootZone Diamond ERA OPS product is used for the batters' boxes, catchers' boxes and pitching areas of baseball and softball fields.



Brown



Red Clay

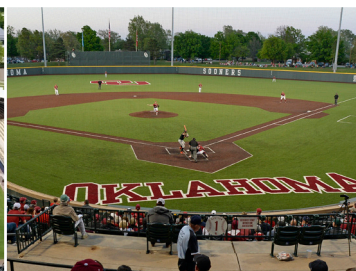
"I was 100% against artificial mounds and now that I've experienced the benefits of AstroTurf mound technology I am for it because it saves games constant rainouts."

Skip Johnson, Head Baseball Coach, University of Oklahoma

- ◆ Extremely dense profile for ultimate durability
- ◆ Exclusive, precise in-house fiber masterbatch formulations with cutting edge ultraviolet and heat stabilizers
- ◆ Diamond-shaped PE and Nylon face fibers that are designed to lay over and replicate clay
- ◆ Nylon boosts durability
- ◆ Entanglement technology, wherein we entangle molecular side chains to reinforce the fiber and prevent splitting
- ◆ Nylon RootZone infill stabilization system
- ◆ Multi-layer woven primary backing
- ◆ The latest polyurethane technology to enhance tuft lock, dimensional stability and fiber adhesion, with polymer formulations engineered in Germany and applied in our own American factory
- ◆ Infill mixtures specifically designed to play like clay



Oral Roberts University - Tulsa, OK



University of Oklahoma - Norman, OK



University of Portland - Portland, OR



Washington State University - Pullman, WA

FINISH FABRIC	VALUE	ASTM TEST METHOD
Face Yarn Type	Diamond Polyethylene/Nylon twisted Monofilament and Nylon RootZone	N/A
Yarn Denier	16,600 (10 ends/1,060 per end for Mono, 8 ends/750 denier per end for RootZone)	D-1577
Yarn Thickness	241 microns for Mono, 100 microns for RootZone	D-3218
Pile Weight	90 oz per SY	D- 5848
Finished Pile Height	1.5"	D-5823
Standard Field Color	Red Clay, Brown	None
Construction	Tufted	None
Turf Density	2,160 oz/yd ³	HUD 44d
Gauge	3/16"	D-5793
Primary Backing	8 oz per SY Multilayer Polypropylene/Polyester	D- 5848
Secondary Backing	20 oz per SY Polyurethane	D- 5848
Total Carpet Weight	118 oz per SY (+/- 5%)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
Elongation to Break	> 50%	D-2256
Yarn Breaking Strength	> 20 lbs	D-2256
Yarn Melting Point	248° F PE/ 428° F Nylon	D-789
Flammability	TEST PASSED	D-2859

Some of our installations include:

Baseball Installations:

University of Oklahoma (OK)
 Oral Roberts University (OK)
 University of Portland (OR)
 Seattle University (WA)
 Washington State University (WA)

Softball Installations:

Pittsburg State University (KS)
 Maize Unified School District (KS)



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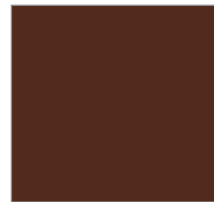
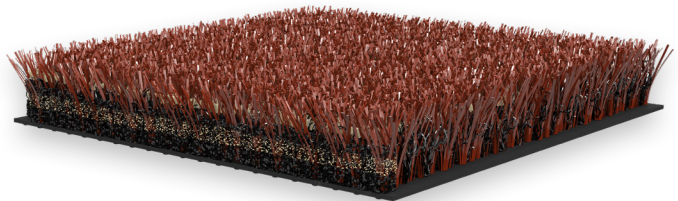
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It's all about the bounce.

- ◆ Extremely dense profile for ultimate durability
- ◆ Exclusive, precise in-house fiber masterbatch formulations with cutting edge ultraviolet and heat stabilizers
- ◆ Diamond-shaped PE and Nylon face fibers that are designed to lay over and replicate clay
- ◆ Nylon boosts durability
- ◆ Entanglement technology, wherein we entangle molecular side chains to reinforce the fiber and prevent splitting

ROOTZONE DIAMOND ERA RBI

The RootZone Diamond ERA RBI product is used for the batters' boxes, catchers' boxes and pitching areas of baseball and softball fields.



Brown



Red Clay

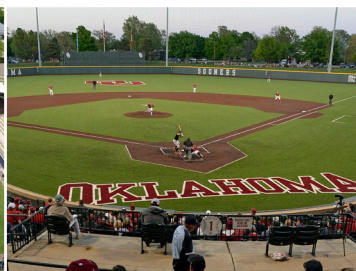
"I was 100% against artificial mounds and now that I've experienced the benefits of AstroTurf mound technology I am for it because it saves games from constant rainouts."

Skip Johnson, Head Baseball Coach, University of Oklahoma

- ◆ Nylon RootZone infill stabilization system
- ◆ Multi-layer woven primary backing
- ◆ The latest polyurethane technology to enhance tuft lock, dimensional stability, and fiber adhesion, with polymer formulations engineered in Germany and applied in our own American factory
- ◆ Infill mixtures specifically designed to play like clay



Oral Roberts University - Tulsa, OK



University of Oklahoma - Norman, OK



University of Kentucky - Lexington, KY



Seattle University - Seattle, WA

FINISH FABRIC	VALUE	ASTM TEST METHOD
Face Yarn Type	Diamond Polyethylene/Nylon twisted Monofilament and Nylon RootZone	N/A
Yarn Denier	16,600 (10 ends/1,060 per end for Mono, 8 ends/750 denier per end for RootZone)	D-1577
Yarn Thickness	241 microns for Mono, 100 microns for RootZone	D-3218
Pile Weight	90 oz per SY	D- 5848
Finished Pile Height	1.5"	D-5823
Standard Field Color	Red Clay, Brown	None
Construction	Tufted	None
Turf Density	2,560 oz/yd ³	HUD 44d
Gauge	3/16"	D-5793
Primary Backing	8 oz per SY Multilayer Polypropylene/Polyester	D- 5848
Secondary Backing	20 oz per SY Polyurethane	D- 5848
Total Carpet Weight	118 oz per SY (+/- 5%)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
Elongation to Break	> 50%	D-2256
Yarn Breaking Strength	> 20 lbs	D-2256
Yarn Melting Point	248° F PE/ 428° F Nylon	D-789
Flammability	TEST PASSED	D-2859

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University of Oklahoma (OK)
Oral Roberts University (OK)
University of Portland (OR)
Seattle University (WA)
Washington State University (WA)

Softball Installations:

Pittsburg State University (KS)
Maize Unified School District (KS)



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ROOTZONE DIAMOND-i OPS



AstroTurf
PRODUCT FACT SHEET

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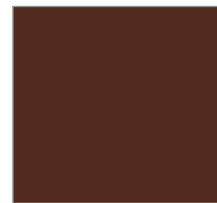
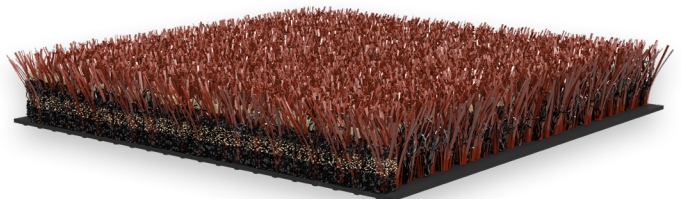
This product features unique fibers - diamond-shaped polyethylene face fibers, diamond-shaped nylon face fibers and nylon RootZone fibers. The use of nylon in this area of the field is critical and sets AstroTurf's Diamond Series apart. Not only does it boost longevity for some of the most heavily used areas in all of sports, it also creates more realistic sliding distances.

The RootZone is a system of texturized fibers that curl down to create a net-like matrix that encapsulates infill - dramatically reducing infill spray during play and infill migration over time. With a RootZone, hops and slaps are more natural because the ball is less susceptible to interference from sand/rubber splash and fly-out. Fewer divots are seen than on other synthetic fields.

It's all about the bounce.

ROOTZONE DIAMOND-i OPS

The RootZone Diamond-i OPS product is used to replicate clay on baseball and softball fields.



Brown



Red Clay

"Our new facility has been outstanding for many reasons. With such a great playing surface we are able to utilize our practice time much better and we don't have rainouts. It has been great for recruiting."

Jim Sherman, Head Coach, University of Delaware

- ◆ Exclusive, precise in-house fiber masterbatch formulations with cutting edge ultraviolet and heat stabilizers
- ◆ Diamond-shaped PE and Nylon face fibers that are designed to lay over and replicate clay
- ◆ Nylon adds durability and realistic sliding distances
- ◆ Entanglement technology, wherein we entangle molecular side chains to reinforce the fiber and prevent splitting

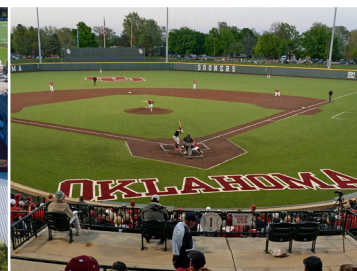
- ◆ Nylon RootZone infill stabilization system
- ◆ Multi-layer woven primary backing
- ◆ The latest polyurethane technology to enhance tuft lock, dimensional stability and fiber adhesion, with polymer formulations engineered in Germany and applied in our own American factory
- ◆ Infill mixtures specifically designed to play like clay



Midwestern State University - Wichita Falls, TX



Northwestern University - Evanston, IL



University of Oklahoma - Norman, OK



Washington State University - Pullman, WA

FINISH FABRIC	VALUE	ASTM TEST METHOD
Face Yarn Type	Diamond Polyethylene/Nylon twisted Monofilament and Nylon RootZone	N/A
Yarn Denier	16,600 (10 ends/1,060 per end for Mono, 8 ends/750 denier per end for RootZone)	D-1577
Yarn Thickness	241 microns for Mono, 100 microns for RootZone	D-3218
Pile Weight	52 oz per SY	D- 5848
Finished Pile Height	1.5"	D-5823
Standard Field Color	Red Clay, Brown	None
Construction	Tufted	None
Turf Density	1,248 oz/yd ³	HUD 44d
Gauge	3/8"	D-5793
Primary Backing	8 oz per SY Multilayer Polypropylene/Polyester	D- 5848
Secondary Backing	20 oz per SY Polyurethane	D- 5848
Total Carpet Weight	80 oz per SY (+/- 5%)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
Elongation to Break	> 50%	D-2256
Yarn Breaking Strength	> 20 lbs	D-2256
Yarn Melting Point	248° F PE / 428° F Nylon	D-789
Flammability	TEST PASSED	D-2859

Some of our installations include:
Baseball Installations:

Abilene Christian University (TX)
 Ball State University (IN)
 Dallas Baptist University (TX)
 University of Delaware (DE)
 Eastern Michigan University (MI)
 University of Iowa (IA)
 University of Michigan (MI)
 Northwestern University (IL)
 University of Oklahoma (OK)
 Oral Roberts University (OK)

University of Portland (OR)
 University of Richmond (VA)
 Sam Houston State University (TX)
 University of San Francisco (CA)
 Seattle University (WA)
 Southern Illinois University (IL)
 Washington State University (WA)
 Western Kentucky University (KY)
 West Virginia University (WV)

Softball Installations:

Abilene Christian University (TX)
 Ball State University (IN)
 Liberty University (VA)
 University of Michigan (MI)



Note: 1.31.19 SS. Valid through 12/31/2019. Any change from the specified values is considered a special product that will require confirmation from manufacturing prior to ordering. All values are ± 5%. AstroTurf® has the right to modify technical specifications on the above-mentioned product. Delivered products can slightly differ from the technical data. AstroTurf® guarantees the technical quality of the proposed article.



2680 Abutment Rd, Dalton, GA 30721
 (800) 723-TURF help@astroturf.com
 www.astroturf.com @AstroTurfUSA



ROOTZONE DIAMOND-i RBI



Today's premiere baseball and softball surface, Diamond Series handles ball bounce like a natural grass field in every area of performance - outfield, infield and base paths. And this can be custom tailored to any coach or facility specifications for speed or bounce.

Diamond Series fields play and look so natural, yet provide the easy maintenance and exceptional durability we've become famous for over the past 50+ years. Outfield, infield, base paths, pitcher's mound, batters' boxes and warning tracks are each surfaced with unique AstroTurf products designed specifically to replicate natural field playability.

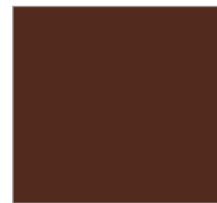
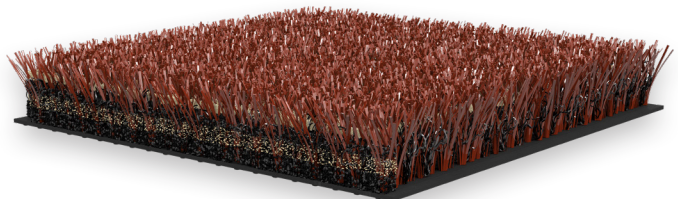
This product features unique fibers - diamond-shaped polyethylene face fibers, diamond-shaped nylon face fibers and nylon RootZone fibers. The use of nylon in this area of the field is critical and sets AstroTurf's Diamond Series apart. Not only does it boost longevity for some of the most heavily used areas in all of sports, it also creates more realistic sliding distances.

The RootZone is a system of texturized fibers that curl down to create a net-like matrix that encapsulates infill - dramatically reducing infill spray during play and infill migration over time. With a RootZone, hops and slaps are more natural because the ball is less susceptible to interference from sand/rubber splash and fly-out. Fewer divots are seen than on other synthetic fields.

It's all about the bounce.

ROOTZONE DIAMOND-i RBI

The RootZone Diamond-i RBI product is used to replicate clay on baseball and softball fields.



Brown



Red Clay

"Moving to turf was not an easy decision for us and came with a great deal of research. We wanted a surface that would bring harmony to both the offensive and defensive components of the game. AstroTurf's product allowed us the best opportunity to do this without compromising any aspect of our field."

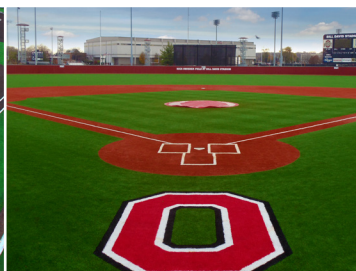
Tim Corbin, Head Baseball Coach, Vanderbilt University

- ◆ Exclusive, precise in-house fiber masterbatch formulations with cutting edge ultraviolet and heat stabilizers
- ◆ Diamond-shaped PE and Nylon face fibers that are designed to lay over and replicate clay
- ◆ Nylon adds durability and realistic sliding distances
- ◆ Entanglement technology, wherein we entangle molecular side chains to reinforce the fiber and prevent splitting

- ◆ Nylon RootZone infill stabilization system
- ◆ Multi-layer woven primary backing
- ◆ The latest polyurethane technology to enhance tuft lock, dimensional stability and fiber adhesion, with polymer formulations engineered in Germany and applied in our own American factory
- ◆ Infill mixtures specifically designed to play like clay



Long Island University - Brooklyn, NY



Ohio State University - Columbus, OH



Texas A&M Commerce - Commerce, TX



Vanderbilt University - Nashville, TN

FINISH FABRIC	VALUE	ASTM TEST METHOD
Face Yarn Type	Diamond Polyethylene/Nylon twisted Monofilament and Nylon RootZone	N/A
Yarn Denier	16,600 (10 ends/1,060 per end for Mono, 8 ends/750 denier per end for RootZone)	D-1577
Yarn Thickness	241 microns for Mono, 100 microns for RootZone	D-3218
Pile Weight	60 oz per SY	D- 5848
Finished Pile Height	1.5"	D-5823
Standard Field Color	Red Clay, Brown	None
Construction	Tufted	None
Turf Density	1,440 oz/yd ³	HUD 44d
Gauge	3/8"	D-5793
Primary Backing	8 oz per SY Multilayer Polypropylene/Polyester	D- 5848
Secondary Backing	20 oz per SY Polyurethane	D- 5848
Total Carpet Weight	88 oz per SY (+/- 5%)	D-5848
Turf Roll Dimensions	15' wide by custom lengths up to 220'	N/A
Perforations	3/16" holes on staggered 4" (approximate) centers	N/A
Turf Permeability	> 30" +/- per hour	F-1551
Tuft Bind	> 8 lbs	D-1335
Grab Tear Strength (Average)	> 200 lbs	D-5034
Lead Content	< 50 ppm	F-2765
Elongation to Break	> 50%	D-2256
Yarn Breaking Strength	> 20 lbs	D-2256
Yarn Melting Point	248° F PE / 428° F Nylon	D-789
Flammability	TEST PASSED	D-2859

Some of our installations include:

Baseball Installations:

Boston College (MA)
 Duke University (NC)
 Indiana University (IN)
 James Madison University (VA)
 University of Kansas (KS)
 Kansas State University (KS)
 University of Kentucky (KY)
 Liberty University (VA)
 Long Island University - Brooklyn (NY)
 The Ohio State University (OH)

Southern Illinois University -
 Edwardsville (IL)
 St. John's University (NY)
 St. Joseph's University (PA)
 Tulane University (LA)
 Vanderbilt University (TN)
 Virginia Tech (VA)
 Wake Forest University (NC)
 Wichita State University (KS)

Softball Installations:

Aurora University (IL)
 Boston College (MA)
 Cornell University (NY)
 Creighton University (NE)
 Davenport University (MI)
 Long Island University - Brooklyn (NY)
 Madison College (WI)
 Madonna University (MI)

Marshall University (WV)
 University of Minnesota (MN)
 University of Oregon (OR)
 Texas A&M Commerce (TX)
 West Texas A&M University (TX)



Note: 1.31.19 SS. Valid through 12/31/2019. Any change from the specified values is considered a special product that will require confirmation from manufacturing prior to ordering. All values are ± 5%. AstroTurf® has the right to modify technical specifications on the above-mentioned product. Delivered products can slightly differ from the technical data. AstroTurf® guarantees the technical quality of the proposed article.



2680 Abutment Rd, Dalton, GA 30721
 (800) 723-TURF help@astroturf.com
 www.astroturf.com @AstroTurfUSA



A310TM – 2010 Bid Bond

CONTRACTOR:

AstroTurf Corporation
2680 Abutment Road SE
Dalton, GA 30721

SURETY:

Berkley Insurance Company
475 Steamboat Road
Greenwich, CT 06830

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

Association of Educational Purchasing Agencies
2111 Pontiac Lake Road
Waterford, MI 48328

BOND AMOUNT: \$ Twentv Five Thousand and no/100 dollars (\$25,000.00)

PROJECT:

(Name, location or address, and Project number, if any)

AEPA Cooperative Purchasing Bid

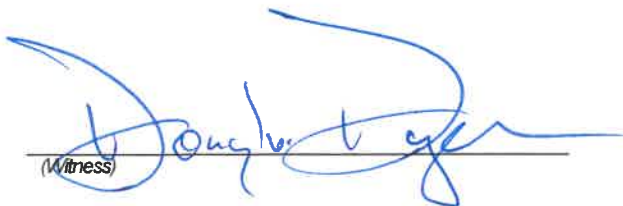
The Contractor and Surety are bound to the Owner in the amount set forth above, for the payment of which the Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, as provided herein. The conditions of this Bond are such that if the Owner accepts the bid of the Contractor within the time specified in the bid documents, or within such time period as may be agreed to by the Owner and Contractor, and the Contractor either (1) enters into a contract with the Owner in accordance with the terms of such bid, and gives such bond or bonds as may be specified in the bidding or Contract Documents, with a surety admitted in the jurisdiction of the Project and otherwise acceptable to the Owner, for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof; or (2) pays to the Owner the difference, not to exceed the amount of this Bond, between the amount specified in said bid and such larger amount for which the Owner may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect. The Surety hereby waives any notice of an agreement between the Owner and Contractor to extend the time in which the Owner may accept the bid. Waiver of notice by the Surety shall not apply to any extension exceeding sixty (60) days in the aggregate beyond the time for acceptance of bids specified in the bid documents, and the Owner and Contractor shall obtain the Surety's consent for an extension beyond sixty (60) days.

If this Bond is issued in connection with a subcontractor's bid to a Contractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

When this Bond has been furnished to comply with a statutory or other legal requirement in the location of the Project, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

Signed and sealed this 10th day of September, 2019


(Witness)


(Witness)

AstroTurf Corporation

(Principal)

(Seal)


(Title)

Berkley Insurance Company

(Surety)

(Seal)


(Title)

Sherry R. Street Attorney-In-Fact

Bond covers only one (1) year of warranty.

POWER OF ATTORNEY
BERKLEY INSURANCE COMPANY
WILMINGTON, DELAWARE

NOTICE: The warning found elsewhere in this Power of Attorney affects the validity thereof. Please review carefully.

KNOW ALL MEN BY THESE PRESENTS, that BERKLEY INSURANCE COMPANY (the "Company"), a corporation duly organized and existing under the laws of the State of Delaware, having its principal office in Greenwich, CT, has made, constituted and appointed, and does by these presents make, constitute and appoint: *John W. Lyman; Sherry R. Street; Jennifer Hammons; or Dawn Denise Wright of J. Smith Lanier & Co., a Marsh & McLennan Agency LLC Company of Chattanooga, TN* its true and lawful Attorney-in-Fact, to sign its name as surety only as delineated below and to execute, seal, acknowledge and deliver any and all bonds and undertakings, with the exception of Financial Guaranty Insurance, providing that no single obligation shall exceed **One Hundred Million and 00/100 U.S. Dollars (U.S.\$100,000,000.00)**, to the same extent as if such bonds had been duly executed and acknowledged by the regularly elected officers of the Company at its principal office in their own proper persons.

This Power of Attorney shall be construed and enforced in accordance with, and governed by, the laws of the State of Delaware, without giving effect to the principles of conflicts of laws thereof. This Power of Attorney is granted pursuant to the following resolutions which were duly and validly adopted at a meeting of the Board of Directors of the Company held on January 25, 2010:

RESOLVED, that, with respect to the Surety business written by Berkley Surety, the Chairman of the Board, Chief Executive Officer, President or any Vice President of the Company, in conjunction with the Secretary or any Assistant Secretary are hereby authorized to execute powers of attorney authorizing and qualifying the attorney-in-fact named therein to execute bonds, undertakings, recognizances, or other suretyship obligations on behalf of the Company, and to affix the corporate seal of the Company to powers of attorney executed pursuant hereto; and said officers may remove any such attorney-in-fact and revoke any power of attorney previously granted; and further

RESOLVED, that such power of attorney limits the acts of those named therein to the bonds, undertakings, recognizances, or other suretyship obligations specifically named therein, and they have no authority to bind the Company except in the manner and to the extent therein stated; and further

RESOLVED, that such power of attorney revokes all previous powers issued on behalf of the attorney-in-fact named; and further

RESOLVED, that the signature of any authorized officer and the seal of the Company may be affixed by facsimile to any power of attorney or certification thereof authorizing the execution and delivery of any bond, undertaking, recognizance, or other suretyship obligation of the Company; and such signature and seal when so used shall have the same force and effect as though manually affixed. The Company may continue to use for the purposes herein stated the facsimile signature of any person or persons who shall have been such officer or officers of the Company, notwithstanding the fact that they may have ceased to be such at the time when such instruments shall be issued.

IN WITNESS WHEREOF, the Company has caused these presents to be signed and attested by its appropriate officers and its corporate seal hereunto affixed this 9th day of May, 2019.

Attest:

Berkley Insurance Company

(Seal)

By

Ira S. Lederman
Executive Vice President & Secretary

By

Jeffrey M. Hafter
Senior Vice President

WARNING: THIS POWER INVALID IF NOT PRINTED ON BLUE "BERKLEY" SECURITY PAPER.

STATE OF CONNECTICUT)

) ss:

COUNTY OF FAIRFIELD)

Sworn to before me, a Notary Public in the State of Connecticut, this 9th day of May, 2019, by Ira S. Lederman and Jeffrey M. Hafter who are sworn to me to be the Executive Vice President and Secretary, and the Senior Vice President, respectively, of Berkley Insurance Company.

MARIA C RUNDBAKEN
NOTARY PUBLIC
CONNECTICUT
MY COMMISSION EXPIRES
APRIL 30, 2024

Maria C. Rundbaken
Notary Public, State of Connecticut

CERTIFICATE


I, the undersigned, Assistant Secretary of BERKLEY INSURANCE COMPANY, DO HEREBY CERTIFY that the foregoing is a true, correct and complete copy of the original Power of Attorney; that said Power of Attorney has not been revoked or rescinded and that the authority of the Attorney-in-Fact set forth therein, who executed the bond or undertaking to which this Power of Attorney is attached, is in full force and effect as of this date.

Given under my hand and seal of the Company, this 10 day of September, 2019

(Seal)

Vincent P. Forte
Vincent P. Forte



The first name in turf  ...and all that's around it.

Part A - Annual Report/Letter of Credit - AstroTurf Corporation

Included herein, please find:

1. Letter from our parent company, SportGroup, sharing our credit limit
2. Letter from our bonding company detailing our bonding limit.

These documents, along with the confidential documents emailed directly to George Wilson on Friday, September 13, 2019 at 10:32 AM Eastern Time.

Sport Group Holding GmbH · Gewerbering 3 · 86666 Burgheim

To Whom It May Concern

Sport Group Holding GmbH

Gewerbering 3
86666 Burgheim

T: +49 (0) 8432 / 87-0

F: +49 (0) 8432 / 87-87

info@sportgroup-holding.com

www.sportgroup-holding.com

Steuer-Nr. 124/116/20202

USt-ID-Nr. DE 300533028

Line of Credit Sport Group GmbH / Astro Turf Corporation

AstroTurf Corporation is a wholly owned subsidiary of Sport Group Holdings, an international leader in the sports surfacing industry, offering a range of surfaces around the globe.

As a subsidiary of Sport Group, AstroTurf Corporation has access to Sport Group's line of credit, which exceeds eight figures. This line of credit provides operating capital to AstroTurf Corporation through the construction season and as needed.

Should you have any questions, please contact:

Sport Group Holding GmbH

Christoph Böswald
Head of Controlling and Treasury
Gewerbering 3
86 666 Burgheim
Tel.: +49 8432 87-53
christoph.boeswald@sportgroup-holding.com

Regards,


Frank Dittrich
CEO


Andreas Vorbrodt
CFO



J. Smith Lanier & Co.
Insuring People And Business Since 1868

January 1, 2019

RE AstroTurf Corporation Bond Capacity

To Whom It May Concern:

We are the bonding agent for AstroTurf Corporation. They are currently bonded through Berkley Insurance Company, which is a "A+" AM Best rated company. The current limits for AstroTurf Corporation are \$15,000,000 per single project with a \$100,000,000 aggregate.

Should you require further information, please do not hesitate to contact our office.

Sincerely,

A handwritten signature in blue ink, appearing to be 'Sherry', is written above the typed name.

Sherry Street CPCU ARM AAI AINS AU CRM CIC CISR
Account Executive

Exhibit B – Marketing Plan

Upon award, AstroTurf Corporation plans to aggressively market the contract both internally to our own sales network and externally to our customer base.

The contract will be launched via a press release, which will be posted to our site, pushed out on social media to our 25,000+ followers, published on PR Web and sent directly to industry groups and publications like the American Sports Builders Association, Athletic Management, Athletic Business, National Athletic Directors Association, Sports Business Journal, and others.

- This press release will emphasize:
 - The ease of purchase with AEPA, especially in combination with our exclusive financing opportunities provided by PNC Bank. We will note how marrying the cooperative with the financing option makes for easy and expedited sports surfacing projects.
 - The advantages of the regionally-based cooperative model AEPA employs
 - The full suite of sports surfaces available for purchase through the award and by AstroTurf Corporation customers. Notably, this award will dovetail nicely with AstroTurf Corporation's 2020 goals to more aggressively push the full range of sports surfacing available due to our SportGroup ownership (i.e., Rekortan tracks and Laykold courts)

After launch, AstroTurf will regularly push messaging to our customer base about the AEPA co-op via dedicated email blasts and email blasts with links and logos at the bottom of all other content that link to our website's "How to Buy" section. This section already details the advantages of cooperative purchasing, but it will be modified to note the full range of sports surfaces now available through the AEPA/Subsidiary Cooperative awards of the new contract.

Moreover, AstroTurf will complete ongoing case studies about projects built through the contract(s), highlighting the easy experience and value afforded by the co-operative.

We will also update our existing corporate literature about the AEPA co-op and have copies available at the 100+ trade shows and conventions we attend. We will also supplement our AEPA co-operative sales literature (attached) with individual flyers for each Member Agency.

To get very granular exposure, we will also strategically design artwork to market via retargeting advertisements that will display messaging related to cooperative purchasing who have been to our website and who have entered key search terms into Google. For example, individuals who have googled "how to buy AstroTurf", "AEPA AstroTurf", "AstroTurf co-op" etc. will receive ads that show up around the web with messages tailored to purchasing through the co-operative(s). (Note that iconic AstroTurf's brand name offers key SEO advantages).

In addition, we will add logo displays to our general advertisements that will encourage co-operative purchasing.

YOU WANT TO BUY AN ASTROTURF® FIELD, BUT NEED TO FIND THE BEST WAY TO DO IT.

Too often field buyers want our products, but assume they are required to conduct their own formal bid.

That results in several problems



Time and Money – It is common to spend hundreds of collective hours conducting your own formal bid. Considerable time and effort is required – doing market research, drafting specifications, advertising the bid, vetting bidders, conducting interviews and more. **Do you really have this kind of time?**



You might not even get what you want! There are multiple bid types (RFP, IFB, hard bid, line item bids, etc.) and depending on the type of bid you conduct, you may have little choice in your selection. Certain bid types result in general contractors selecting your turf for you. Then you're married to that turf manufacturer and installer for the next 8 years of the warranty – *and you didn't even get to choose!*
Price is important, but it shouldn't be the ONLY factor in your decision.

So is there a better way? **Yes!**

A growing contracting method is the cooperative purchasing model. There are many good co-ops that offer contract awards from which their members can benefit. The co-ops ensure that all responding Vendors are fully vetted before awarding the contract, which can then be "piggybacked" by public agencies across the country. This makes it easy to choose an awarded contract with the Vendor your agency prefers.

The co-op benefits are clear



It's easy – They've done the hard work for you. Just issue a purchase order referencing the co-op contract you choose, and we can hit the ground running.



It's free – Co-op membership is typically free and easy to join online.



It's legal – RFPs and IFBs are designed to comply with the state requirements and statutes on the front end to allow for maximum flexibility.



It's proven – Over the past 20 years, thousands of public institutions, including K-12, universities, municipalities and more, have trusted using cooperative contracts for their purchases. More and more agencies use cooperative contracts each year, for everything from purchasing office supplies and computers, to building a turf field or running track.



Best of all... Get the product you want from the Vendor you trust.

GET THE FIELD THAT YOU WANT!

Quick Facts

Lead Agency:
Varies by State

Contract Number:
Synthetic Turf #016-G

Contract Term:
Through March 2020

Cost of Membership:
Free

Available Products:
Synthetic Turf

Website:
www.aepacoop.org

AstroTurf Corporation is available through AEPA.

The Association of Educational Purchasing Agencies (AEPA) is a multi-state non-profit organization made up of Educational Service Agencies and political subdivisions organized through a Memorandum of Understanding between all participating states.

AEPA is a true “cooperative” who serves to leverage purchasing power to benefit all schools and agencies, regardless of size, with the ability to purchase at equal buying levels.

AEPA started in 2000 with purchasing professionals from 10 member states who had the mutual goal of securing combined volume purchasing contracts based on potential sales by qualifying customers in participating states.



Combined expertise



Existing vendor relationships



Experience & overall vision



Association of Educational
PURCHASING AGENCIES

AstroTurf

**CO-OP
SOLUTIONS**

AEPA is an association of regional co-ops. Currently, AEPA consists of 27 member states who craft contracts and bids competitively that are tailored to meet each state's specific legal requirements. Awarded contracts are available statewide and facilitated by one cooperative member agency acting as the contract administrator.

AEPA will help answer any questions regarding the contract and provide any needed support documents to use the contract through piggyback contract options.

How to Purchase

Contact AstroTurf to see if your agency is an AEPA Member. If necessary, join at www.aepacoop.org

Receive AEPA pricing proposal.

Draw up contract with AstroTurf or Authorized Distributor. Contract and PO should reference AEPA contract number.

Build Your Project

It's easy. And it works!

AEPA has been used by numerous entities across the country to purchase their AstroTurf fields.

Ambridge School District – Ambridge, PA
Armstrong School District – Kittanning, PA
City of Coral Springs Mullins Park – Coral Springs, FL
Eugene School District – Eugene, OR
Lauderhill Sports Complex – Lauderdale, FL

Leon County Public Schools – Tallahassee, FL
Palm Bay H.S. Football Stadium – Melbourne, FL
South Park High School – South Park Township, PA
Valley Park City Complex – Charleston, WV
West Shamokin High School – Rural Valley, PA

“We bought our new AstroTurf field with the AEPA contract. It was easy and efficient. We had a great experience. AstroTurf's systems and service are top-notch, and we could not be happier with the end result.”

Brian Miller

Athletic Director, Ambridge Area School District (PA)



Ambridge High School – Ambridge, PA



Lauderhill Sports Complex – Lauderdale, FL



South Park High School – South Park Township, PA

AstroTurf SINCE 1965
powered by sportgroup
THE SURFACE SPECIALISTS



Victoria Stringham

Director of Cooperative Purchasing

vstringham@astroturf.com

480-415-6300

Laykold®

POWERED BY



ADVANTAGE

Laykold® Advantage system is comprised of factory textured colors using a select blend of silica sands. Batch mixing is simplified, resulting in superior quality control and a consistent surface pace regardless of location or applicator. Designed for more demanding sports traffic.

**Highlight: Advantage is factory textured.*

Highlights

- Certified Quality
- Designed for more demanding sports traffic
- Only acrylic surface made by an ISO 9001 and 14001 certified company in the United States
- Can be adjusted to meet desired court pace
- Versatile application-tennis, basketball, netball, in-line, multisport, play courts and more
- Environmentally friendly - does not contain asbestos, lead or mercury
- A wide variety of long lasting colors
- Superior reputation for over 75 years
- Custom colors available
- Nobody covers the court like Laykold®!



sportgroup
THE SURFACE SPECIALISTS



USA 724.452.1330

109 Conica Lane

PO Box 160, Harmony, PA 16037 USA

info@advpolytech.com

www.laykold.com • www.sportsbyapt.com



@aptworldwide

Laykold® is a registered trademark of APT Corporation

Laykold®

POWERED BY



COLORCOAT

Laykold® ColorCoat system is a durable, fade and wear resistant, all-weather tennis and athletic surface, designed to beautify asphalt and/or concrete substrates while providing the desired speed of play.

Highlights

- Certified Quality
- Only acrylic surface made by an ISO 9001 and 14001 certified company in the United States
- Can be adjusted to meet desired court pace
- Versatile application—tennis, basketball, netball, in-line, multisport, play courts and more
- Environmentally friendly – does not contain asbestos, lead or mercury
- A wide variety of long lasting colors
- Superior reputation for over 75 years
- Custom colors available
- Nobody covers the court like Laykold®!



COLORFLEX

Laykold® ColorFlex system is a highly flexible, premium quality, acrylic surface that is ideal for use with new asphalt pavements and cushioned, free floating, or slip-sheet surfaces that require highly flexible coatings for greater performance and longevity.

Laykold®
ColorCoat
Concentrate

Laykold® Line Primer and
Textured White Line Paint

Laykold® Acrylic Resurfacer

Laykold® Epoxy Poly Primer
Used on concrete substrates only

Laykold®
ColorFlex

Laykold® Line Primer and
Textured White Line Paint

Laykold® Nusurf

Laykold® Poly Primer
Used on concrete substrates only

SPORTS AND LEISURE
**SYNTHETIC
SURFACE
SPECIALISTS**

www.laykold.com • 724.452.1330

APT PROUDLY INTRODUCES **Laykold®** CUSHION**PLUS** **FORCE**

FINALLY TRUE FORCE
REDUCTION AND
CUSHIONING WITH
APT'S PROPRIETARY
MICRON TECHNOLOGY!

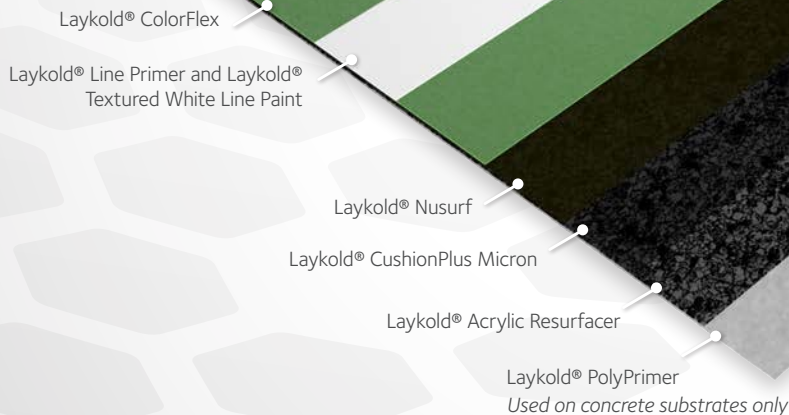
- 2+ mm Cushion Plus Micron
- > Liquid or spray applied micron rubber **dries faster** and requires **fewer applications**
- > **Superior force reduction** over traditional systems of equal or greater thickness
- 1 coat Laykold Nusurf
- 2 coats Laykold® ColorFlex*

POWERED BY



**25%
MORE
FORCE
REDUCTION**

**75%
LESS
LABOR!**



USA 724.452.1330

109 Conica Lane

PO Box 160, Harmony, PA 16037 USA

info@advpolytech.com

www.laykold.com • www.sportsbyapt.com

f @aptworldwide

Laykold® is a registered trademark of APT Corporation

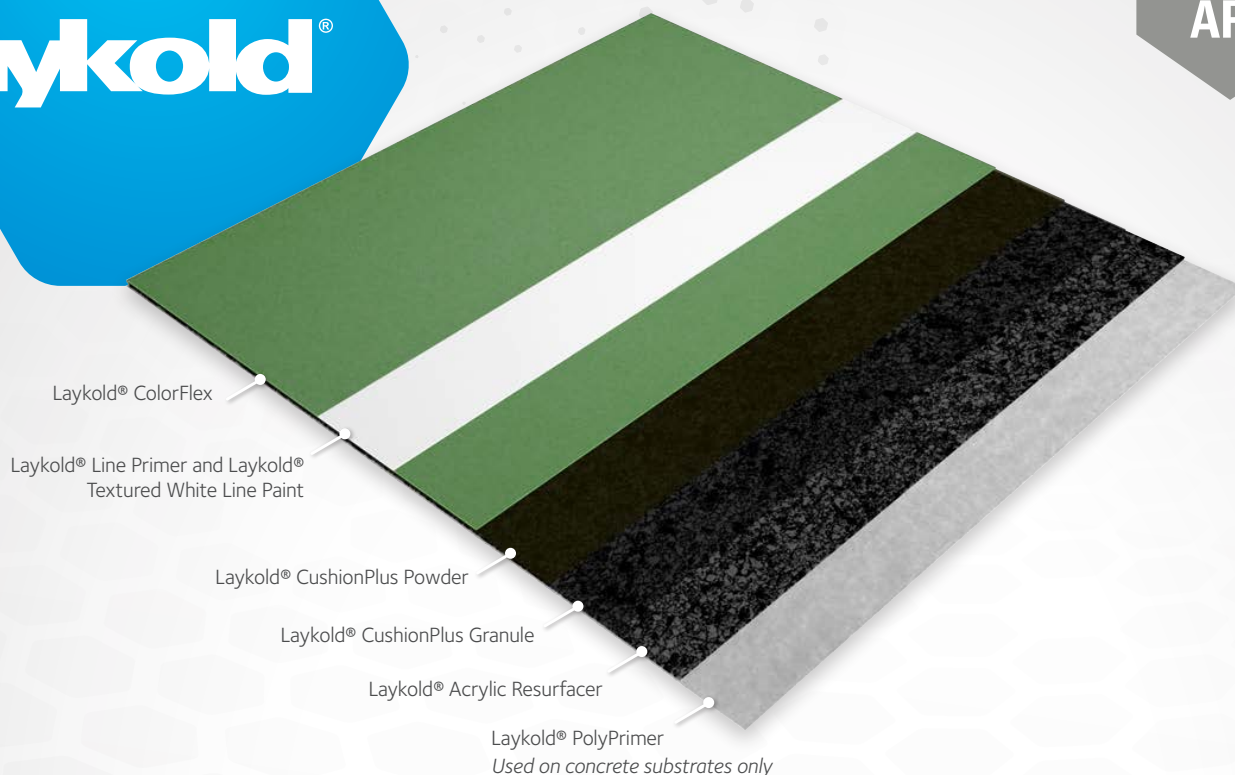


sportgroup
THE SURFACE SPECIALISTS



Laykold®

POWERED BY



CUSHIONPLUS TRADITIONAL SYSTEMS

Laykold® Cushion Plus offers a series of industry leading force reduction surfaces. Elastic layers are created using applications of liquid applied rubber, encapsulated in APT's resilient proprietary binder. The cushioned court is finished with Laykold's highly flexible ColorFlex for an attractive, durable, and comfortable playing surface.

STANDARD

- 2 coats Laykold® Cushion Plus Granule
- 3 coats Laykold® Cushion Plus Powder
- 2 coats Laykold® ColorFlex*

XTREME

- 3 coats Laykold® Cushion Plus Granule
- 3 coats Laykold® Cushion Plus Powder
- 2 coats Laykold® ColorFlex*

SUPREME

- 4 coats Laykold® Cushion Plus Granule
- 3 coats Laykold® Cushion Plus Powder
- 2 coats Laykold® ColorFlex*

*Optional: 1 finish coat of ColorFlex may be applied to speed up surface pace.

Highlights

- Manufactured by APT in an ISO 9001 Quality Assured facility
- More comfortable play and post-play experience
- Firm, yet resilient, uniform footing for unsurpassed safety
- Available in 4 comfort levels: Standard, Xtreme, Supreme and Force
- Environmentally friendly – does not contain asbestos, lead or mercury
- Can be adjusted to meet desired court pace



SPORTS AND LEISURE
**SYNTHETIC
SURFACE
SPECIALISTS**

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APT PROUDLY INTRODUCES

Laykold[®]

MASTERSGEL

Laykold Masters Gel is a revolutionary new cushion court system with a fluid applied gel layer that is comprised of 60% renewable resources.

- 
1. LM Concrete Primer
 2. LM Gel
 3. LM Wearcoat
 4. LM Bond Kote
 5. LM Filler
 6. LM Topcoat
 7. LM Line Primer and White Line Paint

HIGHLIGHTS

- 5-year warranty
- Gel layer comprised of 60% renewable resources
- 17% force reduction
- Easy, one pour, self-leveling, gel layer application
- Superior abrasion and UV resistance
- Multisport applications
- Manufactured by APT in an ISO 9001 Quality Assured and ISO 14001 Environmentally Conscious facility
- Custom colors available

SPORTS AND LEISURE
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Laykold®

MASTERSGEL

The revolutionary new cushion court system

POWERED BY



PLANTS 1

ENZYMES 2

GEL 3

Since 1969, Laykold by Advanced Polymer Technology has continuously revolutionized the acrylic sports court world with quality and innovation. Laykold systems are a diverse, world class series of court surfaces that is unmatched in their durability and performance. Now, the Laykold Masters series of courts has gone a step further using green technology to develop a system that outlasts the competition and is truly environmentally friendly.

Take a close look at this green technology and how the gel system works:

It all starts with plants which are harvested and their oils extracted. All natural enzymes are then used to modify the molecular structure of the extracted oils. This process maintains the oils natural characteristics.

As a result of this process, the true magic begins and a gel is created. The gel provides a shock absorbing monolithic renewable core for Laykold surfaces. Regardless of your sport, Laykold Masters Gel provides comfort and world class performance.

Another green initiative by Advanced Polymer Technology.
For more information, sportsbyapt.com



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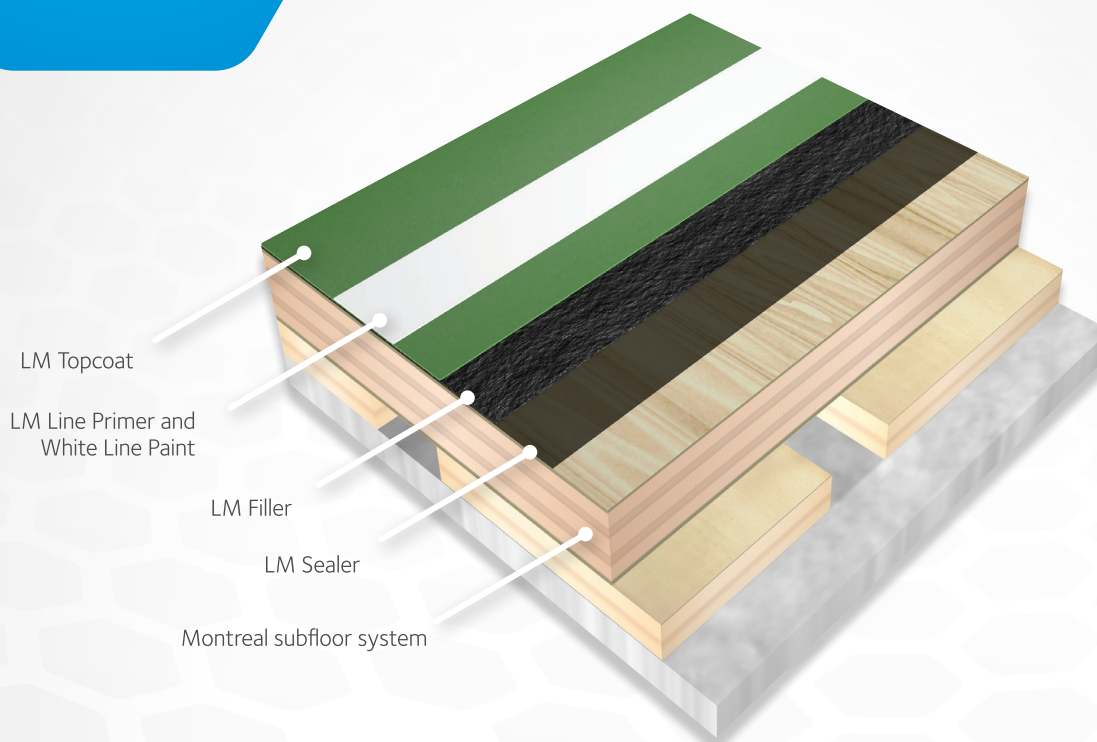
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Laykold® MASTERS



Unprecedented in the world of elastic indoor court systems, Laykold® Masters Montreal and Laykold® Masters Rome's engineered plywood sub-flooring promotes speedy installation. It provides superior force reduction properties with Laykold® Masters acrylics completing this extraordinary system.

POWERED BY



MASTERS ROME

Highlights

- Laykold® Masters Rome is the portable version of the Laykold® Masters Montreal system. Laykold® Masters Rome combines high performance with ultra fast installation and dismantling capabilities. The set up of an event court takes only 4-5 hours and dismantling 2-3 hours. This provides all of the characteristics for high profile and professional event demands
 - Portable options with 7' x 3.5' removable panels
 - Perfect for large events
- A competition floor of 8611.1ft² can be set up by 6 people in just 4 hours and disassembled again in 3
- Perfect opportunities to be able to offer tennis events for arenas without extensive modification measures

MASTERS MONTREAL

Highlights

- 5-year warranty
- Superior abrasion and UV resistance
- Multisport applications
- Longevity - subfloor lasts 30-40 years with ability to recoat (every 8-12 years)
- Versatility - use for retrofits, new installations, overlays (floating system)
- Manufactured by APT in an ISO 9001 Quality Assured and ISO 14001 Environmentally Conscious facility
- Custom colors available

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Laykold® MASTERS



Laykold® Masters 5 and 8 are cutting-edge polyurethane/rubber/acrylic composite court systems. Each utilizes a custom pre-fabricated shockpad made from recycled tennis balls for advanced player comfort and is coated with LM acrylics for consistent ball bounce, reliable footing and staying power.

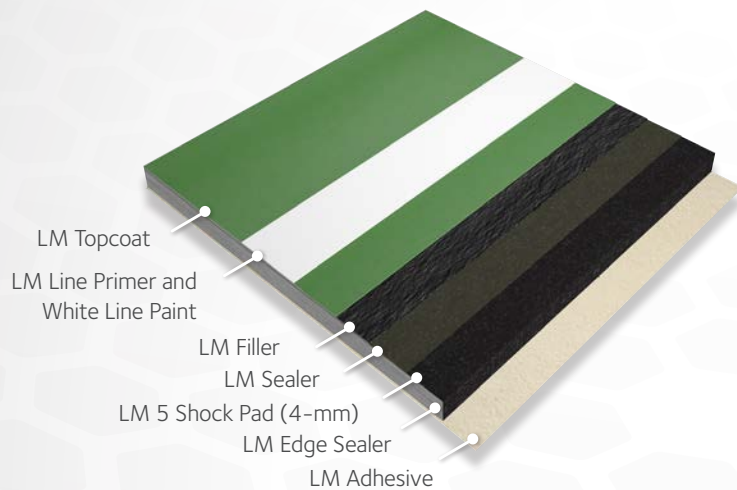
POWERED BY



MASTERS 5

Highlights

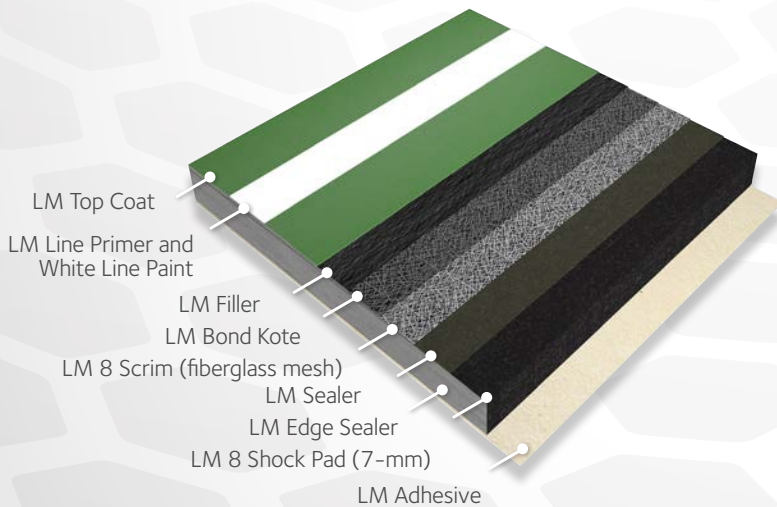
- 5-year warranty
- Permanent cushion utilizing recycled tennis balls
- 14% force reduction
- Superior abrasion and UV resistance
- Multisport applications
- Manufactured by APT in an ISO 9001 Quality Assured and ISO 14001 Environmentally Conscious facility
- Custom colors available



MASTERS 8

Highlights

- 5-year warranty
- Permanent cushion utilizing recycled tennis balls
- 21% force reduction
- Superior abrasion and UV resistance
- Multisport applications
- Manufactured by APT in an ISO 9001 Quality Assured and ISO 14001 Environmentally Conscious facility
- Custom colors available



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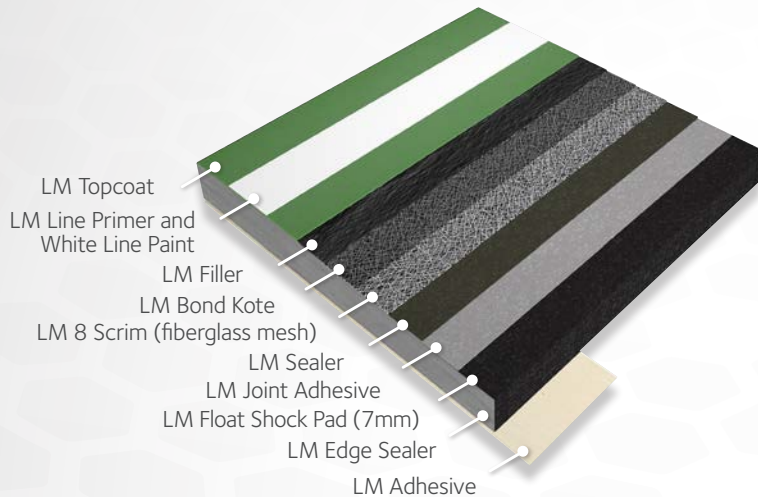
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Laykold® MASTERS



Laykold® Masters 5, 8, Float and Indoor are cutting-edge polyurethane/rubber/acrylic composite court systems. Each utilizes a custom pre-fabricated shockpad made from recycled tennis balls for advanced player comfort and is coated with LM acrylics for consistent ball bounce, reliable footing and staying power.

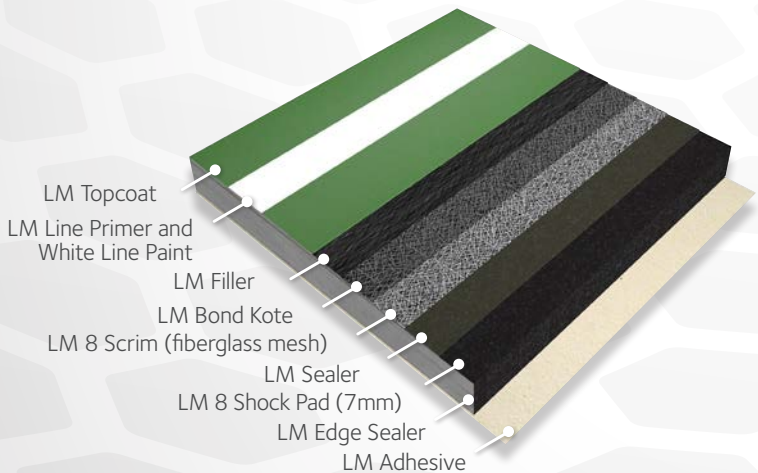
POWERED BY



MASTERS FLOAT

Highlights

- 5-year warranty
- Designed to bridge cracks or moving substrates on all courts
- Excellent for rooftop installations
- Permanent cushion utilizing recycled tennis balls
- 21% force reduction
- Superior abrasion and UV resistance
- Multisport applications
- Manufactured by APT in an ISO 9001 Quality Assured and ISO 14001 Environmentally Conscious facility
- Custom colors available



MASTERS 8 INDOOR

Highlights

- 5-year warranty
- Designed to bridge cracks or moving substrates on all courts
- Excellent for rooftop installations
- Permanent cushion utilizing recycled tennis balls
- 21% force reduction
- Superior abrasion and UV resistance
- Multisport applications
- Manufactured by APT in an ISO 9001 Quality Assured and ISO 14001 Environmentally Conscious facility
- Custom colors available

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State Signature Pages



STATE OF NEW JERSEY BUSINESS REGISTRATION CERTIFICATE

Taxpayer Name:	ASTROTURF CORPORATION
Trade Name:	APT ACQUISITION CONSTRUCTION CORP.
Address:	2680 ABUTMENT ROAD DALTON, GA 30721
Certificate Number:	2084242
Effective Date:	November 02, 2016
Date of Issuance:	September 11, 2019

For Office Use Only:

20190911120056552

AMERICANS WITH DISABILITIES ACT OF 1990
Equal Opportunity for Individuals with Disability

The contractor and the Educational Services Commission of New Jersey (hereafter "owner") do hereby agree that the provisions of Title 11 of the Americans With Disabilities Act of 1990 (the "Act") (42 U.S.C. S121 01 et seq.), which prohibits discrimination on the basis of disability by public entities in all services, programs, and activities provided or made available by public entities, and the rules and regulations promulgated pursuant there unto, are made a part of this contract. In providing any aid, benefit, or service on behalf of the owner pursuant to this contract, the contractor agrees that the performance shall be in strict compliance with the Act. In the event that the contractor, its agents, servants, employees, or subcontractors violate or are alleged to have violated the Act during the performance of this contract, the contractor shall defend the owner in any action or administrative proceeding commenced pursuant to this Act. The contractor shall indemnify, protect, and save harmless the owner, its agents, servants, and employees from and against any and all suits, claims, losses, demands, or damages, of whatever kind or nature arising out of or claimed to arise out of the alleged violation. The contractor shall, at its own expense, appear, defend, and pay any and all charges for legal services and any and all costs and other expenses arising from such action or administrative proceeding or incurred in connection therewith. In any and all complaints brought pursuant to the owner's grievance procedure, the contractor agrees to abide by any decision of the owner which is rendered pursuant to said grievance procedure. If any action or administrative proceeding results in an award of damages against the owner, or if the owner incurs any expense to cure a violation of the ADA which has been brought pursuant to its grievance procedure, the contractor shall satisfy and discharge the same at its own expense.

The owner shall, as soon as practicable after a claim has been made against it, give written notice thereof to the contractor along with full and complete particulars of the claim, if any action or administrative proceeding is brought against the owner or any of its agents, servants, and employees, the *owner shall* expeditiously forward or have forwarded to the contractor every demand, complaint, notice, summons, pleading, or other process received by the owner or its representatives.

It is expressly agreed and understood that any approval by the owner of the services provided by the contractor pursuant to this contract will not relieve the contractor of the obligation to comply with the Act and to defend, indemnify, protect, and save harmless the owner pursuant to this paragraph.

It is further agreed and understood that the owner assumes no obligation to indemnify or save harmless the contractor, its agents, servants, employees and subcontractors for any claim which may arise out of their performance of this Agreement. Furthermore, the contractor expressly understands and agrees that the provisions of this indemnification clause shall in no way limit the contractor's obligations assumed in this Agreement, nor shall they be construed to relieve the contractor from any liability, nor preclude the owner from taking any other actions available to it under any other provisions of the Agreement or otherwise at law.

Signature Thomas Green

Name Thomas Green

Title Dir. of Operations

Company name AstroTurf Construction Corporation

Date Sept. 9, 2019

To be completed and signed below

Return with bid

AFFIRMATIVE ACTION QUESTIONNAIRE

This form is to be completed and returned with the bid. However, the ESCNJ will accept in lieu of this Questionnaire, Affirmative Action Evidence attached but not stapled to this page.

1. Our company has a federal Affirmative Action Plan approval. ☐ Yes
☒ No

If yes, please attach a copy of the plan to this questionnaire.

2. Our company has a New Jersey State Certificate of Employee Information Report. ☐ Yes
☒ No

If yes, please attach a copy of the certificate to this questionnaire.

3. If you answered "**NO**" to both questions above, No. 1 and 2, you must apply for an Affirmative Action Employee Information Report – Form AA302.

Please visit the New Jersey Department of Treasury website for the Division of Public Contracts Equal Employment Opportunity Compliance:

www.state.nj.us/treasury/contract_compliance/

- Click on "Forms" and then "AA302" and "Instructions" under the heading "Employee Information Report"
- Complete and submit the form with the appropriate payment to:

Department of Treasury
Division of Purchase & Property
Contract Compliance Audit Unit
EEO Monitoring Program
P.O. Box 206
Trenton, New Jersey 08625-0206

All fees for this application are to be paid directly to the State of New Jersey. A copy shall be submitted to the ESCNJ within seven (7) days of the notice of the intent to award the contract or the signing of the contract.

EMPLOYEE INFORMATION REPORT (FORM AA302)

IMPORTANT: READ THE FOLLOWING INSTRUCTIONS CAREFULLY BEFORE COMPLETING THE FORM. PRINT OR TYPE ALL INFORMATION. FAILURE TO PROPERLY COMPLETE THE ENTIRE FORM MAY DELAY ISSUANCE OF YOUR CERTIFICATE. **IF YOU HAVE A CURRENT CERTIFICATE OF EMPLOYEE INFORMATION REPORT, DO NOT COMPLETE THIS FORM. SEND COPY OF CURRENT CERTIFICATE TO THE PUBLIC AGENCY. DO NOT COMPLETE THIS FORM FOR CONSTRUCTION CONTRACT AWARDS.**

ITEM 1 - Enter the Federal Identification Number assigned by the Internal Revenue Service, or if a Federal Employer Identification Number has been applied for, or if your business is such that you have not or will not receive a Federal Employer Identification Number, enter the Social Security Number of the owner or of one partner, in the case of a partnership.

ITEM 2 - Check the box appropriate to your TYPE OF BUSINESS. If you are engaged in more than one type of business check the predominate one. If you are a manufacturer deriving more than 50% of your receipts from your own retail outlets, check "Retail".

ITEM 3 - Enter the total "number" of employees in the entire company, including part-time employees. This number shall include all facilities in the entire firm or corporation.

ITEM 4 - Enter the name by which the company is identified. If there is more than one company name, enter the predominate one.

ITEM 5 - Enter the physical location of the company. Include City, County, State and Zip Code.

ITEM 6 - Enter the name of any parent or affiliated company including the City, County, State and Zip Code. If there is none, so indicate by entering "None" or N/A.

ITEM 7 - Check the box appropriate to your type of company establishment. "Single-establishment Employer" shall include an employer whose business is conducted at only one physical location. "Multi-establishment Employer" shall include an employer whose business is conducted at more than one location.

ITEM 8 - If "Multi-establishment" was entered in item 8, enter the number of establishments within the State of New Jersey.

ITEM 9 - Enter the total number of employees at the establishment being awarded the contract.

ITEM 10 - Enter the name of the Public Agency awarding the contract. Include City, County, State and Zip Code.

ITEM 11 - Enter the appropriate figures on all lines and in all columns. THIS SHALL ONLY INCLUDE EMPLOYMENT DATA FROM THE FACILITY THAT IS BEING AWARDED THE CONTRACT. DO NOT list the same employee in more than one job category. DO NOT attach an EEO-1 Report.

Racial/Ethnic Groups will be defined:

Black: Not of Hispanic origin. Persons having origin in any of the Black racial groups of Africa.

Hispanic: Persons of Mexican, Puerto Rican, Cuban, or Central or South American or other Spanish culture or origin, regardless of race.

American Indian or Alaskan Native: Persons having origins in any of the original peoples of North America, and who maintain cultural identification through tribal affiliation or community recognition.

Asian or Pacific Islander: Persons having origin in any of the original peoples of the Far East, Southeast Asia, the Indian Sub-continent or the Pacific Islands. This area

includes for example, China, Japan, Korea, the Philippine Islands and Samoa.

Non-Minority: Any Persons not identified in any of the aforementioned Racial/Ethnic Groups.

ITEM 12 - Check the appropriate box. If the race or ethnic group information was not obtained by 1 or 2, specify by what other means this was done in 3.

ITEM 13 - Enter the dates of the payroll period used to prepare the employment data presented in Item 12.

ITEM 14 - If this is the first time an Employee Information Report has been submitted for this company, check block "Yes".

ITEM 15 - If the answer to Item 15 is "No", enter the date when the last Employee Information Report was submitted by this company.

ITEM 16 - Print or type the name of the person completing the form. Include the signature, title and date.

ITEM 17 - Enter the physical location where the form is being completed. Include City, State, Zip Code and Phone Number.

TYPE OR PRINT IN SHARP BALL POINT PEN

THE VENDOR IS TO COMPLETE THE EMPLOYEE INFORMATION REPORT FORM (AA302) AND RETAIN COPY FOR THE VENDOR'S OWN FILES. THE VENDOR SHOULD ALSO SUBMIT A COPY TO THE PUBLIC AGENCY AWARDED THE CONTRACT IF THIS IS YOUR FIRST REPORT; AND FORWARD ONE COPY **WITH A CHECK IN THE AMOUNT OF \$150.00 PAYABLE TO THE TREASURER, STATE OF NEW JERSEY (FEE IS NON-REFUNDABLE) TO:**

**NJ Department of the Treasury
Division of Contract Compliance & Equal Employment Opportunity
P.O. Box 209
Trenton, New Jersey 08625-0209 Telephone No. 1-609-292-5475**

To download the AA-302 form, click this link:

http://www.state.nj.us/treasury/contract_compliance/pdf/aa302.pdf

STATE OF NEW JERSEY
Division of Purchase & Property
Contract Compliance Audit Unit
EEO Monitoring Program
EMPLOYEE INFORMATION REPORT

IMPORTANT-READ INSTRUCTIONS CAREFULLY BEFORE COMPLETING FORM. FAILURE TO PROPERLY COMPLETE THE ENTIRE FORM AND TO SUBMIT THE REQUIRED \$150.00 FEE MAY DELAY ISSUANCE OF YOUR CERTIFICATE. DO NOT SUBMIT EEO-1 REPORT FOR SECTION B, ITEM 11. For instructions on completing the form, go to: http://www.state.nj.us/treasury/contract_compliance/pdf/aa302ins.pdf

SECTION A - COMPANY IDENTIFICATION

1. FID. NO. OR SOCIAL SECURITY	2. TYPE OF BUSINESS <input type="checkbox"/> 1. MFG <input type="checkbox"/> 2. SERVICE <input type="checkbox"/> 3. WHOLESALE <input type="checkbox"/> 4. RETAIL <input type="checkbox"/> 5. OTHER	3. TOTAL NO. EMPLOYEES IN THE ENTIRE COMPANY
4. COMPANY NAME		
5. STREET	CITY	COUNTY STATE ZIP CODE
6. NAME OF PARENT OR AFFILIATED COMPANY (IF NONE, SO INDICATE)		CITY STATE ZIP CODE
7. CHECK ONE: IS THE COMPANY: <input type="checkbox"/> SINGLE-ESTABLISHMENT EMPLOYER <input type="checkbox"/> MULTI-ESTABLISHMENT EMPLOYER		
8. IF MULTI-ESTABLISHMENT EMPLOYER, STATE THE NUMBER OF ESTABLISHMENTS IN NJ		
9. PUBLIC AGENCY AWARDING CONTRACT		
		CITY COUNTY STATE ZIP CODE

Official Use Only	DATE RECEIVED	ISSUING DATE	ASSIGNED PROGRAM MANAGER

SECTION B - EMPLOYMENT DATA

11. Report all permanent, temporary and part-time employees ON YOUR OWN PAYROLL. Enter the appropriate figures on all lines and in all columns. Where there are no employees in a particular category, enter a zero. Include ALL employees, not just those in minority/non-minority categories, in columns 1, 2, & 3. **DO NOT SUMMIT AN EEO-1 REPORT.**

JOB CATEGORIES	ALL EMPLOYEES			PERMANENT MINORITY/NON-MINORITY EMPLOYEE BREAKDOWN										
	COL. 1 TOTAL (Cols. 2 & 3)	COL. 2 MALE	COL. 3 FEMALE	MALE					FEMALE					
				BLACK	HISPANIC	AMER. INDIAN	ASIAN	NON MIN.	BLACK	HISPANIC	AMER. INDIAN	ASIAN	NON MIN.	
Officials/Managers														
Professionals														
Technicians														
Sales Workers														
Office & Clerical														
Craftworkers (Skilled)														
Operations (Semi-skilled)														
Laborers (Unskilled)														
Service Workers														
TOTAL														
Total employment from previous Report (if any)														
Temporary & Part-Time Employees	The data below shall NOT be included in the figures for the appropriate categories above.													

12. HOW WAS INFORMATION AS TO RACE OR ETHNIC GROUP IN SECTION B OBTAINED? <input type="checkbox"/> 1. Visual Survey <input type="checkbox"/> 2. Employment Record <input type="checkbox"/> 3. Other (Specify)	14. IS THIS THE FIRST Employee Information Report Submitted? 1. YES <input type="checkbox"/> 2. NO <input type="checkbox"/>	13. IF NO, DATE LAST REPORT SUBMITTED MO. DAY YEAR 13. DATES OF PAYROLL PERIOD USED From: To:
--	--	---

SECTION C - SIGNATURE AND IDENTIFICATION

16. NAME OF PERSON COMPLETING FORM (Print or Type)	SIGNATURE	TITLE	DATE MO. DAY YEAR
17. ADDRESS NO. & STREET	CITY	COUNTY	STATE ZIP CODE PHONE (AREA CODE, NO., EXTENSION)

I certify that the above information is correct to the best of my knowledge.

Name of Company/Firm

AstroTurf Construction Corporation

Address

2600 Abutment Rd

City, State, Zip

Dalton, GA 30721

Name of Authorized Agent

Thomas Green Title
Director of Operations

SIGNATURE

Thomas Green

Date

Sept. 9, 2019

Sample Certificate of Employee Information Report

Certification 111XX

CERTIFICATE OF EMPLOYEE INFORMATION REPORT

INITIAL

This is to certify that the contractor listed below has submitted an Employee Information Report pursuant to N.J.A.C. 17:27-1.1 et. seq. and the State Treasurer has approved said report. This approval will remain in effect for the period of 15-DEC-20XX to 15-DEC-20XX

SAMPLE COMPANY, INC.
33 WEST STATE STREET
TRENTON, NJ 08625

VOID



State Treasurer

(REVISED 4/10)

RETURN WITH BID

EXHIBIT A

MANDATORY EQUAL EMPLOYMENT OPPORTUNITY LANGUAGE

N.J.S.A. 10:5-31 et seq. (P.L. 1975, C. 127)

N.J.A.C. 17:27

GOODS, PROFESSIONAL SERVICE AND GENERAL SERVICE CONTRACTS

During the performance of this contract, the contractor agrees as follows:

The contractor or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Except with respect to affectional or sexual orientation and gender identity or expression, the contractor will ensure that equal employment opportunity is afforded to such applicants in recruitment and employment, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Such equal employment opportunity shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Public Agency Compliance Officer setting forth provisions of this nondiscrimination clause.

The contractor or subcontractor, where applicable will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex.

The contractor or subcontractor will send to each labor union, with which it has a collective bargaining agreement, a notice, to be provided by the agency contracting officer, advising the labor union of the contractor's commitments under this chapter and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

The contractor or subcontractor, where applicable, agrees to comply with any regulations promulgated by the Treasurer pursuant to N.J.S.A. 10:5-31 et seq., as amended and supplemented from time to time and the Americans with Disabilities Act.

The contractor or subcontractor agrees to make good faith efforts to meet targeted county employment goals established in accordance with N.J.A.C. 17:27-5.2.

The contractor or subcontractor agrees to inform in writing its appropriate recruitment agencies including, but not limited to, employment agencies, placement bureaus, colleges, universities, and labor unions, that it does not discriminate on the basis of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex, and that it will discontinue the use of any recruitment agency which engages in direct or indirect discriminatory practices.

The contractor or subcontractor agrees to revise any of its testing procedures, if necessary, to assure that all personnel testing conforms with the principles of job related testing, as established by the statutes and court decisions of the State of New Jersey and as established by applicable Federal law and applicable Federal court decisions.

In conforming with the targeted employment goals, the contractor or subcontractor agrees to review all procedures relating to transfer, upgrading, downgrading and layoff to ensure that all such actions are taken without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability,

nationality or sex, consistent with the statutes and court decisions of the State of New Jersey, and applicable Federal law and applicable Federal court decisions.

The contractor shall submit to the public agency, after notification of award but prior to execution of a goods and services contract, one of the following three documents:

Letter of Federal Affirmative Action Plan Approval

Certificate of Employee Information Report

Employee Information Report Form AA302 (electronically provided by the Division and distributed to the public agency through the Division's website at www.state.nj.us/treasury/contract_compliance)

The contractor and its subcontractors shall furnish such reports or other documents to the Division of Purchase & Property, CCAU, EEO Monitoring Program as may be requested by the office from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the Division of Purchase & Property, CCAU, EEO Monitoring Program for conducting a compliance investigation pursuant to **Subchapter 10 of the Administrative Code at N.J.A.C. 17:27.**

Signature Thomas Green

Name Thomas Green

Title Director of Operations

Company name: AstroTurf Construction Corporation

Date 9/9/19

EXHIBIT B Return with bid if bidding on installation services
MANDATORY EQUAL EMPLOYMENT OPPORTUNITY LANGUAGE
N.J.S.A. 10:5-31 et seq. (P.L.1975, c.127)
N.J.A.C. 17:27-1.1 et seq.
CONSTRUCTION CONTRACTS

During the performance of this contract, the contractor agrees as follows:

The contractor or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Except with respect to affectional or sexual orientation and gender identity or expression, the contractor will ensure that equal employment opportunity is afforded to such applicants in recruitment and employment, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Such equal employment opportunity shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Public Agency Compliance Officer setting forth provisions of this nondiscrimination clause.

The contractor or subcontractor, where applicable will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex.

The contractor or subcontractor will send to each labor union, with which it has a collective bargaining agreement, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments under this act and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

The contractor or subcontractor, where applicable, agrees to comply with any regulations promulgated by the Treasurer, pursuant to N.J.S.A. 10:5-31 et seq., as amended and supplemented from time to time and the Americans with Disabilities Act.

When hiring or scheduling workers in each construction trade, the contractor or subcontractor agrees to make good faith efforts to employ minority and women workers in each construction trade consistent with the targeted employment goal prescribed by N.J.A.C. 17:27-7.2; provided, however, that the Dept. of LWD, Construction EEO Monitoring Program, may, in its discretion, exempt a contractor or subcontractor from compliance with the good faith procedures prescribed by the following provisions, A, B, and C, as long as the Dept. of LWD, Construction EEO Monitoring Program is satisfied that the contractor or subcontractor is employing workers provided by a union which provides evidence, in accordance with standards prescribed by the Dept. of LWD, Construction EEO Monitoring Program, that its percentage of active "card carrying" members who are minority and women workers is equal to or greater than the targeted employment goal established in accordance with N.J.A.C. 17:27-7.2. The contractor or subcontractor agrees that a good faith effort shall include compliance with the following procedures:

(A) **EXHIBIT B** (Continued)

- (B) If the contractor or subcontractor has a referral agreement or arrangement with a union for a construction trade, the contractor or subcontractor shall, within three business days of the contract award, seek assurances from the union that it will cooperate with the contractor or subcontractor as it fulfills its affirmative action obligations under this contract and in accordance with the rules promulgated by the Treasurer pursuant to N.J.S.A. 10:5-31 et. seq., as supplemented and amended from time to time and the Americans with Disabilities Act. If the contractor or subcontractor is unable to obtain said assurances from the construction trade union at least five business days prior to the commencement of construction work, the contractor or subcontractor agrees to afford equal employment opportunities minority and women workers directly, consistent with this chapter. If the contractor's or subcontractor's prior experience with a construction trade union, regardless of whether the union has provided said assurances, indicates a significant possibility that the trade union will not refer sufficient minority and women workers consistent with affording equal employment opportunities as specified in this chapter, the contractor or subcontractor agrees to be prepared to provide such opportunities to minority and women workers directly, consistent with this chapter, by complying with the hiring or scheduling procedures prescribed under (B) below; and the contractor or subcontractor further agrees to take said action immediately if it determines that the union is not referring minority and women workers consistent with the equal employment opportunity goals set forth in this chapter.
- (C) If good faith efforts to meet targeted employment goals have not or cannot be met for each construction trade by adhering to the procedures of (A) above, or if the contractor does not have a referral agreement or arrangement with a union for a construction trade, the contractor or subcontractor agrees to take the following actions:
- (1) To notify the public agency compliance officer, the Dept. of LWD, Construction EEO Monitoring Program, and minority and women referral organizations listed by the Division pursuant to N.J.A.C. 17:27-5.3, of its workforce needs, and request referral of minority and women workers;
 - (2) To notify any minority and women workers who have been listed with it as awaiting available vacancies;
 - (3) Prior to commencement of work, to request that the local construction trade union refer minority and women workers to fill job openings, provided the contractor or subcontractor has a referral agreement or arrangement with a union for the construction trade;
 - (4) To leave standing requests for additional referral to minority and women workers with the local construction trade union, provided the contractor or subcontractor has a referral agreement or arrangement with a union for the construction trade, the State Training and Employment Service and other approved referral sources in the area;
 - (5) If it is necessary to lay off some of the workers in a given trade on the construction site, layoffs shall be conducted in compliance with the equal employment opportunity and nondiscrimination standards set forth in this regulation, as well as with applicable Federal and State court decisions;
 - (6) To adhere to the following procedure when minority and women workers apply or are referred to the contractor or subcontractor:
 - (i) The contractor or subcontractor shall interview the referred minority or women worker.
 - (ii) If said individuals have never previously received any document or certification signifying a level of qualification lower than that required in order to perform the work of the construction

EXHIBIT B (Continued)

trade, the contractor or subcontractor shall in good faith determine the qualifications of such individuals. The contractor or subcontractor shall hire or schedule those individuals who satisfy appropriate qualification standards in conformity with the equal employment opportunity and non-discrimination principles set forth in this chapter. However, a contractor or subcontractor shall determine that the individual at least possesses the requisite skills, and experience recognized by a union, apprentice program or a referral agency, provided the referral agency is acceptable to the Dept. of LWD, Construction EEO Monitoring Program. If necessary, the contractor or subcontractor shall hire or schedule minority and women workers who qualify as trainees pursuant to these rules. All of the requirements, however, are limited by the provisions of (C) below. (iii) The name of any interested women or minority individual shall be maintained on a waiting list, and shall be considered for employment as described in above, whenever vacancies occur. At the request of the Dept. of LWD, Construction EEO Monitoring Program, the contractor or subcontractor shall provide evidence of its good faith efforts to employ women and minorities from the list to fill vacancies.

(iv) If, for any reason, said contractor or subcontractor determines that a minority individual or a woman is not qualified or if the individual qualifies as an advanced trainee or apprentice, the contractor or subcontractor shall inform the individual in writing of the reasons for the determination, maintain a copy of the determination in its files, and send a copy to the public agency compliance officer and to the Dept. of LWD, Construction EEO Monitoring Program.

(7) To keep a complete and accurate record of all requests made for the referral of workers in any trade covered by the contract, on forms made available by the Dept. of LWD, Construction EEO Monitoring Program and submitted promptly to the Dept. of LWD, Construction EEO Monitoring Program upon request.

- (D) The contractor or subcontractor agrees that nothing contained in (B) above shall preclude the contractor or subcontractor from complying with the union hiring hall or apprenticeship policies in any applicable collective bargaining agreement or union hiring hall arrangement, and, where required by custom or agreement, it shall send journeymen and trainees to the union for referral, or to the apprenticeship program for admission, pursuant to such agreement or arrangement. However, where the practices of a union or apprenticeship program will result in the exclusion of minorities and women or the failure to refer minorities and women consistent with the targeted county employment goal, the contractor or subcontractor shall consider for employment persons referred pursuant to (B) above without regard to such agreement or arrangement; provided further, however, that the contractor or subcontractor shall not be required to employ women and minority advanced trainees and trainees in numbers which result in the employment of advanced trainees and trainees as a percentage of the total workforce for the construction trade, which percentage significantly exceeds the apprentice to journey worker ratio specified in the applicable collective bargaining agreement, or in the absence of a collective bargaining agreement, exceeds the ratio established by practice in the area for said construction trade. Also, the contractor or subcontractor agrees that, in implementing the procedures of (B) above, it shall, where applicable, employ minority and women workers residing within the geographical jurisdiction of the union.

After notification of award, but prior to signing a construction contract, the contractor shall submit to the public agency compliance officer and the Dept. of LWD, Construction EEO Monitoring Program an initial project workforce report (Form AA-201) electronically provided to the public agency by the Dept. of LWD, Construction EEO Monitoring Program, through its website, for distribution to and completion by the contractor, in accordance with N.J.A.C. 17:27-7. The contractor also agrees to submit a copy of the Monthly Project Workforce Report once a month thereafter for the duration of this contract to the Dept. of LWD, Construction EEO Monitoring Program, and to the public agency

EXHIBIT B (Continued)

compliance officer. The contractor agrees to cooperate with the public agency in the payment of budgeted funds, as is necessary, for on-the-job and/or off-the job programs for outreach and training of minorities and women.

(E) The contractor and its subcontractors shall furnish such reports or other documents to the Dept. of LWD, Construction EEO Monitoring Program as may be requested by the Dept. of LWD, Construction EEO Monitoring Program from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the Dept. of LWD, Construction EEO Monitoring Program for conducting a compliance investigation pursuant to N.J.A.C. 17:27-1.1 et seq. (Revised: January, 2016)

Company AstroTurf Construction Corporation
Signature Thomas Green
Name Thomas Green
Title Dir. of Operations
Date 9/09/19

RETURN WITH BID
Educational Services Commission of New Jersey
Business Office
1660 Stelton Road
Piscataway, New Jersey 08854

Chapter 271
Political Contribution Disclosure Form
(Contracts that Exceed \$17,500.00)
Ref. N.J.S.A. 52:34-25

The undersigned, being authorized and knowledgeable of the circumstances, does hereby certify that _____ (Business Entity) has made the following **reportable** political contributions to any elected official, political candidate or any political committee as defined in N.J.S.A. 19:44-20.26 during the twelve (12) months preceding this award of contract:

<u>Date of Contribution</u>	<u>Amount of Contribution</u>	<u>Name of Recipient Elected Official/ Committee/Candidate</u>	<u>Name of Contributor</u>

The Business Entity may attach additional pages if needed.

☒ **No Reportable Contributions** (Please check (✓) if applicable.)

I certify that _____ (Business Entity) made no reportable contributions to any elected official, political candidate or any political committee as defined in N.J.S.A. 19:44-20.26.

Certification

I certify, that the information provided above is in full compliance with Public law 2005 – Chapter 271.

Name of Authorized Agent Thomas Green

Signature Thomas Green Title Dir. of Operations

Business Entity AstroTurf Construction corporation

C. 271 POLITICAL CONTRIBUTION DISCLOSURE FORM

Contractor Instructions

Business entities (contractors) receiving contracts from a public agency that are NOT awarded pursuant to a "fair and open" process (defined at N.J.S.A. 19:44A-20.7) are subject to the provisions of P.L. 2005, c. 271, s. 2 (N.J.S.A. 19:44A-20.26). This law provides that 10 days prior to the award of such a contract, the contractor shall disclose contributions to:

- any State, county, or municipal committee of a political party
- any legislative leadership committee¹
- any continuing political committee (a.k.a., political action committee)
- any candidate committee of a candidate for, or holder of, an elective office:
 - of the public entity awarding the contract
 - of that county in which that public entity is located
 - of another public entity within that county
 - or of a legislative district in which that public entity is located or, when the public entity is a county, of any legislative district which includes all or part of the county

The disclosure must list reportable contributions to any of the committees that exceed \$300 per election cycle that were made during the 12 months prior to award of the contract. See N.J.S.A. 19:44A-8 and 19:44A-16 for more details on reportable contributions.

N.J.S.A. 19:44A-20.26 itemizes the parties from whom contributions must be disclosed when a business entity is not a natural person. This includes the following:

- individuals with an "interest" ownership or control of more than 10% of the profits or assets of a business entity or 10% of the stock in the case of a business entity that is a corporation for profit
- all principals, partners, officers, or directors of the business entity or their spouses
- any subsidiaries directly or indirectly controlled by the business entity
- IRS Code Section 527 New Jersey based organizations, directly or indirectly controlled by the business entity and filing as continuing political committees, (PACs)

When the business entity is a natural person, "a contribution by that person's spouse or child, residing therewith, shall be deemed to be a contribution by the business entity." [N.J.S.A. 19:44A-20.26(b)]. The contributor must be listed on the disclosure.

Any business entity that fails to comply with the disclosure provisions shall be subject to a fine imposed by ELEC in an amount to be determined by the Commission which may be based upon the amount that the business entity failed to report.

The enclosed list of agencies is provided to assist the contractor in identifying those public agencies whose elected official and/or candidate campaign committees are affected by the disclosure requirement. It is the contractor's responsibility to identify the specific committees to which contributions may have been made and need to be disclosed. The disclosed information may exceed the minimum requirement.

¹ N.J.S.A. 19:44A-3(s): "The term "legislative leadership committee" means a committee established, authorized to be established, or designated by the President of the Senate, the Minority Leader of the Senate, the Speaker of the General Assembly or the Minority Leader of the General Assembly pursuant to section 16 of P.L. 1993, c. 65 (C. 19:44A-10.1) for the purpose of receiving contributions and making expenditures."

The enclosed form, a content-consistent facsimile, or an electronic data file containing the required details (along with a signed over sheet) may be used as the contractor's submission and is disclosable to the public under the Open Public Records Act.

The contractor must also complete the attached Stockholder Disclosure Certification. This will assist the agency in meeting its obligations under the law. **NOTE: This section does not apply to Board of Education contracts.**

P.L. 2005, c. 271

(Unofficial version, Assembly Committee Substitute to A-3013, First Reprint*)

AN ACT authorizing units of local government to impose limits on political contributions by contractors and supplementing Title 40A of the New Jersey Statutes and Title 19 of the Revised Statutes.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

40A:11-51 1. a. A county, municipality, independent authority, board of education, or fire district is hereby authorized to establish by ordinance, resolution or regulation, as may be appropriate, measures limiting the awarding of public contracts there from to business entities that have made a contribution pursuant to P.L. 1973, c. 83 (C. 19:44A-1 et seq.) and limiting the contributions that the holders of a contract can make during the term of a contract, notwithstanding the provisions and parameters of sections 1 through 12 of P.L. 2004, c. 19 (C. 19:44A-20.2 et al.) and section 22 of P.L. 1973, c. 83 (C. 19:44A-22).

b. The provisions of P.L. 2004, c. 19 shall not be construed to supersede or preempt any ordinance, resolution or regulation of a unit of local government that limits political contributions by business entities performing or seeking to perform government contracts. Any ordinance, resolution or regulation in effect on the effective date of P.L. 2004, c. 19 shall remain in effect and those adopted after that effective date shall be valid and enforceable.

c. An ordinance, resolution or regulation adopted or promulgated as provided in this section shall be filed with the Secretary of State.

52:34-25 2. a. Not later than 10 days prior to entering into any contract having an anticipated value in excess of \$17,500, except for a contract that is required by law to be publicly advertised for bids, a State agency, county, municipality, independent authority, board of education, or fire district shall require any business entity bidding thereon or negotiating therefore, to submit along with its bid or price quote, a list of political contributions as set forth in this subsection that are reportable by the recipient pursuant to the provisions of P.L. 1973, c. 83 (C.19:44A-1 et seq.) and that were made by the business entity during the preceding 12 month period, along with the date and amount of each contribution and the name of the recipient of each contribution. A business entity contracting with a State agency shall disclose contributions to any State, county, or municipal committee of a political party, legislative leadership committee, candidate committee of a candidate for, or holder of, a State elective office, or any continuing political committee. A business entity contracting with a county, municipality, independent authority, other than an independent authority that is a State agency, board of education, or fire district shall disclose contributions to: any State, county, or municipal committee of a political party; any legislative leadership committee; or any candidate committee of a candidate for, or holder of, and elective office of that public entity, of that county in which that public entity is located, of another public entity within that county, or of a legislative district in which that public entity is located or, when the public entity is a county, of any legislative district which includes all or part of the county, or any continuing political committee.

The provisions of this section shall not apply to a contract when a public emergency requires the immediate delivery of goods or services.

b. When a business entity is a natural person, a contribution by that person's spouse or child, residing therewith, shall be deemed to be a contribution by the business entity. When a business entity is other than a natural person, a contribution by

any person or other business entity having an interest therein shall be deemed to be a contribution by the business entity. When a business entity is other than a natural person, a contribution by: all principals, partners, officers, or directors of the business entity or their spouses; any subsidiaries directly or indirectly controlled by the business entity; or any political organization organized under section 527 of the Internal Revenue Code that is directly or indirectly controlled by the business entity, other than a candidate committee, election fund, or political party committee, shall be deemed to be a contribution by the business entity.

c. As used in this section:

"business entity" means a natural or legal person, business corporation, professional services corporation, limited liability company, partnership, limited partnership, business trust, association or any other legal commercial entity organized under the laws of this State or of any other state or foreign jurisdiction;

"interest" means the ownership or control of more than 10% of the profits or assets of a business entity or 10% of the stock in the case of a business entity that is a corporation for profit, as appropriate; and

P.L. 2005, c. 271

"State agency" means any of the principal departments in the Executive Branch of the State Government, and any division, board, bureau, office, commission or other instrumentality within or created by such department, the Legislature of the State and any office, board, bureau or commission within or created by the Legislative Branch, and any independent State authority, commission, instrumentality or agency.

d. Any business entity that fails to comply with the provisions of this section shall be subject to a fine imposed by the New Jersey Election Law Enforcement Commission in an amount to be determined by the commission which may be based upon the amount that the business entity failed to report.

19:44A-20.13 3. a. Any business entity making a contribution of money or any other thing of value, including an in-kind contribution, or pledge to make a contribution of any kind to a candidate for or the holder of any public office having ultimate responsibility for the awarding of public contracts, or to a political party committee, legislative leadership committee, political committee or continuing political committee, which has received in any calendar year \$50,000 or more in the aggregate through agreements or contracts with a public entity, shall file an annual disclosure statement with the New Jersey Election Law Enforcement Commission, established pursuant to section 5 of P.L. 1973, c. 83 (C. 19:44A-5), setting forth all such contributions made by the business entity during the 12 months prior to the reporting deadline.

b. The commission shall prescribe forms and procedures for the reporting required in subsection a. of this section which shall include, but not be limited to:

(1) the name and mailing address of the business entity making the contribution, and the amount contributed during the 12 months prior to the reporting deadline;

(2) the name of the candidate for or the holder of any public office having ultimate responsibility for the awarding of public contracts, candidate committee, joint candidates committee, political party committee, legislative leadership committee, political committee or continuing political committee receiving the contribution; and

(3) the amount of money the business entity received from the public entity through contract or agreement, the dates, and information identifying each contract or agreement and describing the goods, services or equipment provided or property sold.

c. The commission shall maintain a list of such reports for public inspection both at its office and through its Internet site.

d. When a business entity is a natural person, a contribution by that person's spouse or child, residing therewith, shall be deemed to be a contribution by the business entity. When a business entity is other than a natural person, a contribution by any person or other business entity having an interest therein shall be deemed to be a contribution by the business entity.

When a business entity is other than a natural person, a contribution by: all principals, partners, officers, or directors of the business entity, or their spouses; any subsidiaries directly or indirectly controlled by the business entity; or any political organization organized under section 527 of the Internal Revenue Code that is directly or indirectly controlled by the business entity, other than a candidate committee, election fund, or political party committee, shall be deemed to be a contribution by the business entity.

As used in this section:

"Business entity" means a natural or legal person, business corporation, professional services corporation, limited liability company, partnership, limited partnership, business trust, association or any other legal commercial entity organized under the laws of this State or of any other state or foreign jurisdiction; and

"Interest" means the ownership or control of more than 10% of the profits or assets of a business entity or 10% of the stock in the case of a business entity that is a corporation for profit, as appropriate.

e. Any business entity that fails to comply with the provisions of this section shall be subject to a fine imposed by the New Jersey Election Law Enforcement Commission in an amount to be determined by the commission which may be based upon the amount that the business entity failed to report.

4. This act shall take effect immediately.

*Note: Bold italicized statutory references of new sections are anticipated and not final as of the time this document was prepared. Statutory compilations of N.J.S.A. 18A:18A-51 is anticipated to show a reference to N.J.S.A. 40:11-51 and to N.J.S.A. 52:34-25.

To be completed and signed below.

Return with bid.

STATEMENT OF OWNERSHIP DISCLOSURE

N.J.S.A. 52:25-24.2 (P.L. 1977, c.33, as amended by P.L. 2016, c.43)

This statement shall be completed, certified to, and included with all bid and proposal submissions. Failure to submit the required information is cause for automatic rejection of the bid or proposal.

Name of Organization: AstroTurf Corporation

Organization Address: 2680 Abnuttment Rd

City, State, ZIP: Dalton, GA 30721

Part I Check the box that represents the type of business organization:

- ☐ Sole Proprietorship (skip Parts II and III, execute certification in Part IV)
- ☐ Non-Profit Corporation (skip Parts II and III, execute certification in Part IV)
- ☒ For-Profit Corporation (any type) ☐ Limited Liability Company (LLC)
- ☐ Partnership ☐ Limited Partnership ☐ Limited Liability Partnership (LLP)

Other (be specific): _____ **Part II Check**

the appropriate box

- ☒ The list below contains the names and addresses of all stockholders in the corporation who own 10 percent or more of its stock, of any class, or of all individual partners in the partnership who own a 10 percent or greater interest therein, or of all members in the limited liability company who own a 10 percent or greater interest therein, as the case may be. **(COMPLETE THE LIST BELOW IN THIS SECTION)**

OR

- ☐ No one stockholder in the corporation owns 10 percent or more of its stock, of any class, or no individual partner in the partnership owns a 10 percent or greater interest therein, or no member in the limited liability company owns a 10 percent or greater interest therein, as the case may be. **(SKIP TO PART IV)**

(Please attach additional sheets if more space is needed):

Name of Individual or Business Entity	Home Address (for Individuals) or Business Address
Advanced Polymer Technology Corp.	109 Conica Lane, Harmony, PA 16037

Part III DISCLOSURE OF 10% OR GREATER OWNERSHIP IN THE STOCKHOLDERS, PARTNERS OR LLC MEMBERS LISTED IN PART II

If a bidder has a direct or indirect parent entity which is publicly traded, and any person holds a 10 percent or greater beneficial interest in the publicly traded parent entity as of the last annual federal Security and Exchange Commission (SEC) or foreign equivalent filing, ownership disclosure can be met by providing links to the website(s) containing the last annual filing(s) with the federal Securities and Exchange Commission (or foreign equivalent) that contain the name and address of each person holding a 10% or greater beneficial interest in the publicly traded parent entity, along with the relevant page numbers of the filing(s) that contain the information on each such person. **Attach additional sheets if more space is needed.**

Website (URL) containing the last annual SEC (or foreign equivalent) filing	Page #'s

Please list the names and addresses of each stockholder, partner or member owning a 10 percent or greater interest in any corresponding corporation, partnership and/or limited liability company (LLC) listed in Part II **other than for any publicly traded parent entities referenced above.** The disclosure shall be continued until names and addresses of every non-corporate stockholder, and individual partner, and member exceeding the 10 percent ownership criteria established pursuant to N.J.S.A. 52:25-24.2 has been listed. **Attach additional sheets if more space is needed.**

Stockholder/Partner/Member and Corresponding Entity Listed in Part II	Home Address (for Individuals) or Business Address
Sport Group Holding GmbH	Gewobering 3, DE -86666 Burgheim Germany

Part IV Certification

I, being duly sworn upon my oath, hereby represent that the foregoing information and any attachments thereto to the best of my knowledge are true and complete. I acknowledge: that I am authorized to execute this certification on behalf of the bidder/proposer; that the *ESCNJ* is relying on the information contained herein and that I am under a continuing obligation from the date of this certification through the completion of any contracts with the *ESCNJ* to notify the *ESCNJ* in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I am subject to criminal prosecution under the law and that it will constitute a material breach of my agreement(s) with the, permitting the *ESCNJ* to declare any contract(s) resulting from this certification void and unenforceable.

Full Name (Print):	Thomas Green	Title:	Dir. of Operations
Signature:	Thomas Green	Date:	9-89-19

This statement shall be completed, certified to, and included with all bid and proposal submissions. Failure to submit the required information is cause for automatic rejection of the bid or proposal.

To be completed and signed below. Return with bid.

STATE OF NEW JERSEY – DIVISION OF PURCHASE AND PROPERTY DISCLOSURE OF INVESTMENT ACTIVITIES IN IRAN							
Quote Number: _____	Bidder/Officer: _____						
<p style="text-align: center;">PART 1: CERTIFICATION</p> <p style="text-align: center;">BIDDERS MUST COMPLETE PART 1 BY CHECKING EITHER BOX.</p> <p style="text-align: center; color: red;">FAILURE TO CHECK ONE OF THE BOXES WILL RENDER THE PROPOSAL NON-RESPONSIVE.</p> <p>Pursuant to Public Law 2012, c. 25, any person or entity that submits a bid or proposal or otherwise proposes to enter into or renew a contract must complete the certification below to attest, under penalty of perjury, that neither the person or entity, nor any of its parents, subsidiaries, or affiliates, is identified on the Department of Treasury's Chapter 25 list as a person or entity engaging in investment activities in Iran. The Chapter 25 list is found on the Division's website at http://www.state.nj.us/treasury/procurement/Chapter25List.pdf. Bidders must review this list prior to completing the below certification. Failure to complete the certification will render a bidder's proposal non-responsive. If the Director finds a person or entity to be in violation of law, she shall take action as may be appropriate and provided by law, rule or contract, including but not limited to, imposing sanctions, seeking compliance, recovering damages, declaring the party in default and seeking debarment or suspension of the party.</p> <p>PLEASE CHECK THE APPROPRIATE BOX:</p> <div style="margin-left: 20px;"><div style="display: flex; align-items: flex-start;"><div style="margin-right: 10px;"><input checked="" type="checkbox"/></div><div><p>I certify, pursuant to Public Law 2012, c. 25, that neither the bidder listed above nor any of the bidder's parents, subsidiaries, or affiliates is listed on the N.J. Department of the Treasury's list of entities determined to be engaged in prohibited activities in Iran pursuant to P.L. 2012, c. 25 ("Chapter 25 List"). I further certify that I am the person listed above, or I am an officer or representative of the entity listed above and am authorized to make this certification on its behalf. I will skip Part 2 and sign and complete the Certification below.</p></div></div><div style="margin-left: 20px; margin-top: 10px;"><p style="color: red; margin: 0;">OR</p><div style="display: flex; align-items: flex-start;"><div style="margin-right: 10px;"><input type="checkbox"/></div><div><p>I am unable to certify as above because the bidder and/or one or more of its parents, subsidiaries, or affiliates is listed on the Department's Chapter 25 list. I will provide a detailed, accurate and precise description of the activities in Part 2 below and sign and complete the Certification below. Failure to provide such will result in the proposal being rendered as non-responsive and appropriate penalties, fines and/or sanctions will be assessed as provided by law.</p></div></div></div></div> <tr><td colspan="2" style="padding: 10px;"><p style="text-align: center;">PART 2: PLEASE PROVIDE FURTHER INFORMATION RELATED TO INVESTMENT ACTIVITIES IN IRAN</p><p style="text-align: center;">You must provide a detailed, accurate and precise description of the activities of the bidding person/entity, or one of its parents, subsidiaries or affiliates, engaging in the investment activities in Iran outlined above by completing the boxes below.</p><p style="text-align: center;">EACH BOX WILL PROMPT YOU TO PROVIDE INFORMATION RELATIVE TO THE ABOVE QUESTIONS. PLEASE PROVIDE THOROUGH ANSWERS TO EACH QUESTION. IF YOU NEED TO MAKE ADDITIONAL ENTRIES, CLICK THE "ADD AN ADDITIONAL ACTIVITIES ENTRY" BUTTON.</p><div style="border: 1px solid black; padding: 10px; margin: 10px 0;"><div style="display: flex; justify-content: space-between;"><div>Name _____ Relationship to Bidder/Officer _____</div><div style="text-align: right;">Delete</div></div><div style="margin-top: 5px;">Description of Activities _____</div><div style="margin-top: 10px; display: flex; justify-content: space-between;"><div>Duration of Engagement _____</div><div>Anticipated Cessation Date _____</div></div><div style="margin-top: 5px; display: flex; justify-content: space-between;"><div>Bidder/Officer Contact Name _____</div><div>Contact Phone Number _____</div></div></div><div style="text-align: center; margin-top: 10px;"><div style="border: 1px solid black; padding: 2px 10px; display: inline-block;">ADD AN ADDITIONAL ACTIVITIES ENTRY</div></div></td></tr> <tr><td colspan="2" style="padding: 10px;"><p><small>Certification: I, being duly sworn upon my oath, hereby represent that the foregoing information and any attachments thereto to the best of my knowledge are true and complete. I acknowledge that I am authorized to execute this certification on behalf of the bidder; that the State of New Jersey is relying on the information contained herein and that I am under a continuing obligation from the date of this certification through the completion of any contracts with the State to notify the State in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I am subject to criminal prosecution under the law and that it will constitute a material breach of my agreement(s) with the State, permitting the State to declare any contract(s) resulting from this certification void and unenforceable.</small></p></td></tr> <tr><td colspan="2" style="padding: 10px;"><div style="display: flex; justify-content: space-between;"><div>Full Name (Print): <u>Thomas Green</u></div><div>Signature: _____</div></div><div style="text-align: right; margin-top: 5px; font-size: small;">Do Not Enter PIN as a Signature</div><div style="display: flex; justify-content: space-between; margin-top: 10px;"><div>Title: <u>Dir. of Operations</u></div><div>Date: <u>Sept. 9, 2019</u></div></div></td></tr>		<p style="text-align: center;">PART 2: PLEASE PROVIDE FURTHER INFORMATION RELATED TO INVESTMENT ACTIVITIES IN IRAN</p> <p style="text-align: center;">You must provide a detailed, accurate and precise description of the activities of the bidding person/entity, or one of its parents, subsidiaries or affiliates, engaging in the investment activities in Iran outlined above by completing the boxes below.</p> <p style="text-align: center;">EACH BOX WILL PROMPT YOU TO PROVIDE INFORMATION RELATIVE TO THE ABOVE QUESTIONS. 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To be completed and signed below. Return with bid.

Statement of Suspension or Debarment

STATE OF NEW JERSEY/ Georgia
Specify, of other

COUNTY OF Whitfield

I, Thomas Green of the (City, Town, Borough)
of Dalton State of Georgia of full age,

being duly sworn according to law on my oath depose and say that:

I am Director of Operations of the firm
of AstroTurf Construction Corporation the Bidder

making the Proposal for the above named projects, and that I executed the said Proposal with full authority to do so; that said Bidder is not at the time of the making this bid included on the New Jersey State Treasurer's or the Federal Government's List of Debarred, Suspended or Disqualified Bidders as a result of action taken by any State or Federal Agency.

Name of Contractor: AstroTurf Construction corp
(Company Name)

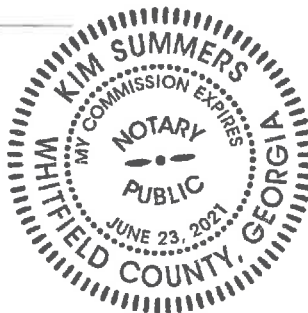
By: Thomas Green
(Signature of authorized representative)

Subscribed and sworn to before me

This 9th day of September, 20 19.

(Seal) Notary Public of ~~New Jersey~~ GA
Specify Other State

My Commission expires June 20 21.



To be completed and signed below.

Return with Bid

Prevailing Wages Certification

It is the determination of the ESCNJ that this is a public works project that in total will exceed \$2,000.00 (two thousand dollars), therefore prevailing wages rules and regulations apply as promulgated by the New Jersey Prevailing Wage Act and in conformance with N.J.S.A. 34:11-56:25. With the laws as they apply to the public agency.

CERTIFICATION

1. I certify that our company understands that this project of the ESCNJ requires prevailing wages to be paid in full accordance with the law.
2. I further certify that all subcontractors named in this bid understand that this project requires the subcontractor to pay prevailing wages in full accordance with the law.

NOTIFICATION OF VIOLATIONS – New Jersey Department of Labor

Has the Bidder or any person having an "interest" with the Bidder, been notified by the New Jersey Department of Labor by notice issued pursuant to N.J.S.A. 34:11-56:37 that he/she has been in violation for failure to pay prevailing wages as required by the New Jersey Prevailing Wage Act within the last five (5) years?

*Yes _____

No ☒ _____

*If yes, please attach a signed document explaining any/or all administrative proceedings with the NJDOL within the last five (5) years.

Please include any pending administrative proceedings with the NJDOL, if any.

Name of Company AstroTurf Construction Corporation

Authorized Agent Thomas Green

Authorized Signature Thomas Green

Certificate Number
723803

Registration Date: 05/13/2019
Expiration Date: 05/12/2020



State of New Jersey

Department of Labor and Workforce Development Division of Wage and Hour Compliance

Public Works Contractor Registration Act

Pursuant to N.J.S.A. 34:11-56.48, et seq. of the Public Works Contractor Registration Act, this certificate of registration is issued for purposes of bidding on any contract for public work or for engaging in the performance of any public work to:

Astroturf Construction Corporation

Responsible Representative(s):

Robert Carey, Secretary
William Smith, CEO

Responsible Representative(s):

APT Acquisition Construction Corp, Owner
Robert Staten, COO

A handwritten signature in black ink, reading "RA Angelo".

Robert Asaro-Angelo, Commissioner
Department of Labor and Workforce Development

NON TRANSFERABLE

This certificate may not be transferred or assigned
and may be revoked for cause by the Commissioner
of Labor and Workforce Development.

To be completed and signed below. Return with bid. if bidding on installation



State of New Jersey
**DEPARTMENT OF THE TREASURY
DIVISION OF PROPERTY MANAGEMENT AND CONSTRUCTION
33 W. STATE STREET
PO BOX 034
TRENTON, NEW JERSEY 08625-0034**

REPLY TO:
TEL: (609) 943-3400
FAX: (609) 292-7651

**TOTAL AMOUNT OF
UNCOMPLETED CONTRACTS**

(This form is to be used with the NOTICE OF CLASSIFICATION when submitting bids to the Department of Education.)

I Certify that the amount of uncompleted work on contracts is \$ _____

The amount claimed includes uncompleted portions of all currently held contracts from all sources (public and private) in accordance with N.J.A.C. 17:19-2.13.

I further certify that the amount of this bid proposal, including all outstanding incomplete contracts does not exceed my prequalification dollar limit.



Sworn to and
subscribed before me
This day of
20

Notary Public

Respectfully submitted,

By _____
Name of Firm

Signature

Title

Business Address

Phone

Return if Bidding on Installation

EQUIPMENT CERTIFICATION

In accordance with N.J.S.A. 18A:18A-23, I hereby certify that AstroTurf Corporation

Name of Company

A) owns all the necessary equipment as required by the specifications and to complete the specified public work project.

or

B) _____ leases or controls all the necessary
(Name of Company) equipment to complete the specified public work project.

PLEASE NOTE: If your company is not the actual owner of the equipment, **you shall submit with the bid**

1. A certificate stating the source from which the equipment will be obtained and
2. Obtain and submit with the bid a certificate from the owner and person in control of the equipment, definitely granting to the bidder the control of the equipment required during such time it may be necessary for the completion of that portion of the contract for which said equipment will be necessary.

Name of Company AstroTurf Construction Corporation

Authorized Agent Thomas Green

Authorized Signature Thomas Green

Date Sept. 9, 2019

DPMC Contractor Classification (DPMC- 27)
PO Box 042
Trenton, NJ 08625-0042



State of New Jersey
DEPARTMENT OF THE TREASURY
DIVISION OF PROPERTY MANAGEMENT AND CONSTRUCTION

REQUEST FOR CLASSIFICATION

ATTENTION CONTRACTOR

Enclosed is the Contractors Request for Classification Booklet (DPMC 27) which, when completed and submitted with the mandatory financial statement and other documentation provides the data required to post your firm on the active bid list for State projects described herein.

Please submit the completed application and all required documentation to this office. Upon review and approval of this application, your firm will be notified by mail of the effective and expiration dates, type of work, and rating assigned to your firm.

There is a non-refundable fee of \$100.00 which must be submitted with the application. All payments must be made on company checks (no-cash) made payable to "Treasurer, State of New Jersey". No application will be processed without the fee.

If you have any questions, please contact the Contractor Classification unit at (609) 943-3400 (and select #3) or access the DPMC web site at www.state.nj.us/treasury/dpmc/. NOTE: It is suggested that a photocopy of this completed form be retained for your records.

**ATTACHMENT B – NEW JERSEY ANTI-DISCRIMINATION PROVISIONS
N.J.S.A. 10:2-1 ET SEQ.**

Pursuant to N.J.S.A. 10:2-1, if awarded a contract, the contractor agrees that:

a. In the hiring of persons for the performance of work under this contract or any subcontract hereunder, or for the procurement, manufacture, assembling or furnishing of any such materials, equipment, supplies or services to be acquired under this contract, no contractor, nor any person acting on behalf of such contractor or subcontractor, shall, by reason of race, creed, color, national origin, ancestry, marital status, gender identity or expression, affectional or sexual orientation or sex, discriminate against any person who is qualified and available to perform the work to which the employment relates;

b. No contractor, subcontractor, nor any person on his behalf shall, in any manner, discriminate against or intimidate any employee engaged in the performance of work under this contract or any subcontract hereunder, or engaged in the procurement, manufacture, assembling or furnishing of any such materials, equipment, supplies or services to be acquired under such contract, on account of race, creed, color, national origin, ancestry, marital status, gender identity or expression, affectional or sexual orientation or sex;

c. There may be deducted from the amount payable to the contractor by the contracting public agency, under this contract, a penalty of \$50.00 for each person for each calendar day during which such person is discriminated against or intimidated in violation of the provisions of the contract; and

d. This contract may be canceled or terminated by the contracting public agency, and all money due or to become due hereunder may be forfeited, for any violation of this section of the contract occurring after notice to the contractor from the contracting public agency of any prior violation of this section of the contract. No provision in this section shall be construed to prevent a board of education from designating that a contract, subcontract or other means of procurement of goods, services, equipment or construction shall be awarded to a small business enterprise, minority business enterprise or a women's business enterprise pursuant to P.L.1985, c.490 (C.18A:18A-51 et seq.).

Company Title: AstroTurf Construction Corporation
Representative: Thomas Green
Signature: Thomas Green
Date: 9/9/19



There are number of levels of authority that must take action during the entire procurement process and within each of these levels there are a number of checks and balances. Therefore, CES has made the determination, as it relates to complying with the Campaign Contribution Disclosure requirement, that even though the individuals listed below do not fall within the definition “Applicable public official” as defined in 13-1-191.1 NMSA 1978, in order to ensure that CES is in compliance with the intent of the requirements, the following have been identified as Name(s) of Applicable Public Official(s) if any that must be identified:

<u>Position</u>	<u>Representative</u>	<u>Member</u>
President, Region I	Kirk Carpenter	Aztec Municipal Schools
President Elect, Region VI	Dwain Haynes	Eunice Municipal Schools
Past President, Region VI	T.J. Parks	Hobbs Municipal Schools
Past President	None	
Region I	Daniel Benavidez	Zuni Public Schools
Region II	Dr. Lillian Torrez	Taos Municipal Schools
Region III	Andy Ortiz	Raton Public Schools
Secretary, Region IV	Teresa Salazar	Moriarty/Edgewood Schools District
Region V	Aaron McKinney	Tucumcari Public Schools
Region VI	LeAnne Gandy	Lovington Municipal Schools
Treasurer, Region VII	Brenda Vigil	Tularosa Municipal Schools
Region VIII	Loren Cushman	Animas Public Schools
New Mexico Coalition of Charter Schools	Matt Pahl	Executive Director
New Mexico Association of Community Colleges (NMACC)	Edward Desplas	Two Year Community Colleges
New Mexico Coalition of Educational Leaders (NMCEL)	Stan Rounds	Executive Director
New Mexico School Boards Association (NMSBA)	Joe Guillen	Executive Director
New Mexico Public Education Department (NMPED)	Adan Delgado	PED
Commission of Higher Ed	Penny Garcia	ENMU

CAMPAIGN CONTRIBUTION DISCLOSURE FORM

Pursuant to the Procurement Code, Sections 13-1-28, et seq., NMSA 1978 and NMSA 1978, § 13-1-191.1 (2006), as amended by Laws of 2007, Chapter 234, any prospective contractor seeking to enter into a contract with any state agency or local public body must file this form with that state agency or local public body. This form must be filed even if the contract qualifies as a small purchase or a sole source contract. The prospective contractor must disclose whether they, a family member or a representative of the prospective contractor has made a campaign contribution to an applicable public official of the state or a local public body during the two years prior to the date on which the contractor submits a proposal or, in the case of a sole source or small purchase contract, the two years prior to the date the contractor signs the contract, if the aggregate total of contributions given by the prospective contractor, a family member or a representative of the prospective contractor to the public official exceeds two hundred and fifty dollars (\$250) over the two year period.

Furthermore, the state agency or local public body may cancel a solicitation or proposed award for a proposed contract pursuant to Section 13-1-181 NMSA 1978 or a contract that is executed may be ratified or terminated pursuant to Section 13-1-182 NMSA 1978 of the Procurement Code if: 1) a prospective contractor, a family member of the prospective contractor, or a representative of the prospective contractor gives a campaign contribution or other thing of value to an applicable public official or the applicable public official's employees during the pendency of the procurement process or 2) a prospective contractor fails to submit a fully completed disclosure statement pursuant to the law.

The state agency or local public body that procures the services or items of tangible personal property shall indicate on the form the name or names of every applicable public official, if any, for which disclosure is required by a prospective contractor.

THIS FORM MUST BE INCLUDED IN THE REQUEST FOR PROPOSALS AND MUST BE FILED BY ANY PROSPECTIVE CONTRACTOR WHETHER OR NOT THEY, THEIR FAMILY MEMBER, OR THEIR REPRESENTATIVE HAS MADE ANY CONTRIBUTIONS SUBJECT TO DISCLOSURE.

The following definitions apply:

“Applicable public official” means a person elected to an office or a person appointed to complete a term of an elected office, who has the authority to award or influence the award of the contract for which the prospective contractor is submitting a competitive sealed proposal or who has the authority to negotiate a sole source or small purchase contract that may be awarded without submission of a sealed competitive proposal.

“Campaign Contribution” means a gift, subscription, loan, advance or deposit of money or other thing of value, including the estimated value of an in-kind contribution, that is made to or received by an applicable public official or any person authorized to raise, collect or expend contributions on that official's behalf for the purpose of electing the official to statewide or local office. “Campaign Contribution” includes the payment of a debt incurred in an election campaign, but does not include the value of services provided without compensation or unreimbursed travel or other personal expenses of

individuals who volunteer a portion or all of their time on behalf of a candidate or political committee, nor does it include the administrative or solicitation expenses of a political committee that are paid by an organization that sponsors the committee.

"Family member" means spouse, father, mother, child, father-in-law, mother-in-law, daughter-in-law or son-in-law of (a) a prospective contractor, if the prospective contractor is a natural person; or (b) an owner of a prospective contractor.

"Pendency of the procurement process" means the time period commencing with the public notice of the request for proposals and ending with the award of the contract or the cancellation of the request for proposals.

"Prospective contractor" means a person or business that is subject to the competitive sealed proposal process set forth in the Procurement Code or is not required to submit a competitive sealed proposal because that person or business qualifies for a sole source or a small purchase contract.

"Representative of a prospective contractor" means an officer or director of a corporation, a member or manager of a limited liability corporation, a partner of a partnership or a trustee of a trust of the prospective contractor.

Name(s) of Applicable Public Official(s) if any: None
(Completed by State Agency or Local Public Body)

DISCLOSURE OF CONTRIBUTIONS BY PROSPECTIVE CONTRACTOR:

Contribution Made By: N/A

Relation to Prospective Contractor: N/A

Date Contribution(s) Made: N/A

Amount(s) of Contribution(s) N/A

Nature of Contribution(s) N/A

Purpose of Contribution(s) N/A

(Attach extra pages if necessary)

Thomas Shun
Signature

Sept. 9, 2019
Date

Director of Operations
Title (position)

--OR--

NO CONTRIBUTIONS IN THE AGGREGATE TOTAL OVER TWO HUNDRED FIFTY DOLLARS (\$250) WERE MADE to an applicable public official by me, a family member or representative.

Thomas Muen

Signature

Sept. 9, 2019

Date

Director of Operations

Title (Position)

Part D - Questionnaire

AEPA IFB 020-A

Natural & Synthetic Surfaces for Sports Fields, Tracks, Courts, Playground and Landscaping Applications

Instructions

This questionnaire contains forms and requests for information required by AEPA for vendor evaluation for responsiveness and responsibility.

To submit the required forms, follow these steps:

1. Read the documents in their entirety.
2. Bidders must use Part D – Questionnaire to its capacity. Attached exhibits and/or supplemental information should be included only when requested (i.e. Annual Report, Marketing Plan).
3. Complete all questions.
4. Save all pages in the correct order to a single PDF format titled “**Part D – Questionnaire – Name of Bidding Company**”.
5. Submit Part D, along with other required documents in Public Purchase.

The following sections will need to be completed prior to submission and submitted as one single PDF titled “Part D – Questionnaire – Name of Bidding Company”:

[Company Information](#)

[Service Questionnaire](#)

[Exceptions](#)

[Deviations](#)

Company Information

Name of Bidding Company: AstroTurf Corporation
Company Address: 2680 Abutment Road
City, State Zip code: Dalton, GA 30721
Website: www.astroturf.com
Contact Person: Victoria Stringham
Title: Director of Cooperative Sales
Phone: 480.415.6300
Email: vstringham@astroturf.com

Background

Note: Generally, AEPA will not accept an offer from a business that is less than five (5) years old or, which fails to demonstrate and/or establish a proven record of business. If the bidder has recently purchased an established business or, has proof of prior success in either this business or a closely related business, provide written documentation and verification in response to the questions below. AEPA reserves the right to accept or reject newly formed companies based on information provided in this response and from its own investigation of the company.

This business is a: _____ public company X privately owned company
In what year was this business started under its present name? 2016
Under what additional, or, former name(s) has your business operated? In 2016, SportGroup, the world's largest
 sports surfacing company, purchased substantially all of AstroTurf, LLC's assets and formed a new company named AstroTurf Corporation.

Is this business a corporation? _____ No X Yes. If yes, complete the following:
Date of Incorporation: April 26, 2016
State of Incorporation: Georgia
Name of President: William Heard Smith (CEO)
Name(s) of Vice President(s): N/A
Name of Treasurer: Doug Weatherly, CFO
Name of Secretary: Robb Carey

Is this business a partnership? X No _____ Yes. If yes, complete the following:
Date of Partnership: _____
State Founded: _____
Type of Partnership, if applicable: _____
Name(s) of General Partner(s): _____

Is this business individually owned? X No _____ Yes. If yes, complete the following:
Date of Purchase: _____
State Founded: _____

Name of Owner/Operator: _____

Is this business different from those identified above? X No Yes
If yes, describe the company's format, year and state of origin and names and titles of the principles below.

Is this business women owned? X No Yes

Is this business minority owned? X No Yes

Does this business have an Affirmative Action Plan/Statement? No X Yes

Business Headquarter Location

Business Address 2680 Abutment Rd
City, State Zip code Dalton, GA 30721
Phone 800-723-8873
How long at this address? 15+ Years

Business Branch Location(s)

Branch Address 1601 Mary's Ave #2g10
City, State Zip code Sharpsburg, PA 15215
Branch Address 4509 NC-150
City, State Zip code Lexington, NC 27295
Branch Address 4647 E. Weathermaker Ave., Ste. 102
City, State Zip code Fresno, CA 93703
Branch Address 6597 Joy Rd
City, State Zip code East Syracuse, NY 13057

**If more branch locations exist, insert information here or add another sheet with the above information.*

Sales History

Provide your business's annual sales for 2017, 2018, and 2019 YTD in the United States by the various public segments.

	2017	2018	2019 YTD
K-12 (public & private), Educational Service Agencies	\$79,200,000.00	\$79,200,000.00	\$47,400,000.00
Higher Education Institutions	\$26,400,000.00	\$26,400,000.00	\$15,800,000.00
Counties, Cities, Townships, Villages	\$19,800,000.00	\$19,800,000.00	\$11,800,000.00
States	<1,000,000	<1,000,000	<1,000,000
Other Public Sector & Non-profits	<1,000,000	<1,000,000	<1,000,000
Private Sector	\$6,600,000.00	\$6,600,000.00	\$3,950,000.00
Total	\$132,000,000.00	\$132,000,000.00	\$79,000,000

Work Force

Key Contacts and Providers: Provide a list of the individuals, titles, and contact information for the individuals who will provide the following services on a national and/or local basis:

Function	Name	Title	Phone	Email
Contract Manager	Victoria Stringham	Director of Cooperative Purchasing	480.415.6300	vstringham@astroturf.com
Sales Manager	Rich Jordan	Exec. VP of Business Dev. And Marketing	248.941.2453	rjordan@astroturf.com
Customer & Support Manager	John Currence	Director of Quality	704.201.6758	jcurrence@astroturf.com
Distributors, Dealers, Installers, Sales Reps	Directly Employed Sales: Bob Lord Aden Twer Melissa Twist Dan Isaac Rob Mitchell Carl Capellas Garrett Bare Tim Jordan Speizio Stowers Steve Coleman Curtis Wilson Jeff Raiger Pat Cassa Cam Worrell Dom Berarducci Gregg Swenson Aaron Klotz Greg Morales Distributors/ Installers Ace Surfaces N. A. (Laykold) Ace Tennis & Sport Surfaces (Laykold) Advantage Courts (Laykold) AFE (AstroTurf, Laykold) AG Sports (Rekortan) Agile Courts (Laykold) All Sports Enterprises (AstroTurf,	Sales Mgr. Sales Mgr. Sales Mgr. Sales Mgr. Sales Mgr. Sales Mgr. Sales Mgr. Sales Mgr. Sales Mgr. Sales Mgr. Sales Mgr. Sales Mgr. Sales Mgr. Sales Mgr. Sales Mgr. Sales Mgr. Sales Mgr. Sales Mgr. Court Concepts Inc. (Laykold) Court One-Granite Quarry (Laykold) Court One-Raleigh (Laykold) Court Order Tennis Services (Laykold) Court Surface Specialists (Laykold)	774.513.0020 215.720.6644 267.872.0589 440.840.8220 312.221.7708 216.409.7602 336.468.7239 443.955.9981 404.424.3280 813.777.7677 469.984.5927 760.443.3888 714.318.0763 559.790.3528 559.612.9065 509.432.5216 517.902.4453 408.335.5839	blord@astroturf.com atwer@astroturf.com mvassalotti@astroturf.com disaac@astroturf.com rmitchell@astroturf.com ccapellas@astroturf.com gbare@astroturf.com tjordan@astroturf.com sstowers@astroturf.com scoleman@astroturf.com cwilson@astroturf.com jraiger@astroturf.com pcassa@astroturf.com cworrell@astroturf.com dberarducci@astroturf.com gswenson@astroturf.com aklotz@astroturf.com gmorales@astroturf.com
				SYNLaw of Colorado SYNLaw of Los Angeles SYNLaw of Louisiana SYNLaw of Milwaukee SYNLaw of New Mexico SYNLaw of North Florida SYNLaw of Northeast Ohio SYNLaw of Oregon SYNLaw Ohio Valley SYNLaw Oklahoma SYNLaw Palm Desert SYNLaw Pennsylvania - Eastern SYNLaw Pennsylvania - Western SYNLaw Sacramento SYNLaw San Diego SYNLaw Seattle SYNLaw South Dakota SYNLaw Spokane SYNLaw St. George SYNLaw St. Louis SYNLaw Texas - Austin

	Rekortan, Laykold)	Fast Dry Courts Inc. (Laykold)	Sport Tech Acrylics (Laykold)	SYNLawn Texas - Austin / San Antonio SYNLawn Texas - Dallas SYNLawn Texas - El Paso SYNLawn Texas - Houston SYNLawn Texas - San Antonio SYNLawn Utah SYNLawn Wyoming
	Applied Surfacing (Rekortan)	Frazier Davis Constr. (Laykold)	SportsTurf (AstroTurf, Rekortan, Laykold)	T-3 Global (AstroTurf, Rekortan, Laykold)
	Atlantic Sports Group (AstroTurf, Rekortan, Laykold)	General Acrylics (AstroTurf, Rekortan only)	Symmetry Turf (AstroTurf, Rekortan, Laykold)	Tennis West (Laykold)
	ATT Sports (Rekortan)	J.G. Coffey Co. (Laykold)	SYNLawn California - Bay Area SYNLawn Carolinas (NC) SYNLawn Carolinas (SC) SYNLawn Chesapeake Bay	Texas Sport Builders (Rekortan)
	Bishops Tennis (Laykold)	Kochs Tennis Services (Laykold)	SYNLawn Chicago SYNLawn Georgia & Alabama	Top A Court (Laykold)
	Bourassa Sport (Laykold)	Marathon Surfaces (Rekortan)	SYNLawn Idaho SYNLawn Indiana SYNLawn Kansas City SYNLawn Las Vegas SYNLawn Louisville SYNLawn Maui SYNLawn Miami	Track Surfaces (Rekortan)
	Byrne & Jones (AstroTurf, Rekortan)	McConnel Assoc (Rekortan, Laykold)	SYNLawn Minnesota SYNLawn Mississippi SYNLawn Montana SYNLawn Nashville SYNLawn Nebraska SYNLawn New England SYNLawn New Jersey SYNLawn New York SYNLawn North Dakota SYNLawn Northern NV SYNLawn Oahu SYNLawn of Arizona SYNLawn of C CA	United Turf & Track (AstroTurf, Rekortan, Layold)
	Carter Construction (Rekortan)	MidPac Construction (Laykold)		US Tennis & Recreation (Laykold)
	CBE Tennis (Laykold)	Mid-America Sports (AstroTurf, Rekortan, Laykold)		Vintage Contractors (Laykold)
	CH Court Tech (Laykold)	Midwest Track & Tennis (Rekortan only)		VPG (AstroTurf, Rekortan, Layold)
	Coast to Coast (AstroTurf, Rekortan, Laykold)			
	Coatings Inc. (Laykold)			
	Colony (AstroTurf, Rekortan, Laykold)			
	Competition Athletic Surfaces (Rekortan, Laykold)			
Consultants & Trainers	N/A			
Technical, Maintenance & Support Services	Leroy Lawson	Dir. Of Maintenance	706.723.8873	llawson@astroturf.com

Quotes, Invoicing & Payments	Kim Summers	Director of Estimating	706.723.8873	ksummers@astroturf.com
	Tammy Stephens	Director of Contracting	706.723.8873	tstephens@astroturf.com
	Tamra Fowler	Accounts Receivable	706.723.8873	tfowler@astroturf.com
Warranty & After the Sale	John Currence	Director of Quality	704.201.6758	jcurrence@astroturf.com
Financial Manager	Doug Weatherly	CFO	706.272.4283	dweatherly@astroturf.com

Sales Force: Provide total number and location of salespersons employed by your business in the United States by completing the following: *(To insert more rows, hit the tab key from the last field in the State column.)*

Number of Sales Reps	City	State
Bob Lord	Boston	MA
Aden Twer	Philadelphia	PA
Melissa Twist	Philadelphia	PA
Dan Isaac	Cleveland	OH
Rob Mitchell	Chicago	IL
Carl Capellas	Cleveland	OH
Garett Bare	Sparta	NC
Tim Jordan	Richmond	VA
Speizio Stowers	Atlanta	GA
Steve Coleman	Luntz	FL
Curtis Wilson	Tulsa	OK
Jeff Raiger	San Diego	CA
Pat Cassa	Los Angeles	CA
Cam Worrell	Fresno	CA
Dominick Berarducci	Fresno	CA
Gregg Swenson	Portland	OR
Aaron Klotz	Adrian	MI
Greg Morales	Sacramento	CA

Service/Support and Distribution Centers: Provide the type (service/support or distribution) and location of centers that support the United States by completing the following: *(To insert more rows, hit the tab key from the last field in the State column.)*

Center Type	City	State
Regional Construction Hub	Syracuse	NY
Regional Construction Hub	Pittsburgh	PA
Regional Construction Hub	Lexington	NC
Regional Construction Hub	Fresno	CA

Marketing

Key Marketing Contact(s): List the name(s), title(s) and contact information of the business's key national and regional marketing office(s). *(To insert more rows, hit the tab key from the last field in the Email column.)*

Name	Title	Phone	Email
Sydney Stahlbaum	VP of Marketing	512.423.5164	sstahlbaum@astroturf.com
Gary Jones	Communications Mgr	706.723.8873	gljones@astroturf.com

Marketing Activities: Describe how this business marketed its products and services to schools, nonprofit organizations and other public sector audiences in Fiscal Year 2018– 2019 (July 1 – June 30). List all conventions, conferences and other events at which this company exhibited.

AstroTurf Corporation implemented an active marketing plan between 2018-2019. This plan is geared toward reaching customers and influencers of sports surfacing projects. Activities included Direct Mail, Social Media boosts, Online retargeting advertisements, print advertising, trade shows, sales support activities like brochures, and sponsorship activations with leading groups like the US Soccer Foundation, United Soccer Coaches Association, American Baseball Coaches Association, National Field Hockey Coaches Association, California Association for Adequate Student Housing, Catholic Athletic Administrators Association, and more. AstroTurf Corporation also has implemented strategic "Sports Surfacing Seminars" attracting designers and end users in strategic regional seminars.

AstroTurf Corporation exhibited at over 100 Trade Shows including:

ABCA	OPFMA	California	IADA
AFCA	PASBO Facilities	Superintendent's	UIAAA
NFHCA	Trans.	Symposium	Colorado Parks
STMA	OSBA	FACA	Workshop
NSCAA	SCCC	FIAAA	NDIAA
NIRSA	New England High	FRPA	Oklahoma Coaches
NBOA	School Coaches	GADA	Assoc.
NAIS	Clinic	GRPA	IAAA
NAIA	DAANJ	TASA	IASB
CEFMA	NYSAAA	TASA/TASB	WADA
NACDA	CAAD	Texas Girls	IADA
NCSC	Vermont State	Coaches Clinic	IAPD
NIGP	Athletic Assoc	THSADA	IASBO
NRPA	MSSADA	THSCA	IIAAA
USSSA	MIAAA	DFW	ISBA
ASBA	NHADA	Angelo Football	MIAAA
NFCA	NJSBA	Clinic	MnIAAA
NIRSA	NYSSBA	MIAAA	MFCA
NIAAA	NJLM	OADA	WASB
USTFCCA	NEPSAC	WSSAAA	WSSAAA
PASBO	CASH	CADA	WPRA
PSADA	CPRS	MSBA	
EPC	CSADA	IHSADA	
	CAPPO'S	SDIAAA	

Cooperative Marketing: Describe ways in which this business can collaborate with AEPA Member Agencies in marketing the bid. Submit a marketing plan, titled Exhibit B – Marketing Plan, that would entail at a minimum, the following with their response: process on how the contract will be launched to current and potential agencies, the ability to produce and maintain in full color print advertisements in camera-ready electronic format, including

company logos and contact information, anticipated contract announcements, planned advertisements, industry periodicals, other direct or indirect marketing activities promoting the AEPA awarded contract, and how the contract award will be displayed/linked on the Bidder's website.
See attached Exhibit B.

Sales Training: Explain how your business will educate your salesforce staff on the AEPA contract including timing, methods, etc.

AstroTurf Corporation now employs Victoria Stringham as its Director of Cooperative Sales. Victoria brings a wealth of knowledge and contacts accumulated in her decade of experience earned working for a variety of co-ops.

Victoria will manage the contract by interfacing directly with the AEPA member agencies. She will also serve as AstroTurf's in-house expert on the contract and serve as the key resource for Sales Reps. In this capacity, she will continue to grow the contract by:

- Presenting information and training at our annual company-wide sales meeting
- Hosting quarterly webinars that detail:
 - AEPA advantages and how to sell them to member agencies
 - Contract terms
 - Reporting and fee requirements
 - Products and services available via the contract
- Participating in the weekly sales conference calls of each regional territory
- Participating and helping sales reps on conference calls with specific customers who are interested in the contract
- Attending trade shows and sales calls with sales representatives

Environmental Initiatives

Describe how your products and/or services support environmental goals.

Synthetic turf in general offers greater utility and a better environmental footprint than natural grass, especially when you consider the number of hours of usage it affords versus grass.

Industry-wide, synthetic turf creates positive impacts on the environment. Benefits of synthetic turf include:

- Water Savings – according to the City of Los Angeles Dept. of Engineering, synthetic turf for athletic fields saves an average of 32.4 gallons of water per square foot, per year.
- Elimination of pesticides
- Reduction of fumes from mowers and other maintenance vehicles
- Can contribute to LEED certification under the water savings category
- Fibers are typically 100% recyclable
- A typical synthetic turf field with crumb rubber infill will keep roughly 20,000 tires out of landfills

Describe the business's "green" objectives (i.e. LEED, reducing footprint, etc.).

Turf:

AstroTurf Corporation, as a member of SportGroup, is uniquely positioned to capitalize on research and development advances made by all members of our network of sports surfacing companies across the globe. As such, breakthroughs in Europe (which are driven by the market demands for environmentally friendly solutions) are also available to our US Customers.

The latest development in the environmentally friendly category of synthetic turf products is the Poligras Tokyo GT System, which will be used at the 2020 Olympics. This system uses filaments made from over 60 % renewable raw materials. I'm Green™ bio-polyethylene is the plastic that has the same product properties as our conventional polyethylene, but is made from sustainably grown sugar cane. Sugar cane is an ingredient that captures carbon dioxide, rather than releases it. This has enabled us to design and manufacture a turf to our exacting standards, but with a huge sustainable up-side, creating a new category; climate positive hockey.

Tracks and Tennis Courts:

Rekortan and Laykold lines of tracks and courts, respectively, offer unique systems that leverage soy based polyols to rather than petroleum-based chemicals. The result for the Rekortan G13 system, for example, is a system based on 70% renewable polyurethane, resulting in a total of 88% renewable/recyclable content

Independent Subcontractors, Distributors, Installers, etc.

If the Bidder is not the sole provider of all goods and services provided under this contract, the following **must be answered**:

Selection Criteria for Independent Providers: Describe the criteria and process by which the business selects, certifies and approves subcontractors, distributors, installers and other independent services.

As a prime contractor, AstroTurf exerts every effort to self-perform as many facets of our projects as possible. The growth of our industry does sometimes necessitate the use of subcontractors in certain circumstances to meet client schedules and demands. We know that our sports surfaces will only perform as well as the craftsmanship that goes into them. That's why we enforce exacting standards with our subcontractors and distributors, using crews who are trained and certified to install AstroTurf, Rekortan, Laykold, and SYN Lawn products using our proprietary methods and equipment.

PARTNER SELECTION CRITERIA	<ul style="list-style-type: none"> ▪ Experience in the marketplace ▪ Reputation for ethics in the marketplace ▪ Reputation for workmanship in the marketplace ▪ Bonding capacity ▪ Credit history ▪ Licensing ▪ Equipment ▪ Services provided ▪ Staffing 	<ul style="list-style-type: none"> ▪ Location and areas served (to provide as local a representation to our customers as possible) ▪ Corporate management ▪ Commitment to the AstroTurf brand ▪ Commitment to the market ▪ Commitment to the customer ▪ Unionization of crews where needed ▪ Communication style 	<ul style="list-style-type: none"> ▪ Willingness to undergo rigorous training and certifications to implement AstroTurf techniques and mandates ▪ Certifications by trade organization like the Synthetic Turf Council and the American Sports Builders Association
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Current Subcontractors, Distributors, Installers, etc.: Provide a list of current subcontractors, distributors, installers and other independent service providers who are contracted to perform the type of work outlined in this bid in the member agency states (listed in Part A of this IFB). Include, if applicable, contractor license or certificate information and the state(s) wherein they are eligible to provide services on behalf of the business.

AstroTurf Corporation works both directly and in cooperation with a network of third-party contractors who enable us to meet market demands.

Whether our end customers purchase a field, track, tennis court, or other surface from our network of Partners or from AstroTurf Corporation directly, *the contractor will comply with all state and local licensing requirements as applicable.* Typically our partners are able to perform work wherever they meet state and local licensing requirements.

Please refer to the section above entitled “Distributors, Dealers, Installers, Sales Reps” for a full list of our distributors authorized this contract upon award.

Available licensing information is listed below. Note that state licensing requirements vary and that some states do not require contractors’ licenses at all. Just because a firm is not listed below does not preclude them from using this contract upon award.

State	License Number	Company
Alabama	2006206972	ATT Sports Inc.
Alabama	38343	Mid America Sports Construction
Alabama	AL 22316	Sports Turf
Alabama (Gen. Contractor License)	54001	AstroTurf Construction Corp
Arizona	AZ ROC34868	General Acrylics
Arizona	AZ ROC77085	General Acrylics
Arizona	320702	AstroTurf Corporation
Arkansas	29301	Byrne & Jones
Arkansas	125490720	Mid America Sports Construction
Arkansas	377250519	T3 Global Projects LLC
Arkansas	387060520	AstroTurf Construction Corp
California	CA 747934	AFE
California	CA 566808	Colony Landscapes
California	914561	"General Sports Turf, Inc. dba AstroTurf"
California	828164	SportBuild
California	832713	SYNLawn California - Bay Area
California	910747	SYNLawn of C CA
California	981646	SYNLawn of Los Angeles
California	981646	SYNLawn of Los Angeles
California	981646	SYNLawn of Los Angeles
California	1057973	SYNLawn Sacramento
California	CA 783244	Valley Precision Grading
California	1036156	AstroTurf Corporation
California- DIR	1000056010	AstroTurf Corporation
DC (Washington)	410518000327	AstroTurf Corporation
Delaware	2019604094	All Sports Enterprises
Delaware	2017603833	AstroTurf Corporation
Florida	CBC1260364	APT Acquisition Construction Company (DBA Name)
Georgia	GA GCCO000866	Sports Turf
Georgia	GCCO006261	AstroTurf Construction Corp
Hawaii	ABC-14228	CO-HA Builders, Inc. dba Applied Surfacing Technology
Hawaii	317-430-1521	SYNLawn Indiana
Hawaii	CT-33994	SYNLawn Oahu
Idaho	ID PWC-C-12674	General Acrylics
Idaho	RCE-47036	AstroTurf Corporation

Iowa	C131496	Byrne & Jones
Iowa	C004569	Mid America Sports Construction
Iowa	C098643	Midwest Tennis & Track Co. (track and tennis products only)
Louisiana	41193	Mid America Sports Construction
Louisiana	LA 46775	Sports Turf
Louisiana	56016	T3 Global Projects LLC
Maryland	16231915	ATT Sports Inc.
Maryland	72640	SYNLawn Chesapeake Bay
Minnesota	61725	Midwest Tennis & Track Co. (track and tennis products only)
Minnesota	IR736506	SYNLawn Minnesota
Mississippi	23130-MC	AstroTurf Construction Corp
Mississippi	MS 17610-SC	Sports Turf
Mississippi	22775-MC	T3 Global Projects LLC
Missouri	F00470928	Midwest Tennis & Track Co. (track and tennis products only)
Montana	228561	SYNLawn Montana
Montana	240369	AstroTurf Corporation
Nebraska	43527-18	Byrne & Jones
Nebraska	37191-19	Mid America Sports Construction
Nebraska	20308-19	Midwest Tennis & Track Co. (track and tennis products only)
Nebraska	62141-18	AstroTurf Corporation
Nevada	NV 0059476	General Acrylics
Nevada	NV 0075293	General Acrylics
Nevada	57890	SYNLawn Northern NV
Nevada	85813	AstroTurf Construction Corp
New Jersey	NJ 54324	Applied Landscape Technologies
New Jersey	NJ 703086	Athletic Fields of America
New Jersey Public Works	723803	AstroTurf Construction Corp
New Jersey Public Works	636372	ATT Sports Inc.
New Mexico	NM 30964	General Acrylics
New Mexico	394225	SYNLawn of New Mexico
New Mexico	392677	AstroTurf Corporation
New York	NY 22-3144785	Applied Landscape Technologies
New York	238900	ATT Sports Inc.
North Carolina	79686	AstroTurf Corporation
North Carolina	79686	AstroTurf Corporation
North Carolina	1380815	ATT Sports Inc.
North Dakota	54107	Mid America Sports Construction
North Dakota	37228	Midwest Tennis & Track Co. (track and tennis products only)
North Dakota	2165498	SYNLawn North Dakota
Oregon	OR 203728	Coast To Coast
Oregon	216729	Sport Build / Sport Striping LLC
Oregon	182537	SYNLawn of Oregon
Oregon	226366	AstroTurf Corporation

Pennsylvania	PA 4253713	Applied Landscape Technologies
Pennsylvania	86223	ATT Sports Inc.
Rhode Island	1007679	ATT Sports Inc.
South Carolina	121632	AstroTurf Construction Corp
South Carolina	121632	AstroTurf Construction Corp
South Dakota	1013-6385-ET	Midwest Tennis & Track Co. (track and tennis products only)
Tennessee	64442	Byrne & Jones
Tennessee	356864	Competition Athletics
Tennessee	50331	Mid America Sports Construction
Tennessee	72836	AstroTurf Construction Corp
Utah	UT 7406753-5501	General Acrylics
Utah	9008320-5501	Mid America Sports Construction
Utah	9159672-5501	SYNLawn St. George
Utah	269623-5501	SYNLawn Utah
Utah	11025408-5501	AstroTurf Corporation
Utah	11025408-5501	AstroTurf Corporation
Virginia	2705-140666	ATT Sports Inc.
Virginia	2705081393	Mid America Sports Construction
Virginia	2705115427	AstroTurf LLC
Washington	WA COASTCT863LT	Coast To Coast
Washington	#CC SPORTBS87804	Sport Build / Sport Striping LLC
Washington	SYNLAN*817L1	SYNLawn Seattle
Washington	SYNLAS*827KW	SYNLawn Spokane
Washington	ASTROC*821D3	AstroTurf Corporation
West Virginia	WV050728	A G Sports Services
West Virginia	WV048694	AstroTurf, LLC
West Virginia	WV051849	ATT Sports Inc.
West Virginia	WV052340	Nagle Athletic Surfaces
West Virginia	WV058082	AstroTurf Corporation

Disclosures

Line of Credit Letter or Annual Financial Report (REQUIRED): Attach a letter from the business's chief financial institution indicating the current line of credit available to the business and evidence of financial stability for the past three calendar years (2016, 2017 and 2018). This letter should state the line of credit as a range (i.e. "credit in the low six figures" or "a credit line exceeding five figures"). If company is a publicly traded company a complete Annual Financial Report is required in place of Line of Credit Letter.

Alternatively, Bidders may choose to send the Letter of Line of Credit and/or Annual Report by email directly to the AEPA Executive Director, George Wilson, at georgewilson.aepa@outlook.com. The Letter of Line of Credit and/or Annual Report must be received by the Executive Director before the due date and time of the bid opening.

Legal: Does this business have actions currently filed against it? X No Yes

If **Yes**, **AN ATTACHMENT IS REQUIRED**: List and explain current actions, such as, Federal Debarment (on US General Services Administration's "Excluded Parties List"), appearance on any state or federal delinquent taxpayer list, or claims filed against the retainage and/or payment bond for projects.

References

Provide contact information of your business's five largest public agency customers:

Agency	Name	Title	Phone Number	Email
1. City of Albertville, AL	Mike Brewer	Personnel/ Purchasing Director	256-891-8282	mbrewer@cityofalbertville.com
2. City of Los Angeles Dept of Rec and Park	Jim Newsome	Director	213-202-2678	jimmy.newsom@lacity.org
3. City of Viera, FL	Bonnie King	Executive Director, Florida's Space Coast Office of Tourism	321-433-4470 X 52884	Bonnie.king@visitspacecoast.com
4. Anne Arundel County Public Schools	Greg Stewart	Senior Manager, Planning	443.770.5960	gstewart@aacps.org
5. City of Grand Park, IN (Grand Park)	Blake Hibler		317-809-0462	blake.hibler@bullpentournaments.com

Service Questionnaire

The following chart indicates which AEPA Member States intend to participate in this bid category. Respond to Yes/No and choice questions by using an (X). **Note: A Bidder must be willing and able to deliver the proposed products and/or services to 90% of the participating AEPA Member States, unless otherwise stated within Part B Technical Specifications.**

AEPA Member States	Participating in this bid category?	Has the bidding company sold products/services in these states for the past three (3) years? (Yes or No)	If awarded, which states does the bidding company propose to sell in? (Place an X where applicable)	Indicate which states the bidding company has sales reps, distributors or dealers in. (Place an X where applicable)
California	Yes	<u>Yes</u>	<u>X</u>	<u>X</u>
Colorado	Yes	<u>Yes</u>	<u>X</u>	<u>X</u>
Connecticut	Yes	<u>Yes</u>	<u>X</u>	<u>X</u>
Florida	Yes	<u>Yes</u>	<u>X</u>	<u>X</u>
Georgia	Yes	<u>Yes</u>	<u>X</u>	<u>X</u>
Illinois	No	<u>Yes</u>	<u>X</u>	<u>X</u>
Indiana	Yes	<u>Yes</u>	<u>X</u>	<u>X</u>
Iowa	No	<u>Yes</u>	<u>X</u>	<u>X</u>
Kansas	Yes	<u>Yes</u>	<u>X</u>	<u>X</u>
Kentucky	Yes	<u>Yes</u>	<u>X</u>	<u>X</u>
Massachusetts	No	<u>Yes</u>	<u>X</u>	<u>X</u>
Michigan	Yes	<u>Yes</u>	<u>X</u>	<u>X</u>
Minnesota	Yes	<u>Yes</u>	<u>X</u>	<u>X</u>
Missouri	Yes	<u>Yes</u>	<u>X</u>	<u>X</u>
Montana	Yes	<u>No</u>	<u>X</u>	<u>X</u>

Nebraska	Yes	<u>Yes</u>	<u>X</u>	<u>X</u>
New Jersey	Yes	<u>Yes</u>	<u>X</u>	<u>X</u>
New Mexico	Yes	<u>Yes</u>	<u>X</u>	<u>X</u>
North Dakota	Yes	<u>Yes</u>	<u>X</u>	<u>X</u>
Ohio	Yes	<u>Yes</u>	<u>X</u>	<u>X</u>
Oregon	Yes	<u>Yes</u>	<u>X</u>	<u>X</u>
Pennsylvania	No	<u>Yes</u>	<u>X</u>	<u>X</u>
Texas	Yes	<u>Yes</u>	<u>X</u>	<u>X</u>
Virginia	Yes	<u>Yes</u>	<u>X</u>	<u>X</u>
Washington	Yes	<u>Yes</u>	<u>X</u>	<u>X</u>
West Virginia	Yes	<u>Yes</u>	<u>X</u>	<u>X</u>
Wisconsin	Yes	<u>Yes</u>	<u>X</u>	<u>X</u>
Wyoming	Yes	<u>No</u>	<u>X</u>	<u>X</u>

e-Commerce: Does this business have an e-commerce website? X **No** **Yes**

If YES, what is the website? _____

Customer and Support Service: It is understood depending on the type, kind and level of products and/or services being proposed in response to this bid will impact and determine the type and level of services required and these are identified in Part B Bid Specifications of this IFB.

Does this business have online customer support options? **No** X **Yes**

Does this business have a toll-free customers support phone option? **No** X **Yes**

Does this business offer local customer and support service options? **No** X **Yes**

Training: If applicable, does this business offer customer training for the products and services sold? **No** X **Yes**

If YES, describe what types/kinds of training you offer, the venues where training occurs and the location(s) of your trainers, include number of staff dedicated to training and their qualifications and hours of operation.

AstroTurf Corporation mandates training of designated maintenance personnel with the close-out of every project. This is done in-person by one of our project managers. In addition, we have dedicated maintenance crews who offer ongoing maintenance programs and offer in-person maintenance "refresher" courses with every contracted visit.

Pricing:

Is your pricing methodology guaranteed for the term of the contract? **No** X **Yes**

Will you offer customized price lists to participating entities as required per the pricing terms of Part A? X **No** **Yes**

Will you offer hot list pricing (optional) as described in the pricing terms of Part A? X **No** **Yes**

Will you offer volume price discounts as described in the pricing terms of Part A? **No** X **Yes**

Competitiveness: In order for your bid to be considered, your company must offer AEPA prices that are equal to or lower than those normally offered to individual entities or cooperatives with equal or lower volume.

Is the pricing that is proposed to AEPA equal to or lower than pricing your company offers to individual entities or cooperatives with equal to or lower volume? _____ **No** X **Yes**

Indicate which of the following apply and the **level of competitive range** you are offering in response to this IFB.

X _____ Pricing offered to AEPA is EQUAL TO pricing offered to individual customer and/or cooperatives.

_____ Pricing is LESS THAN individual customer and/or cooperatives. Lower by _____%

Cooperative Contracts: Does your business currently have contracts with other cooperatives (local, regional, state, national)? _____ **No** X **Yes**

If YES, identify which cooperative and the respective expiration date(s).

Omnia – May 2020

AEPA – March 2020

BuyBoard – May 2021

COSTARS – May 2020

Sourcewell – August 2022

TIPS – April 2020

1GPA – September 2020

If YES, and your business is awarded an AEPA contract, explain which contract your business will lead with in marketing and sales representative presentations (sales calls)?

AstroTurf Corporation offers a range of cooperative contracts to suit its coast-to-coast customer base. AstroTurf intends to actively promote the AEPA/Member Agency contracts in all states where local consortiums have adopted the AstroTurf Corporation contract. For this reason, we have extended our largest discount on this AEPA bid. AstroTurf reserves the right to offer most appropriate cooperative contract to the client, depending upon a variety of factors, including the client's comfort level with the applicable local agency, the source of the lead, and the client's past history with cooperative purchasing.

Administrative Fee: Which of the following best reflects how your pricing includes the individual AEPA Members' administrative fee. Mark with an "X".

	The pricing for the products and/or services are the same for each AEPA Member Agency, shipping, handling, administrative fee and other specific state costs are added to arrive at total price offered to the Individual AEPA Member Agency.
X	The pricing for the products and/or services is inclusive of the administrative fee and therefore the pricing is the same for all AEPA Member Agencies. Shipping, handling and other state specific costs are added to the adjusted AEPA Member Agency's price.
	The pricing for the products and/or services includes ALL (shipping, handling, administrative fee, other) costs to arrive at a single price for all AEPA Member Agencies.

Shipping & Handling: Orders that are \$50.00 or more shall include shipping and handling. What is the flat rate your company will charge, regardless of where shipped in the continental United States, for orders less than \$50.00?	N/A
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Product Returns: Does your business have a return policy? X **No** **Yes**

If YES, describe your return policy and if you charge a restocking fee, what is it? (AEPA allows up to 15% for supplies and up to 25% for equipment).

Every sports surface is custom-designed and installed for the client. As such, extensive pre-manufacturing submittal and sign-off procedures are in place. A customer cannot simply change their mind and return the field or track.

We do, however, offer strong warranties that ensure the quality and workmanship of our products and installations.

Payment Terms: Will your business offer AEPA buyer's a quick pay discount?

 X **No** **Yes**

If YES, what is the discount? %Net

Leasing: Does your business offer leasing arrangements under this bid? **No** X **Yes**

If Yes, please indicate the rate factor and other cost factors below.



Effective through September 30, 2019*

It is easy to calculate monthly payment amounts.

For a lease payment quote, simply multiply factors below by the transaction cost. Actual payment of course is subject to review of the borrower's application package.

Public/Municipal – Monthly Payments				
Transaction Size:	36	48	60	84
\$15,000 - \$250,000	0.02995	0.02304	0.01891	0.01421
\$250,001 - \$999,999	0.02978	0.02286	0.01872	0.01403
\$1,000,000 +	0.02965	0.02312	0.01859	0.01388

Private/Commercial – Monthly Payments				
Transaction Size:	36	48	60	84
\$15,000 - \$250,000	0.03020	0.02329	0.01916	0.01449
\$250,001 - \$999,999	0.03010	0.02318	0.01905	0.01437
\$1,000,000 +	0.03003	0.02312	0.01899	0.01430

Example: For a 60 month Public/Municipal Deal | \$275,000 x . 0.01872 = \$5,148.00 monthly payment

Example: For a 60 month Private/Commercial Deal | \$275,000 x . 0.01905 = \$5,239.00 monthly payment

*Rates subject to change based on market conditions

If an AEPA contract is approved and awarded by the Member Agencies, as a Vendor Partner, I agree to:

Responsibilities of an AEPA Vendor Partner	Yes, indicate with an "X"	No, indicate with an "X"
1. Designate and assign a dedicated senior-level contract manager (one authorized to make decisions) to each of the Member Agency accounts. This employee will have a complete copy and must have working knowledge of the AEPA contract.	X	
2. Train and educate sales staff on what the AEPA contract is: including pricing, who can order from the contract (by state), terms/conditions of the contract, and the respective ordering procedures for each state. It is expected that Vendor Partners will lead with AEPA contracts.	X	
3. Develop a marketing plan to support the AEPA contract in collaboration with respective AEPA Member Agencies. The marketing plan should include, but not be limited to, a website presence, electronic mailings, sales flyers, brochures, mailings, catalogs, etc.	X	
4. Create an AEPA-specific sell sheet with a space to add a Member Agency logo and contact information for use by the Member Agencies and the Vendor Partner's local sales representatives to market within each state.	X	
5. On a quarterly basis, complete the sales and administrative fee report (see attached PDF example) and submit to each Member Agency along with the respective administrative fees to be paid. If there are no sales, the Vendor Partner is required to submit a \$0 report to the AEPA Member Agency.	X	
6. Have ongoing communication with the Bid Oversight Chairperson, AEPA Member Agencies and the Member Agencies Participating Entities.	X	
7. Attend two (2) AEPA meetings each year (see Part A)	X	
8. Participate in national and local conference trade shows to promote the AEPA contracts including, but not limited to the Association of School Business Officials (ASBO), the National Institute of Governmental Purchasing (NIGP), and the National Association of Educational Procurement (NAEP).	X	
9. Increase sales over the term of the contract with all participating AEPA Member Agencies.	X	

Deviations

Definition: Deviations can be defined as a major variance, change, or substitution submitted by a Bidder, which deviates from, adds extraneous terms to, conflicts with or offers an alternative to any term, condition, specification or requirement of this solicitation.

Instructions:

1. If “no” is marked with an “X” below, complete this form by signing it at the bottom.
2. If “yes” is marked with an “X” below, insert answers into the form shown below, providing narrative explanations of deviations. *(To insert more rows, hit the tab key from the last field in the last row and column.)*
3. If adding pages, the bidder’s name and identifying information as to which item the response refers must appear on each page.
4. Deviations to local, state or federal laws cannot be accepted under this bid.

	No , this bidder does not have deviations (exceptions or alternates) to the specifications listed in Part B of this IFB.
X	Yes , this bidder has the following deviations to the specifications listed in Part B of this IFB.

Outline Number Part B	Specification (describe)	Details of Deviation
Part B (7.1.5) And Part C – State Specific Forms	Contractor's License: Each of the AEPA states covered by this solicitation has its own state licensing qualifications, requirements and processes. The offeror is responsible for knowing each state’s requirements and codes. For those states where licenses are required, a copy of the appropriate contractor licenses will need to be included in your response to this bid. If the Bidder is using one of its distributors or dealers copies of their licenses shall be submitted to the AEPA Member Agency as part of their quote submission or upon request. All required licenses will be kept current and in compliance with the rules and regulations of each state’s regulatory agency.	Clarification: AstroTurf Corporation operates directly in the market in many states and through partners in other states. Sometimes AstroTurf Corporation AND distributors operate in the same state. In the state of New Jersey specifically, AstroTurf Corporation has a public works license and is currently in the process of getting listed with the DPMC. As such, AstroTurf Corporation cannot fill out the State of New Jersey form included in Part C with the heading “TOTAL AMOUNT OF UNCOMPLETED PROJECTS” <i>at this time</i> . Until such time as AstroTurf Corporation is listed with the DPMC, we will operate on public projects in New Jersey through our partners who are listed on the DPMC.
Part B (7.1.22) And Part C – State Specific Forms	Form AA302 in Part C - State Specific Forms for the State of New Jersey.	Clarification: AstroTurf Corporation, as part of its process to get listed on the New Jersey DPMC, is in the process of filling out Form AA302 with the State of New Jersey. As such, we will submit after award, in keeping with requirement laid out in Exhibit A of the form that states that we must submit AA302 “after notification of award but prior to execution of a goods and services contract.”
Part D Questionnaire – “Shipping & Handling”	Shipping & Handling: Orders that are \$50.00 or more shall include shipping and handling. What is the flat rate your company will charge, regardless of where shipped in the continental United States, for orders less than \$50.00?	Clarification: Per Part B (9.5.1.) “Freight for this bid will be FOB Destination, freight prepaid and added to invoice. The Vendor Partner will maintain risk on all product until the goods are received and inspected by the Buyer. The Vendor Partner will pay shipping costs and add the cost to the Buyers invoice.”

		Therefore, we have NOT included freight in our pricing.
Part D – Pricing Question: Will you offer customized price lists to participating entities as required per the pricing terms of Part A?	Question: Will you offer customized price lists to participating entities as required per the pricing terms of Part A?	Clarification: Part A states “Bidders are required to offer Customized Price Lists (Catalog Bids ONLY) and encouraged to offer Hot Lists and Volume Discounts”. Since this is not a Catalog bid, we have not offered customized price lists.



Association of Educational
PURCHASING AGENCIES

Part E – Signature Forms

AEPA IFB 020-A

Natural & Synthetic Surfaces for Sports Fields, Tracks, Courts, Playgrounds and Landscaping Applications

Instructions

Contained herein are forms that require a signature from an authorized person at your company. All items found within this document are mandatory. Failure to sign the required areas, sections, or signature lines will allow AEPA to consider your company's proposal as non-responsive.

To submit the required signed forms, follow these steps:

1. Read the documents in their entirety.
2. Complete all forms and sign when required.
3. Once signed, place notary stamp in the delegated area on the Bid Affidavit.
4. Return the forms and pages in their correct order and scan one (1) single PDF format titled "Part E – Signature Forms – Name of Bidding Company" (i.e. one PDF document for all signature forms).
5. Submit Part E, along with other required documents in Public Purchase.

AEPA does not allow electronic signatures.

*Note, a bid checklist has been provided to review with your submission.

The following sections will need to be completed prior to submission as one (1) single PDF titled "Part E – Signature Forms – Name of Bidding Company".

Uniform Guidance "EDGAR" Certification Form – ***signature required**

Bid Affidavit – ***signature required**

Acceptance of Bid & Contract Award – ***signature required**

Uniform Guidance “EDGAR” Certification Form

2 CFR Part 200

When a purchasing agency seeks to procure goods and services using funds under a federal grant or contract, specific federal laws, regulations, and requirements may apply in addition to those under state law. This includes, but is not limited to, the procurement standards of the Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards, 2 CFR 200, referred to as the “Uniform Guidance” or new “EDGAR”. All bidders submitting proposals must complete this EDGAR Certification form regarding the bidder’s willingness and ability to comply with certain requirements, which may be applicable to specific agency purchases using federal grant funds.

For each of the items below, the Bidder will certify its agreement and ability to comply, where applicable, by having the bidder’s authorized representative check, initial the applicable boxes, and sign the acknowledgement at the end of this form. If a bidder fails to complete any item of this form, AEPA will consider and may list the response, as the bidders is unable to comply. A “No” response to any of the items below may influence the ability of a purchasing agency to purchase from the bidder using federal funds.

1. Violation of Contract Terms and Conditions

Provisions regarding bidder default are included in AEPA’s terms and conditions. Any contract award will be subject to such terms and conditions, as well as any additional terms and conditions in any purchase order, ancillary agency contract, or construction contract agreed upon by the bidder and the purchasing agency, which must be consistent with and protect the purchasing agency at least to the same extent as AEPA’s terms and conditions. The remedies under the contract are in addition to any other remedies that may be available under law or in equity.

2. Termination for Cause of Convenience

For a participating agency purchase or contract in excess of \$10,000 made using federal funds, you agree that the following term and condition shall apply:

The participating agency may terminate or cancel any purchase order under this contract at any time, with or without cause, by providing seven (7) business days in advance written notice to the bidder. If this agreement is terminated in accordance with this paragraph, the participating agency shall only be required to pay bidder for goods and services delivered to the participating agency prior to the termination and not otherwise returned in accordance with the bidder’s return policy. If the participating agency has paid the bidder for goods and services provided as the date of termination, bidder shall immediately refund such payment(s).

If an alternate provision for termination of a participating agency’s purchase for cause and convenience, including the manner by which it will be effected and the basis for settlement, is in the participating agency’s purchase order, ancillary agreement or construction contract agreed to by the bidder, the participating agency’s provision shall control.

3. Equal Employment Opportunity

Except as otherwise provided under 41 CFR Part 60, all participating agency purchases or contract that meet the definition of “federally assisted construction contract” in 41 CFR Part 60-1.3 shall be deemed to include the equal opportunity clause provided under 41 CFR 60-1.4(b), in accordance with Executive Order 11246, “Equal Employment Opportunity” (30 FR 12319, 12935, 3 CFR Part, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, “Amending Executive Order 11246 Relating to Equal Employment Opportunity,” and implementing regulations at 41 CFR Part 60, “Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor.”

The equal opportunity clause provided under 41 CFR 60-1.4(b) is hereby incorporated by reference. Bidder agrees that such provision applies to any participating agency purchase or contract that meets the definition of “federally assisted construction contract” in 41 CFR Part 60-1.3 and bidder agrees that it shall comply with such provision.

4. Davis Bacon Act

When required by Federal program legislation, bidder agrees that, for all participating agency contracts for the construction, alteration, or repair (including painting and decorating) of public buildings or public works, in excess of \$2,000, bidder shall comply with the Davis-Bacon Act (40 U.S.C. 3141-3144, and 3146-3148) as supplemented by Department of Labor regulations (29 CFR Part 5, "Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction"). In accordance with the statute, bidder is required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specific in a wage determinate made by the Secretary of Labor. In addition, bidder shall pay wages not less than once a week.

Current prevailing wage determinations issued by the Department of Labor are available at www.wdol.gov. Bidder agrees that, for any purchase to which this requirement applies, the award of the purchase to the bidder is conditioned upon bidder's acceptance of wage determination.

Bidder further agrees that is shall also comply with the Copeland "Anti-Kickback" Act (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States"). The Act provides that each construction completion, or repair of public work, to give up any part of the compensation to which he is otherwise entitled under his contract of employment, shall be defined under this titled or imprisoned not more than five (5) years, or both.

5. Contract Work Hours and Safety Standards Act

Where applicable, for all participating agency purchases in excess of \$100,000 that involve the employment of mechanics or laborers, bidder agrees to comply with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, bidder is required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of the 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions that are unsanitary, hazardous or dangerous. These requirements do not apply to the purchase of supplies, materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

6. Right to Inventions Made Under a Contract or Agreement

If the participating agency's federal award meets the definition of "funding agreement" under 37 CFR 401.2(a) and the recipient or sub recipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance or experiments, developmental or research work under the "funding agreement," the recipient or sub recipient must comply with the requirements of 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," and any implementing regulations issued by the awarding agency.

7. Clean Air Act and Federal Water Pollution Control Act

Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as amended, contracts and sub grants of amounts in excess of \$150,000 must contain a provision that requires the non-Federal award to agree to comply with all applicable standards, orders, or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA). When required, bidder agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Clean Air Act and the Federal Water Pollution Control Act.

8. Debarment and Suspension

Debarment and Suspension (Executive Orders 12549 and 12689), a contract award (see 2 CFR 180.222) must not be made to parties listed on the government-wide exclusions in the System for Award Management (SAM), in accordance with OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR Part 1966 Comp. p. 189) and 12689 (3 CFR Part 1989 Comp. p. 235), "Debarment and Suspension." SAM exclusions contain the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549. Bidder certifies that the bidder is not current listed and further agrees to immediately notify AEPA and all participating agencies with pending purchases or seeking to purchase from the bidder if bidder is later listed on the government-wide exclusions in SAM, or is debarred, suspended, or otherwise excluded by agencies or declared ineligible under statutory or regulatory authority other than Executive Order 12549.

9. Byrd Anti-Lobbying Amendment

Byrd Anti-Lobbying Amendment (31 U.S.C. 1352), bidders that apply or bid for an award exceeding \$100,000 must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that take place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.

10. Procurement of Recovered Materials

For participating agency purchases utilizing Federal funds, bidder agrees to comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act where applicable and provide such information and certifications as a participating agency may require to confirm estimates and otherwise comply. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR Part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recover, and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

11. Profit as a Separate Element of Price

For purchases using federal funds in excess of \$150,000, a participating agency may be required to negotiate profit as a separate element of the price. See 2 CFR 200.323(b). When required by a participating agency, bidder agrees to provide information and negotiate with the participating agency regarding profit as a separate element of the price for a particular purchase. However, bidder agrees that the total price, including profit, charged by the bidder to the participating agency shall not exceed the awarded pricing, including any applicable discount, under the bidders contract with AEPA.

12. General Compliance with Participating Agencies

In addition to the foregoing specific requirements, bidder agrees, in accepting any purchase order from a participating agency, it shall make a good faith effort to work with participating agency to provide such information and to satisfy requirements as may apply to a particular purchase or purchases including, but not limited to, applicable record keeping and record retention requirements as noted in the Federal Acquisition Regulation, FAR 4.703(a).

By initialing the table (1-12) and signing below, I certify that the information in this form is true, complete and accurate and that I am authorized by my business to make this certification and all consents and agreements contained herein.

Bidder Certification (By Item)	Bidder Certification: YES, I agree or NO, I do NOT agree	Initial
1. Violation of Contract Terms and Conditions	Yes	TG
2. Termination for Cause of Convenience	Yes	TG
3. Equal Employment Opportunity	Yes	TG
4. Davis-Bacon Act	Yes	TG
5. Contract Work Hours and Safety Standards Act	Yes	TG
6. Right to Inventions Made Under a Contract or Agreement	Yes	TG
7. Clean Air Act and Federal Water Pollution Control Act	Yes	TG
8. Debarment and Suspension	Yes	TG
9. Byrd Anti-Lobbying Amendment	Yes	TG
10. Procurement of Recovered Materials	Yes	TG
11. Profit as a Separate Element of Price	Yes	TG
12. General Compliance with Participating Agencies	Yes	TG

AstroTurf Corporation
Name of Business


Signature of Authorized Representative

Thomas Green
Printed Name

9/9/19
Date

Bid Affidavit

Instructions: This form must be signed by the business's authorized representative and notarized below. If awarded, the Bidder is required to produce a copy of this document for each Member Agency with which it contracts.

1. The undersigned, is duly authorized to represent the persons, business and corporations joining and participating in the submission of the foregoing bid (such persons, business and corporations hereinafter being referred to as the bidder), being duly sworn, on his/her oath, states that to the best of his/her belief and knowledge no person, business or corporation, nor any person duly representing the same joining and participating in the submission of the foregoing bid, has directly or indirectly entered into any agreement or arrangement with any other bidders, or with any official of the **Member Agency**, or any employee thereof, or any person, business or corporation under contract with the **Member Agency** whereby the bidder, in order to induce the acceptance of the foregoing bid by the **Member Agency**, has paid, or is to pay to any other bidder, or to any of the aforementioned persons, anything of value whatever, and that the bidder has not, directly nor indirectly entered into any arrangement, or agreement, with any other bidder or bidders which tends to or does lessen or destroy free competition in the letting of the contract sought for by the foregoing bid.
2. This is to certify that the bidder, or any person on his/her behalf, has not agreed, connived, or colluded to produce a deceptive show of competition in the manner of the bidding, or award of the referenced contract.
3. This is to certify that neither I, nor to the best of my knowledge, information and belief, the bidder, nor any officer, director, partner, member or associate of the bidder, nor any of its employees directly involved in obtaining contracts with the **Member Agency**, or any subdivision of the state has been convicted of false pretenses, attempted false pretenses, or conspiracy to commit false pretenses, bribery, attempted bribery or conspiracy to bribe under the laws of any state or federal government for acts or omissions after January 1, 1985.
4. This is to certify that the bidder, or any person on his behalf has examined and understands the terms, conditions, scope of work and specifications, and other documents of this solicitation and that any and all exceptions have been noted in writing and have been included with the bid submittal.
5. This is to certify that if awarded a contract, the bidder will provide the equipment, commodities, and/or services to members and affiliate members of the Agency in accordance with the terms, conditions, scope of work and specifications and other documents of this solicitation in the following pages of this bid.
6. This is to certify that the bidder is authorized by the manufacturer(s) to sell all proposed products on a national basis.
7. This is to certify that we have completed, reviewed, approved and have included all information that is required of these bid forms.

Thomas Green

Authorized Representative (Please print or type)

2680 Abutment Rd

Mailing Address

Dir. of Operations

Title (Please print or type)

Dalton, GA 30721

City, State, Zip

Thomas Green

Signature of Authorized Representative

Sept. 9, 2019

Date

Subscribed and sworn to before me this

9th

day of

September

Notary Public in and for County of

Whitfield

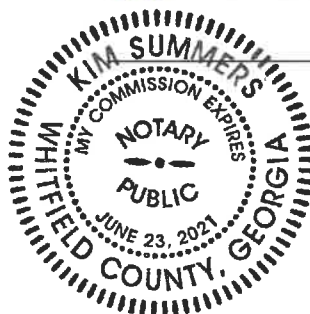
State of

GA

My commission expires on

Signature

Kim Summers



Enter Notary Stamp



Association of Educational
PURCHASING AGENCIES

Acceptance of Bid & Contract Award

Instructions: PART I of this form is to be completed by the Bidder and signed by its Authorized Representative. PART II will be completed by the AEPA Member Agency only upon the occasion of the bid award. If approved by AEPA, the Bidder is required to produce a copy of the document for each of the AEPA Member Agency with which it contracts.

PART I: BIDDER

In compliance with the Invitation for Bid (IFB), the undersigned warrants that I/we have examined all Instructions to Bidders, associated documents, and being familiar with all of the conditions of the bid, hereby offer and agree to furnish all labor, materials, supplies and equipment incurred in compliance with all terms, conditions, specifications and amendments associated with this IFB and any written exceptions to the bid. Signature also certifies understanding and compliance with the certification requirements of the AEPA Member Agency's Terms and Conditions and/or Special Terms and Conditions. The undersigned understands that their competence, ability, capacity and obligations to offer and provide the proposed tangible personal property, professional services, construction services and other services on behalf of the Bidder Partner as well as other factors of interest to the AEPA Member Agency as stated in the evaluation section, will be a consideration in making the award.

Business Name	<u>AstroTurf Corporation</u>	Date	<u>Sept. 9, 2019</u>
Address	<u>2680 Abutment Rd</u>	City, State Zip	<u>Dalton, GA 30721</u>
Contact Person	<u>Victoria Stringham</u>	Title	<u>Dir. of Cooperative Purchasing</u>
Authorized Signature	<u>V. Stringham</u>	Title	<u>Dir. of Operations</u>
Email	<u>vstringham@astroturf.com</u>	Phone	<u>800-723-8873</u>

PART II: AWARDING MEMBER AGENCY

Your bid response for the above identified bid is hereby accepted. As a Bidder Partner you are now bound to offer and provide the products and services identified within this IFB, your response and approved by AEPA, including all terms, conditions, specifications, exceptions and amendments. As Bidder Partner, you are hereby not to commence any billable work or provide any products or services under this contract until an executed purchase order is received from the AEPA Member Agency or Participating Entities. The intent of this contract is to constitute the final and complete agreement between the AEPA Member Agency and Bidder Partner, and no other agreements, oral or otherwise, regarding the subject matter of this contract, shall bind any of the parties hereto. No change or modification of this contract shall be valid unless in writing and signed by both parties to this contract. If any provision of this contract is deemed invalid or illegal by any appropriate court of law, the remainder of this contract shall not be affected thereby. The initial term of this contract shall be for up to fifteen (15) months and will commence on the date indicated below and continue until February 28, 2021, unless terminated, canceled or extended. By mutual written agreement as warranted, the contract may be extended month by month up to six (6) months or for three (3) additional 12-month periods.

Awarding Agency _____

Authorized Representative _____

Awarded this	day of	Contract Number
Contract to commence		
(Member Agency to select)		Or March 1, 2020

Rekortan® G-10

Traditional & Fast Track Systems



POWERED **BY**
sportgroup

Rekortan® G-10

Traditional & Fast Track Systems

Rekortan G-10 is a dual durometer, 10mm, impermeable full pour system. The first layer consists of a self-leveling PU made from environmentally friendly, renewable resources. The top layer is fluid applied and embedded with a dense matrix of EPDM rubber granules.

SMART
TECHNOLOGY
AVAILABLE

APT takes great pride in the Rekortan G-10, made from polyurethane and composed of natural resources for its base layer – it is the track of the future. APT is the leader in innovative ideas to help our planet and your athletes be successful.

HIGHLIGHTS

- Featuring APT's unique green layer, based on 70% renewable polyurethane, resulting in a total of 88% renewable/recyclable content
- Spike resistant
- Formulated to resist UV degradation in the world's most demanding climates
- Top layer poured-in place installation for a seamless finish
- Embedded surface ensures excellent all-weather performance and spike resistance
- Premium colors available upon request

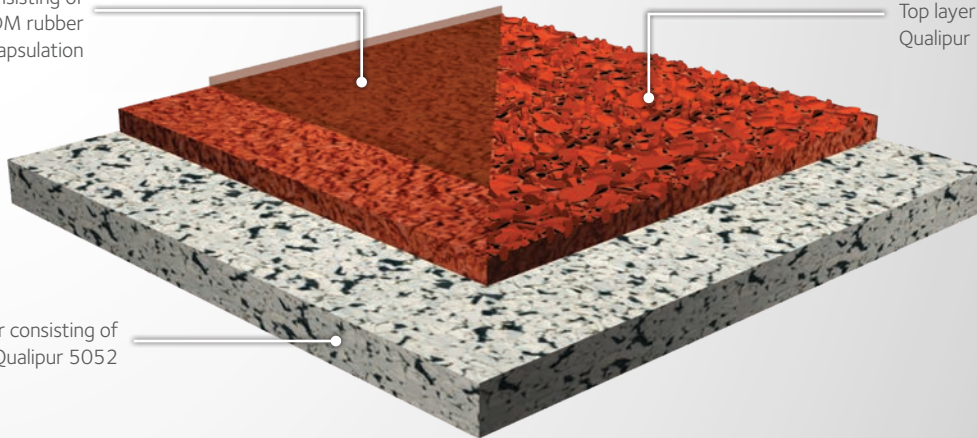
FAST TRACK SYSTEM:

Top layer consisting of Qualipur 5050, EPDM rubber granules, and spray encapsulation

TRADITIONAL SYSTEM:

Top layer consisting of Qualipur 5050 and EPDM rubber

Base layer consisting of SBR rubber and Qualipur 5052



sportgroup
THE SURFACE SPECIALISTS



www.rekortan.com

info@rekortan.com



Rekortan® G-13

Traditional & Fast Track Systems



POWERED **BY**
sportgroup

Rekortan® G-13

Traditional & Fast Track Systems

Rekortan G-13 is a dual durometer, 13mm, impermeable full pour system. The first layer consists of a self-leveling PU made from environmentally friendly, renewable resources. The top layer is fluid applied and embedded with a dense matrix of EPDM rubber granules.

SMART
TECHNOLOGY
AVAILABLE

APT takes great pride in the Rekortan G-13, made from polyurethane and composed of natural resources for its base layer – it is the track of the future. APT is the leader in innovative ideas to help our planet and your athletes be successful.

HIGHLIGHTS

- IAAF approved system
- Featuring APT's unique green layer, based on 70% renewable polyurethane, resulting in a total of 88% renewable/recyclable content
- Outstanding force reduction
- Spike resistant
- Formulated to resist UV degradation in the world's most demanding climates
- Top layer poured-in place installation for a seamless finish
- Embedded surface ensures excellent all-weather performance and spike resistance
- Premium colors available upon request

FAST TRACK SYSTEM:

Top layer consisting of Qualipur 5050, EPDM rubber granules, and spray encapsulation

TRADITIONAL SYSTEM:

Top layer consisting of Qualipur 5050 and EPDM rubber

Base layer consisting of SBR rubber and Qualipur 5052

sportgroup
THE SURFACE SPECIALISTS



www.rekortan.com

info@rekortan.com



Rekortan[®] M99

THE OFFICIAL SURFACE OF
THE PENN RELAYS SINCE 1988



POWERED **BY**
sportgroup

Rekortan® M99

THE OFFICIAL SURFACE OF
THE PENN RELAYS SINCE 1988

Rekortan M99 is a 15mm, impermeable, full-pour system featuring 3 specialized layers: a self-leveling fluid applied polyurethane coat, an innovative central force-reduction layer, and a fluid applied polyurethane topcoat with a dense matrix of broadcast EPDM rubber granules.

World-Class Surfacing Rekortan M99: Fast for sprinters and kind to endurance athletes

SMART
TECHNOLOGY
AVAILABLE

OLYMPIC GAMES AND OLYMPIC TRAINING FACILITIES

- Olympic Stadium, Berlin Germany
- Olympic Games, Munich Germany
- Olympic Stadium, Caracas Venezuela
- Olympic Stadium, Melbourne Australia
- Olympic Games, Los Angeles CA
- Olympic Park, Homebush Bay NSW Australia
- Olympic Park, Sydney Australia
- Olympic Stadium Luzhnik Russia
- Volos Stadium, Olympic Games, Athens Greece
- Bishan Stadium, Youth Olympics, Singapore
- Bislett Olympic Stadium, Oslo Norway
(IAAF Diamond League event track)

HIGH PROFILE EVENTS AND/OR TRACKS

- World Championships, Stuttgart Germany
- Goodwill Games, Brisbane Australia
- Penn Relays, University of Pennsylvania, Philadelphia PA (Official surface since 1988)
- Varsity Stadium, Univ. of Toronto, Toronto, ON Canada
- International Stadium, Beijing China

HIGHLIGHTS

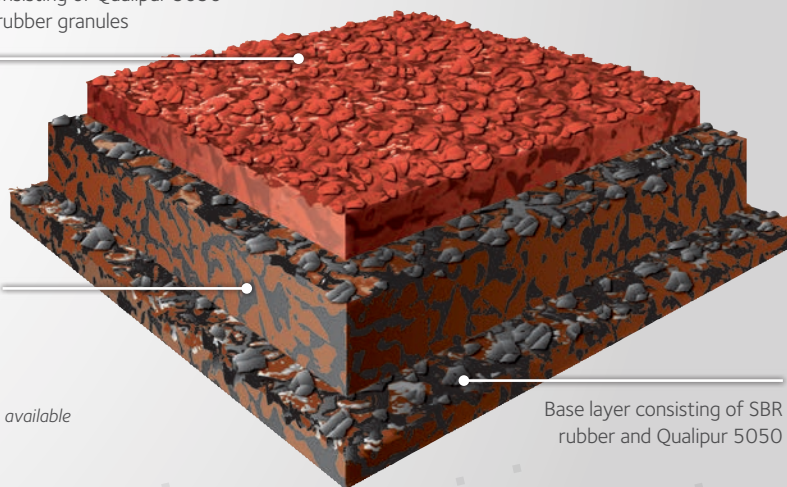
- IAAF approved system
- Featuring APT's unique polyurethane micro-foam that significantly increases force reduction
- Formulated to resist UV degradation in the world's most demanding climates
- 100% solid polyurethanes
- Top layer poured-in place installation for a seamless finish
- Embedded surface ensures excellent all-weather performance and spike resistance
- Fast Track since 1969
- Premium colors available upon request

Top layer consisting of Qualipur 5050 and EPDM rubber granules

Middle layer consisting of SBR rubber and Qualipur 5050 SA

* Encapsulation option available

Base layer consisting of SBR rubber and Qualipur 5050



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Rekortan[®] R-10



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Rekortan® R-10

Rekortan R-10 is a 2-layer, 10mm, impermeable full pour system. It consists of a self-leveling base coat and fluid applied polyurethane topcoat with a dense matrix of broadcast EPDM rubber granules.

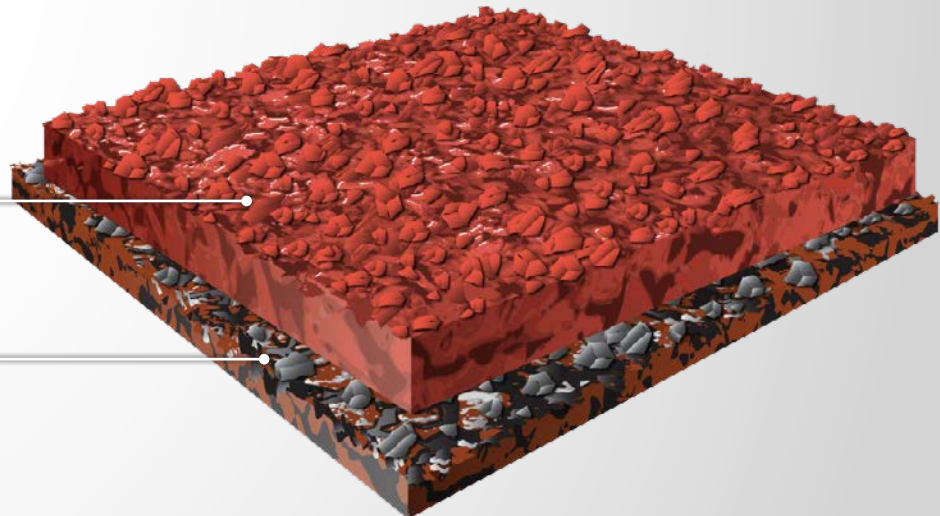
SMART
TECHNOLOGY
AVAILABLE

HIGHLIGHTS

- Formulated to resist UV degradation in the world's most demanding climates
- 100% solid polyurethanes
- Top layer poured-in-place installation for a seamless finish
- Embedded surface ensures excellent all-weather performance and spike resistance
- Premium colors available upon request

Top layer consisting of
Qualipur 5050 and
EPDM rubber granules

Base layer consisting
of SBR rubber and
Qualipur 5050



* Encapsulation option available

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Rekortan[®] RESURFACE

Spartan Respray



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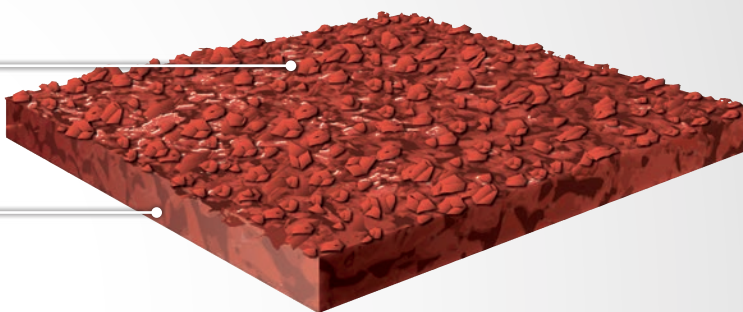
SMART
TECHNOLOGY
AVAILABLE

Rekortan[®] RESURFACE

Rekortan Resurface is available to maintain and prolong the use of your track

Fluid-applied Qualipur 5050
polyurethane and EPDM
rubber granules

Layer of Qualipur primer



HIGHLIGHTS

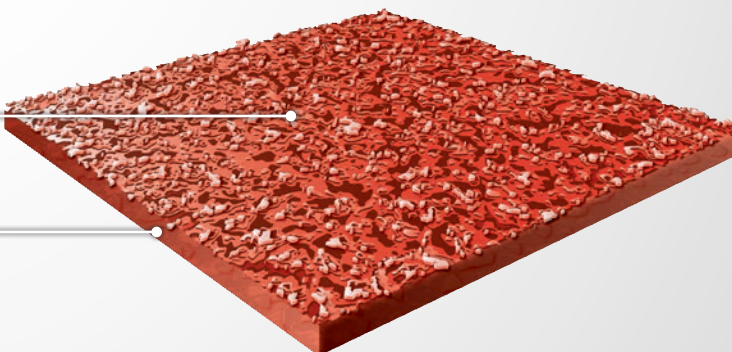
- To upgrade your existing track surface
- Impermeable, polyurethane and EPDM
- No solvents added
- Free of mercury and lead
- Premium colors available upon request
- All PU components made in the USA

Spartan[®] Respray

Spartan Respray is available to maintain and prolong the use of your track

Structural spray and
EPDM spray rubber blend

Layer of Qualipur primer



HIGHLIGHTS

- To maintain & prolong the life of your track
- To add additional resilience to the surface
- Available in multiple colors
- UV resistant aliphatic coatings available for special color requests like purple, orange, light blue
- Free of mercury and lead
- All PU components made in the USA

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info@rekortan.com



Spartan B



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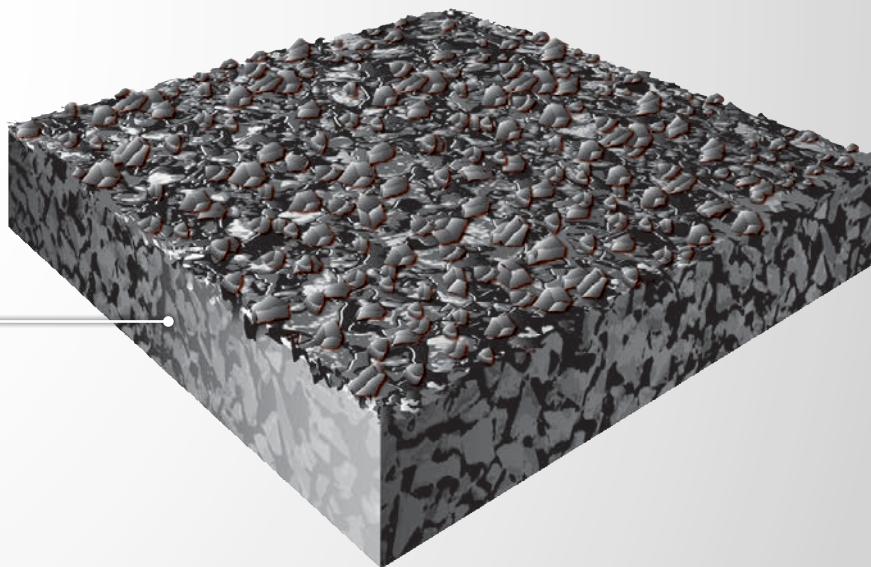
Spartan B

Spartan B is a single layer,
13mm, permeable black mat
track system consisting of
SBR rubber granules bound
in polyurethane.

SMART
TECHNOLOGY
AVAILABLE

HIGHLIGHTS

- Permeable paved in place black mat system
- Full-depth
- Polyurethane bound permeable SBR basemat



One paved layer of
SBR and binder

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Spartan **BS**



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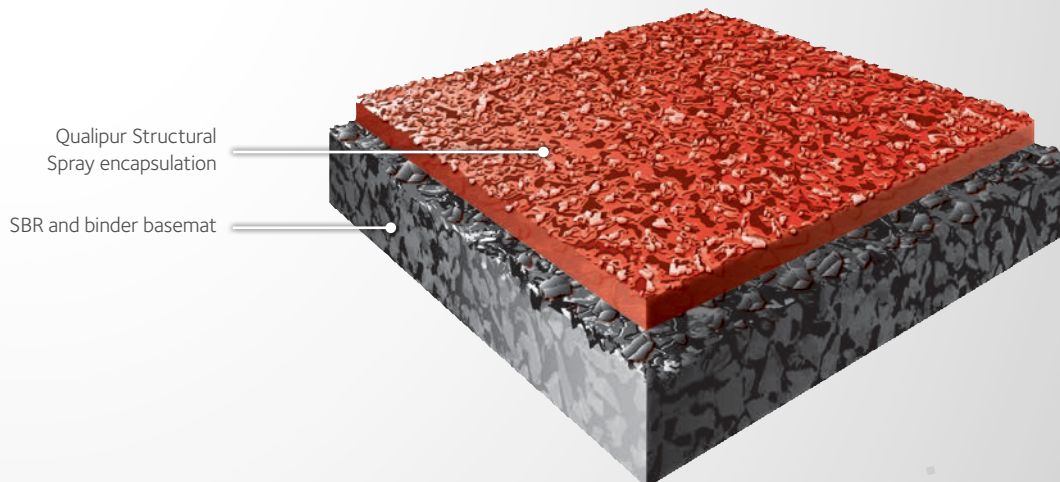
Spartan BS

Spartan BS is a two layer, 13mm, permeable spray coat track system. The base layer consists of a black mat of SBR rubber granules bound in polyurethane. The surface layer is made up of polyurethane and colored EPDM granules applied by spray to provide a structural topcoat.

SMART
TECHNOLOGY
AVAILABLE

HIGHLIGHTS

- IAAF approved system
- Permeable structural spray coat system
- Excellent force reduction
- Ideal for regional tracks and universities
- Spike resistant
- Available in multiple colors
- Aliphatic top coat option available
- Premium colors available upon request



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Spartan BJJ



POWERED **BY**
sportgroup

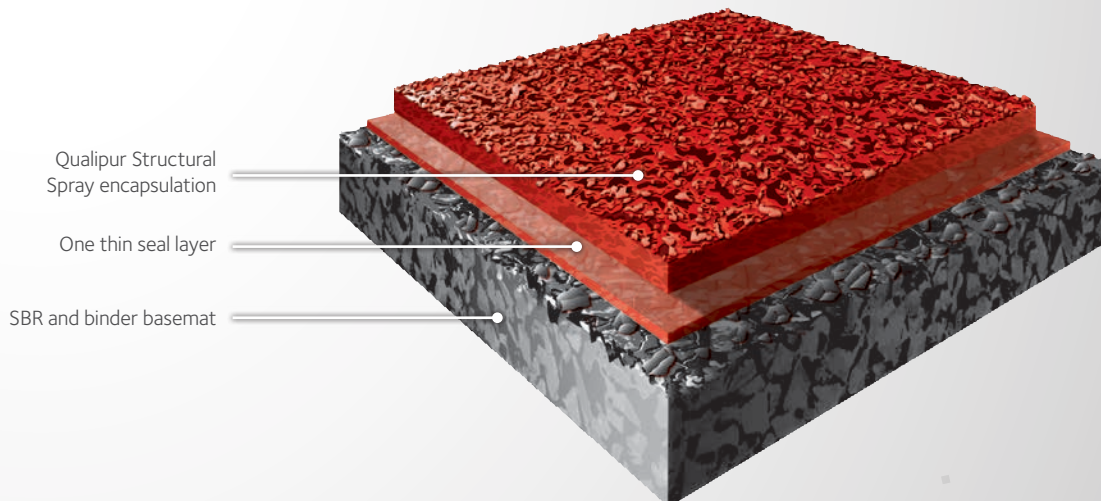


Spartan BSS is a 13mm, impermeable spray coat track system. The first layer consists of a black mat of SBR rubber granules bound in polyurethane. The second layer is a thin seal coat. The surface layer is polyurethane and colored EPDM granules applied by spray to provide a structural topcoat.

SMART
TECHNOLOGY
AVAILABLE

HIGHLIGHTS

- IAAF approved system
- Impermeable structural spray coat system
- Excellent force reduction
- Ideal for regional tracks and universities
- Spike resistant
- Available in multiple colors
- Aliphatic top coat option available
- Premium colors available upon request



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Spartan BV



POWERED **BY**
sportgroup



Spartan BV is a 14mm, two-layer sandwich style polyurethane track system. Its base layer consists of a black mat of SBR rubber granules, bound in polyurethane, with a thin seal coat. The surface layer is a fluid applied polyurethane topcoat with a dense matrix of broadcast EPDM rubber granules.

SMART
TECHNOLOGY
AVAILABLE

FEATURED AT IAAF CERTIFIED FACILITIES AROUND THE WORLD, INCLUDING:

2019 Mingara Athletics Facility, Australia
2019 Kompleks Sukan Kluang, Malaysia
2019 Kompleks Sukan Semporna, Malaysia
2019 Caledonian Athletics Stadium, New Zealand
2018 Duncan Mackinnon Reserve Athletics Track, Australia
2018 Mini Kompleks Sukan Nabawan, Malaysia
2018 Kompleks Sukan Sandakan, Malaysia
2018 Stadium Majlis Perbandaran Ampang Jaya (MPAJ), Malaysia
2018 Stadium Mukah, Malaysia
2018 Stadium University Malaysia, Malaysia
2018 King's College Campbell Sports Complex, New Zealand
2018 Mt. Smart Stadium, New Zealand
2018 Newtown Park, New Zealand
2018 Northland Athletic Track, New Zealand
2018 The Trusts Arena, Douglas Track and Field, New Zealand
2018 The Trusts Stadium Douglas Track and Field, New Zealand
2018 Panjab Stadium, Pakistan
2018 Stadium Mass Ground, Pakistan

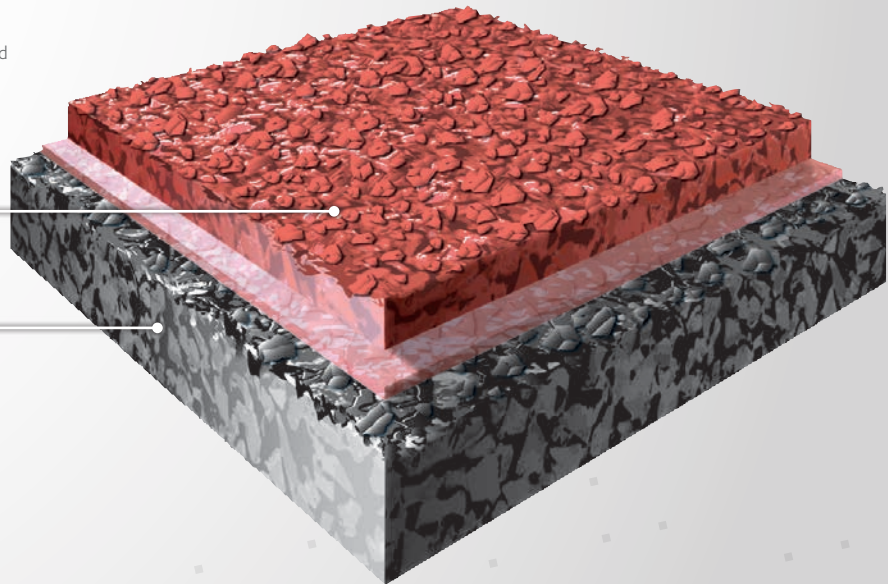
HIGHLIGHTS

- IAAF approved system
- Impermeable, two-component paved in place sandwich style track system
- Provides a high energy return
- Excellent all weather performance and spike resistance
- Free of mercury and lead
- World class performance for training and competition
- Premium colors available upon request

Top layer consisting of
Qualipur 5050 flooded
with EPDM rubber

SBR and binder basemat
with a thin seal

* Encapsulation option available



sportgroup
THE SURFACE SPECIALISTS



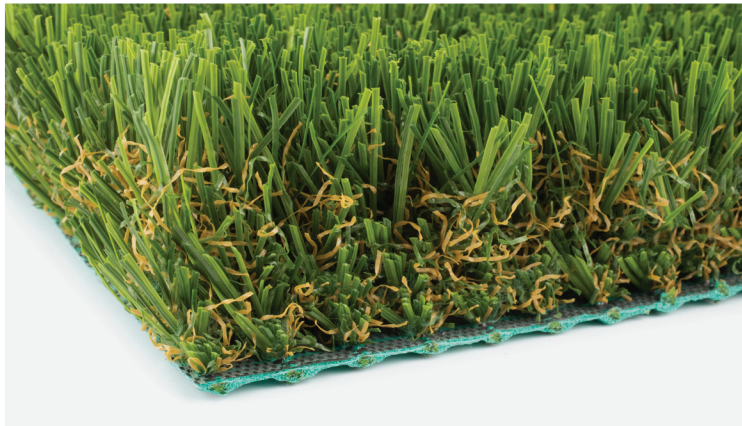
www.rekortan.com

info@rekortan.com





ARTIFICIAL GRASS >> SYNLawn 348



DETAILS

Product SKU:	SC348
Grass Zone Yarn/Color:	Polyethylene / Meadow/Lime
Grass Zone Denier:	12,000/6
Thatch Zone Yarn/Color:	Polyethylene / Field Green/Beige
Thatch Zone Denier:	5,040/12
Grass Zone Yarn Shape:	"S" Cross Section
Finished Pile Height:	1 7/8"
Finished Pile Weight:	80 oz.
Backing:	15/18 PP 2-part/20oz EnviroLoc™
Tuft Gauge:	1/2"
Total Weight:	106 oz.
Tuff Bind:	>8 lbs.
Fall Rating:	10'
Permeability:	>45 inches per /SY
Features:	Enviroloc™, HeatBlock™, Deluster, UV Stabilizers
Test Data:	Pill Test, Critical Radiant Flux, ASTM E648, ASTM F1951, ASTM F1292

APPLICATIONS



GOLF



LANDSCAPE



PETS



PLAY



ROOFTOP

SYNLawn 348

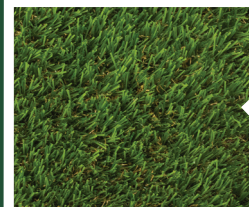
Top quality artificial turf at an affordable price, this synthetic grass variety provides stunning realism at a budget-friendly value that is sure to make the neighborhood turn green with envy.



20% Cooler
with patented
HeatBlock™
Technology



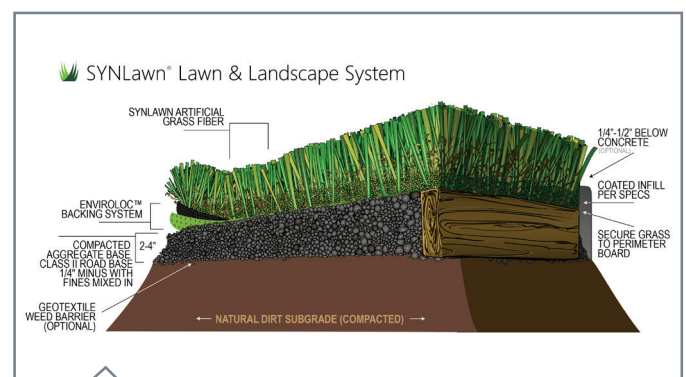
**ROLL
WIDTH: 15'**



**LIFETIME
WARRANTY**

EnviroLoc™ Backing

plant-based backing 'locks-in'
turf fibers for longer lifespan.



CAD drawings available at CADdetails.com

FOOT TRAFFIC



SOFTNESS



For ordering and questions, contact SYNLawn at 866-796-5296 or visit SYNLawn.com

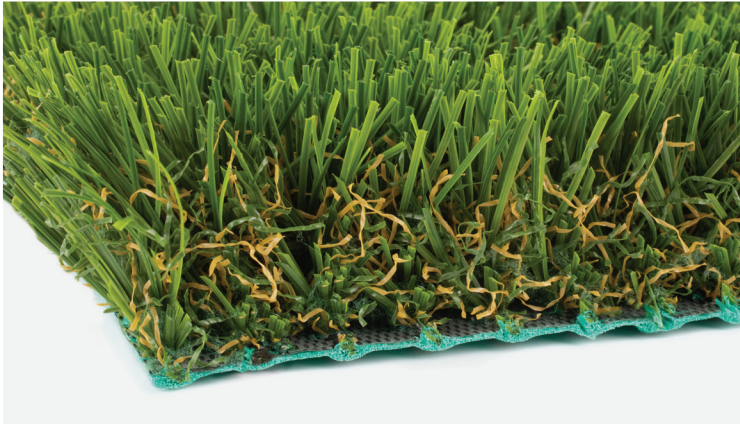


SYNLAWN®

Updated 04.17.19



ARTIFICIAL GRASS >> SYNLawn 648

**DETAILS**

Product SKU:	SC648
Grass Zone Yarn/Color:	Polyethylene/Meadow/Lime
Grass Zone Denier:	12,000/6
Thatch Zone Yarn/Color:	Polyethylene/Field Green/Beige
Thatch Zone Denier:	5,040/12
Grass Zone Yarn Shape:	"S" Cross Section
Finished Pile Height:	1 5/8"
Finished Pile Weight:	65 oz.
Backing:	15/18 PP 2-part/20oz EnviroLoc™
Tuft Gauge:	3/8"
Total Weight:	91 oz.
Tuff Bind:	>8 lbs.
Fall Rating:	10'
Permeability:	>45 inches per /SY
Features:	Enviroloc™, HeatBlock™, Deluster, UV Stabilizers
Test Data:	Pill Test, Critical Radiant Flux, ASTM E648, ASTM F1951, ASTM F1292

APPLICATIONS

GOLF



LANDSCAPE



PETS



PLAY



ROOFTOP

SYNLawn 648

Created with luxurious looks and budget-friendly value in mind this artificial grass variety is perfect for those looking to get the most bang for their buck.



20% Cooler
with patented
HeatBlock™
Technology



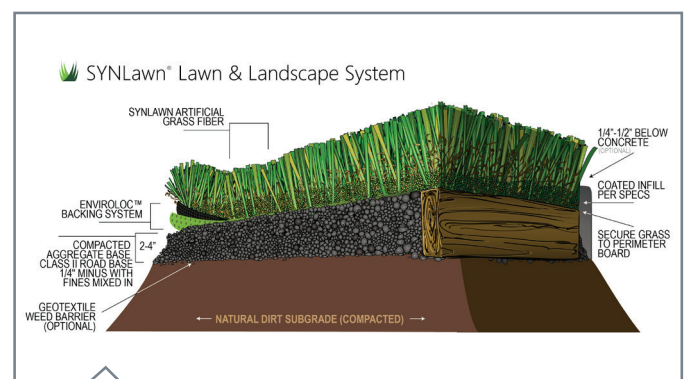
**ROLL
WIDTH: 15'**



**LIFETIME
WARRANTY**

EnviroLoc™ Backing

plant-based backing 'locks-in'
turf fibers for longer lifespan.



CAD drawings available at CADdetails.com

FOOT TRAFFIC**SOFTNESS**

For ordering and questions, contact SYNLawn at 866-796-5296 or visit SYNLawn.com

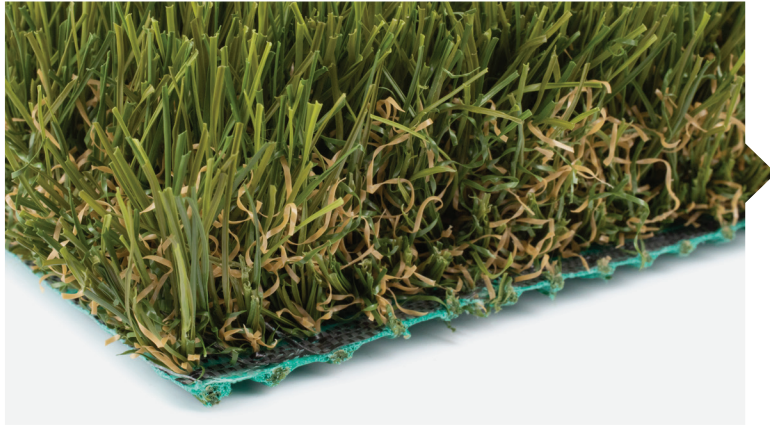


SYNLAWN®

Updated 04.17.19



ARTIFICIAL GRASS >> SYNAugustine 347

**DETAILS**

Product SKU:	SA347
Grass Zone Yarn/Color:	Polyethylene/Field Green/Olive/Apple
Grass Zone Denier:	9,900/9
Thatch Zone Yarn/Color:	Polyethylene/Field Green/Beige
Thatch Zone Denier:	5,600/8
Grass Zone Yarn Shape:	Soft Omega
Finished Pile Height:	1 7/8"
Finished Pile Weight:	75 oz.
Backing:	15/18 PP 2-part/20oz EnviroLoc™
Tuft Gauge:	3/8"
Total Weight:	104 oz.
Tuff Bind:	>8 lbs.
Fall Rating:	10'
Permeability:	>45 inches per /SY
Features:	EnviroLoc™, HeatBlock™, Deluster, UV Stabilizers
Test Data:	Pill Test, Critical Radiant Flux, ASTM E648, ASTM F1951, ASTM F1292

APPLICATIONS

LANDSCAPE



PLAY



PETS

SYNAugustine 347

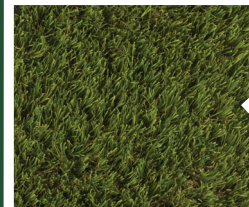
Combining beautiful multi-colored grass blades with a dense multi-colored thatch to create a natural appearance with a realistic feel and superior strength. Our softest, most comfortable variety of grass ever created.



20% Cooler
with patented
HeatBlock™
Technology



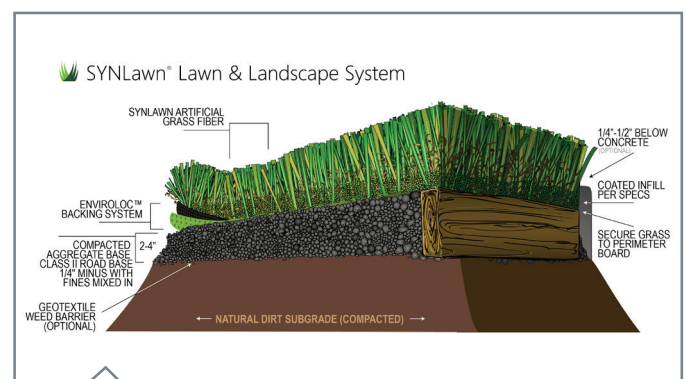
**ROLL
WIDTH: 15'**



**LIFETIME
WARRANTY**

EnviroLoc™ Backing

plant-based backing 'locks-in'
turf fibers for longer lifespan.

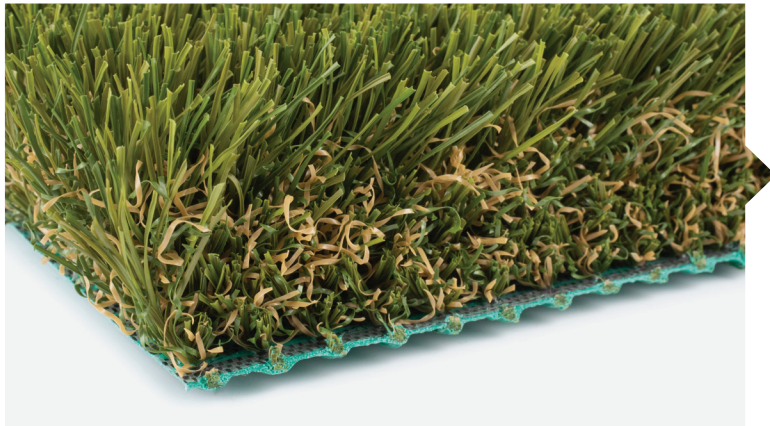
CAD drawings available at CADdetails.com**FOOT TRAFFIC****SOFTNESS**For ordering and questions, contact SYNLawn at 866-796-5296 or visit SYNLawn.com

SYNLAWN®

Updated 04.17.19



ARTIFICIAL GRASS >> SYNAugustine X47



DETAILS

Product SKU:	SAX47
Grass Zone Yarn/Color:	Polyethylene/Field Green/Olive/Apple
Grass Zone Denier:	9,900/9
Thatch Zone Yarn/Color:	Polyethylene/Field Green/Beige
Thatch Zone Denier:	5,040/12
Grass Zone Yarn Shape:	Soft Omega
Finished Pile Height:	1 5/8"
Finished Pile Weight:	100 oz.
Backing:	15/18 PP 2-part/20oz EnviroLoc™
Tuft Gauge:	3/8"
Total Weight:	126 oz.
Tuff Bind:	>8 lbs.
Fall Rating:	10'
Permeability:	>45 inches per /SY
Features:	Enviroloc™, HeatBlock™, Deluster, UV Stabilizers
Test Data:	Pill Test, Critical Radiant Flux, ASTM E648, ASTM F1951, ASTM F1292

APPLICATIONS



LANDSCAPE



PETS



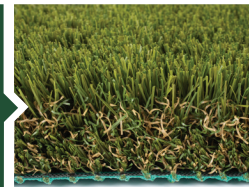
PLAY

SYNAugustine X47

Weighing in at whopping 100-ounce face weight this artificial grass variety rises above the competition with its unmatched softness and durability. Multi-color grass blades and a dense tan thatch combine to offer a leading contender in its weight class.

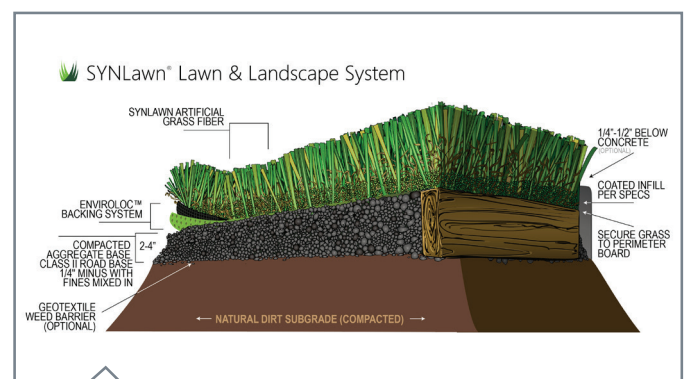
**20% Cooler**

with patented HeatBlock™ Technology

**ROLL WIDTH: 15'****LIFETIME WARRANTY**

EnviroLoc™ Backing

plant-based backing 'locks-in' turf fibers for longer lifespan.

CAD drawings available at CADdetails.com

FOOT TRAFFIC

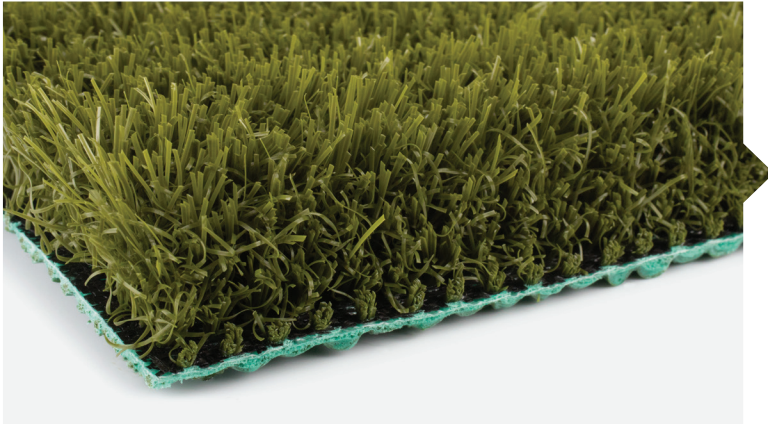


SOFTNESS

**X-Series**For ordering and questions, contact SYNLawn at 866-796-5296 or visit SYNLawn.com

SYNLAWN®

Updated 04.17.19



DETAILS

Product SKU:	SD211
Grass Zone Yarn/Color:	Nylon / Verde
Grass Zone Denier:	8,400/16
Thatch Zone Yarn/Color:	Nylon / Turf Cool/Tan
Thatch Zone Denier:	5,040/12
Grass Zone Yarn Shape:	Diamond Mono
Finished Pile Height:	7/8"
Finished Pile Weight:	60 oz.
Backing:	15/18 PP 2-part/20oz EnviroLoc™
Tuft Gauge:	3/16"
Total Weight:	86 oz.
Tuff Bind:	>8 lbs.
Fall Rating:	10'
Permeability:	>45 inches per /SY
Features:	EnviroLoc™, HeatBlock™, UV Stabilizers
Test Data:	Pill Test, Critical Radiant Flux, ASTM E648, ASTM F1951, ASTM F1292-HIC 10', IPEMA Certified

APPLICATIONS



GOLF



LANDSCAPE



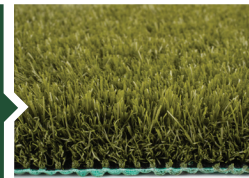
PLAY

SYNBermuda 211

A top seller! This grass is ideal for high foot traffic and works well for the most demanding applications including children's playgrounds, pet training areas, community rooftops, balconies, and golf fringe areas.



20% Cooler
with patented
HeatBlock™
Technology



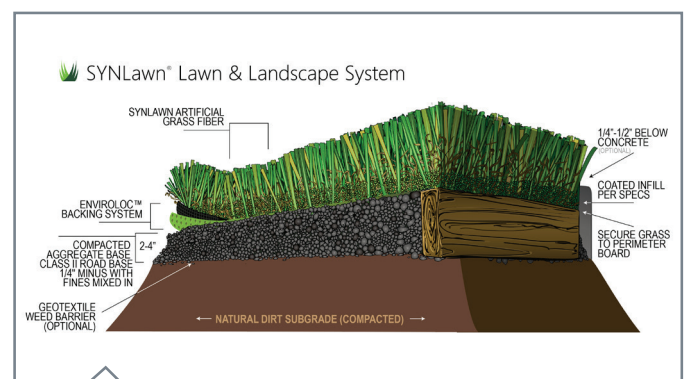
**ROLL
WIDTH: 15'**



**LIFETIME
WARRANTY**

EnviroLoc™ Backing

plant-based backing 'locks-in'
turf fibers for longer lifespan.



CAD drawings available at CADdetails.com

FOOT TRAFFIC



SOFTNESS





ARTIFICIAL GRASS >> SYNfescue 343

**DETAILS**

Product SKU:	SF343
Grass Zone Yarn/Color:	Polyethylene / Field Green/Apple
Grass Zone Denier:	10,000/6
Thatch Zone Yarn/Color:	Polyethylene / Field Green/Beige
Thatch Zone Denier:	5,040/12
Grass Zone Yarn Shape:	Omega
Finished Pile Height:	2.0"
Finished Pile Weight:	80 oz.
Backing:	15/18 PP 2-part/20oz EnviroLoc™
Tuft Gauge:	3/8"
Total Weight:	104 oz.
Tuff Bind:	>8 lbs.
Fall Rating:	9'
Permeability:	>45 inches per /SY
Features:	Enviroloc™, HeatBlock™, Deluster, UV Stabilizers
Test Data:	Pill Test, Critical Radiant Flux, ASTM E648, ASTM F1951, ASTM F1292-HIC 9'

APPLICATIONS

LANDSCAPE



PETS



PLAY



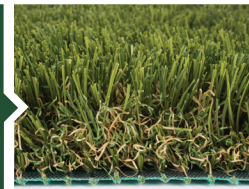
ROOFTOP

SYNFescue 343

Offering superior dimensional strength and stability while remaining easy on the wallet and eyes makes this synthetic grass one of our best selling turf styles.



20% Cooler
with patented
HeatBlock™
Technology



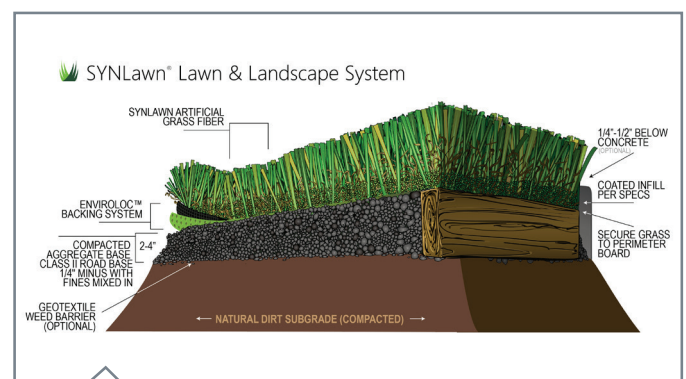
**ROLL
WIDTH: 15'**



**LIFETIME
WARRANTY**

EnviroLoc™ Backing

plant-based backing 'locks-in'
turf fibers for longer lifespan.

CAD drawings available at CADdetails.com**FOOT TRAFFIC****SOFTNESS**

For ordering and questions, contact SYNLawn at 866-796-5296 or visit SYNLawn.com



SYNLAWN®

Updated 04.17.19



ARTIFICIAL GRASS >> SYNRe 200

**DETAILS**

Product SKU:	SR200
Grass Zone Yarn/Color:	Nylon / Field Green/Clover
Grass Zone Denier:	8,400/16
Thatch Zone Yarn/Color:	Nylon / Field Green/Turf Tan
Thatch Zone Denier:	4,200/8
Grass Zone Yarn Shape:	Diamond Mono
Finished Pile Height:	1 3/4"
Finished Pile Weight:	56 oz.
Backing:	15/18 PP 2-part/20oz EnviroLoc™
Tuft Gauge:	3/8"
Total Weight:	82 oz.
Tuff Bind:	>8 lbs.
Fall Rating:	9'
Permeability:	>45 inches per /SY
Features:	Enviroloc™, HeatBlock™, UV Stabilizers
Test Data:	Pill Test, Critical Radiant Flux, ASTM E648, E108-Class Fire Rating, ASTM E84, ASTM F1951, ASTM F1292-HIC 9', ASTM E108 Class A Fire Rating

APPLICATIONS

GOLF



LANDSCAPE



PLAY



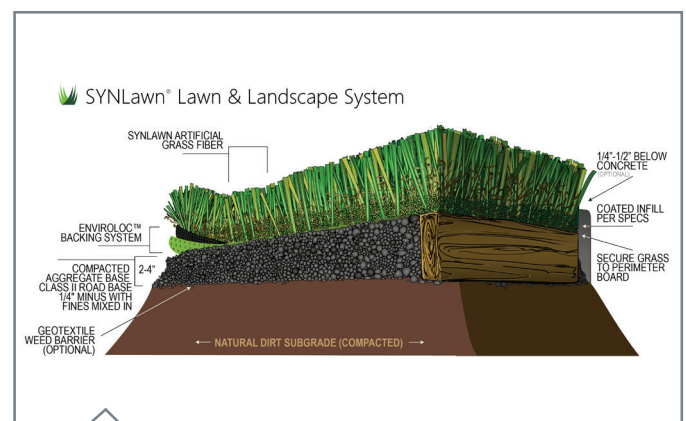
ROOFTOP

SYNRe 200

Ideal for high foot traffic areas and the most demanding applications including children's playgrounds and pet training areas. Passes even the most stringent safety tests and is recommended for rooftops, decks, and golf fringe areas.

**Coveted
E108**Class A
Fire Rating**ROLL
WIDTH: 15'****LIFETIME
WARRANTY****EnviroLoc™ Backing**

'locks-in' turf fibers for lasting beauty and longer lifespan.

CAD drawings available at CADdetails.com**FOOT TRAFFIC****SOFTNESS**



ARTIFICIAL GRASS >> SYNRe 244 8F



DETAILS

Product SKU:	SR244 8F
Grass Zone Yarn/Color:	Nylon / Field Green/Lime
Grass Zone Denier:	12,000/6
Thatch Zone Yarn/Color:	Nylon / Field Green/Turf Tan
Thatch Zone Denier:	5,040/12
Grass Zone Yarn Shape:	Diamond Mono
Finished Pile Height:	1 1/8"
Finished Pile Weight:	60 oz.
Backing:	15/18 PP 2-part, Polyurethane 5mm
Tuft Gauge:	3/8"
Total Weight:	131 oz.
Tuff Bind:	>8 lbs.
Fall Rating:	10'
Permeability:	>45 inches per /SY
Features:	EnviroLoc™, HeatBlock™, UV Stabilizers
Test Data:	Pill Test, Critical Radiant Flux, ASTM E648, ASTM F1951, ASTM F1292-HIC 10'

APPLICATIONS



GOLF



LANDSCAPE



PLAY



ROOFTOP

SYNRe 244 8F

This artificial grass is ideal for the most demanding applications including children's playgrounds pet training areas, rooftops, balconies, decks, and golf fringe areas.



20% Cooler
with patented
HeatBlock™
Technology



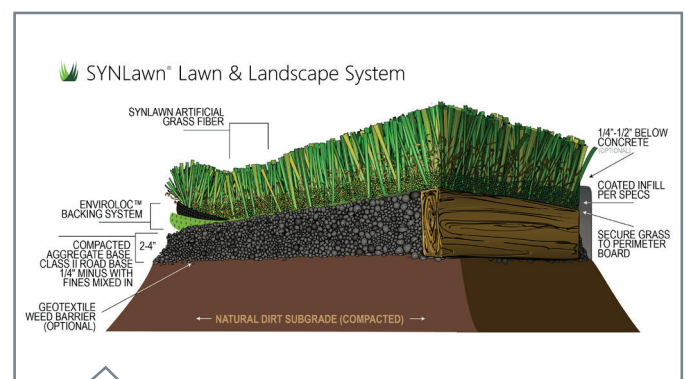
ROLL
WIDTH: 15'



LIFETIME
WARRANTY

EnviroLoc™ Backing

plant-based backing 'locks-in'
turf fibers for longer lifespan.



CAD drawings available at CADdetails.com

FOOT TRAFFIC



SOFTNESS



For ordering and questions, contact SYNLawn at 866-796-5296 or visit SYNLawn.com



SYNLAWN®

Updated 04.17.19



DETAILS

Product SKU:	SR244
Grass Zone Yarn/Color:	Nylon / Field Green/Lime
Grass Zone Denier:	8,400/16
Thatch Zone Yarn/Color:	Nylon / Field Green/Turf Tan
Thatch Zone Denier:	4,200/8
Grass Zone Yarn Shape:	Diamond Mono
Finished Pile Height:	1 1/8"
Finished Pile Weight:	60 oz.
Backing:	15/18 PP 2-part/20oz EnviroLoc™
Tuft Gauge:	3/8"
Total Weight:	86 oz.
Tuff Bind:	>8 lbs.
Fall Rating:	10'
Permeability:	>45 inches per /SY
Features:	EnviroLoc™, HeatBlock™, UV Stabilizers
Test Data:	Pill Test, Critical Radiant Flux, ASTM E648, ASTM F1951, ASTM F1292-HIC 10'

APPLICATIONS



GOLF



LANDSCAPE



PLAY



ROOFTOP

SYNRe 244

This artificial grass is ideal for the most demanding applications including children's playgrounds pet training areas, rooftops, balconies, decks, and golf fringe areas.



20% Cooler
with patented
HeatBlock™
Technology



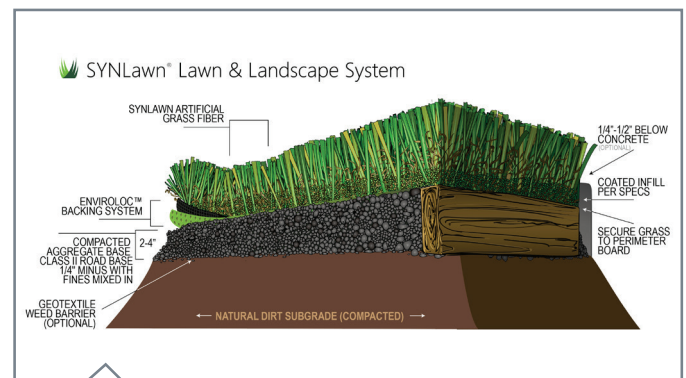
**ROLL
WIDTH: 15'**



**LIFETIME
WARRANTY**

EnviroLoc™ Backing

plant-based backing 'locks-in'
turf fibers for longer lifespan.



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FOOT TRAFFIC

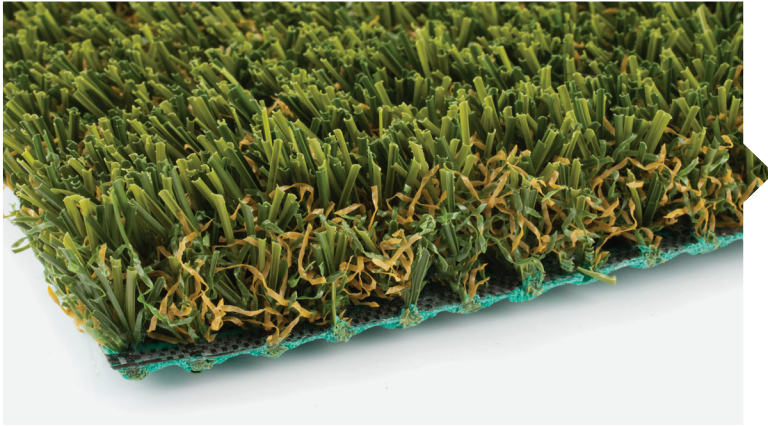


SOFTNESS





ARTIFICIAL GRASS >> SYNTipede 213



DETAILS

Product SKU:	ST243
Grass Zone Yarn/Color:	Polyethylene / Field Green/Apple
Grass Zone Denier:	10,000/6
Thatch Zone Yarn/Color:	Polyethylene / Turf Green/Tan
Thatch Zone Denier:	5,040/12
Grass Zone Yarn Shape:	Omega
Finished Pile Height:	1.0"
Finished Pile Weight:	60 oz.
Backing:	15/18 PP 2-part/20oz EnviroLoc™
Tuft Gauge:	3/8"
Total Weight:	86 oz.
Tuff Bind:	>8 lbs.
Fall Rating:	10' (per manufacturer's specifications)
Permeability:	>45 inches per /SY
Features:	EnviroLoc™, HeatBlock™, Deluster, UV Stabilizers
Test Data:	Pill Test, ASTM E648, ASTM F1951, ASTM F1292-HIC 10', IPEMA Certified

APPLICATIONS



GOLF



LANDSCAPE



PLAY



ROOFTOP



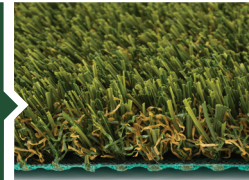
PETS

SYNTipede 243

Ideal for high foot traffic for the most demanding applications including children's playgrounds and pet training areas. Also recommended for rooftops, decks, and golf fringe areas.



20% Cooler
with patented
HeatBlock™
Technology



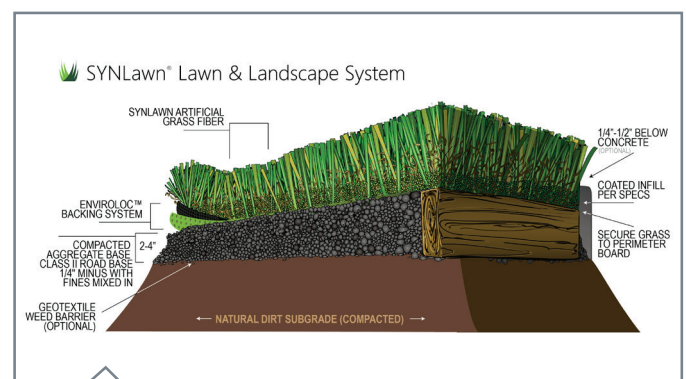
ROLL
WIDTH: 15'



LIFETIME
WARRANTY

EnviroLoc™ Backing

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turf fibers for longer lifespan.



CAD drawings available at CADdetails.com

FOOT TRAFFIC



SOFTNESS

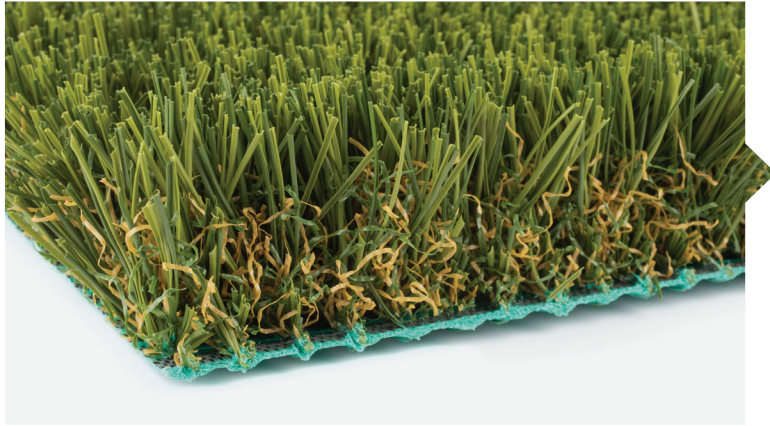


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SYNLAWN®

Updated 04.17.19



DETAILS

Product SKU:	ST343
Grass Zone Yarn/Color:	Polyethylene / Field Green/Apple
Grass Zone Denier:	10,000/6
Thatch Zone Yarn/Color:	Polyethylene / Field Green/Beige
Thatch Zone Denier:	5,040/12
Grass Zone Yarn Shape:	Omega
Finished Pile Height:	1 1/2"
Finished Pile Weight:	80 oz.
Backing:	15/18 PP 2-part/20oz EnviroLoc™
Tuft Gauge:	3/8"
Total Weight:	106 oz.
Tuff Bind:	>8 lbs.
Fall Rating:	10'
Permeability:	>45 inches per /SY
Features:	Enviroloc™, HeatBlock™, Deluster, UV Stabilizers
Test Data:	Pill Test, Critical Radiant Flux, ASTM E648, ASTM F1951, ASTM F1292-HIC 10'

APPLICATIONS



LANDSCAPE



PLAY



ROOFTOP



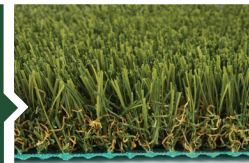
PETS

SYNTipede 343

Combining beautiful field multi-colored grass blades with our exclusive HeatBlock™ Technology to create a superior synthetic turf variety with durability and low surface temperatures.



20% Cooler
with patented
HeatBlock™
Technology



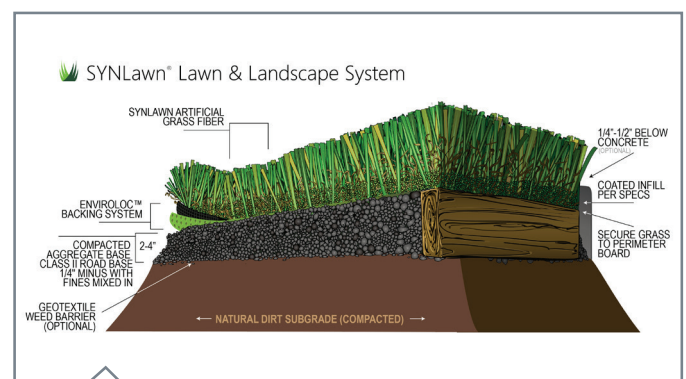
ROLL
WIDTH: 15'



LIFETIME
WARRANTY

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FOOT TRAFFIC



SOFTNESS



Association of Educational Purchasing Agencies
Tabulation Report IFB #020-A - Athletic Surfaces -
Natural & Synthetic Surfaces for Sport Fields, Tracks,
Courts, Playground & Lanscaping Applications
Vendor: AstroTurf Corporation

General Comments:

General Attachments: AstroTurf Turf Product Specs.pdf
Bid Bond - AstroTurf Corporation - AEPA.pdf
Exhibit A - Annual Report - Letter of Credit - AstroTurf Corporation.pdf
Exhibit B - Marketing Plan - AstroTurf Corporation.pdf
Laykold Court Product Specs.pdf
Part C - State Specific Forms - AstroTurf Corporation (1) - 9.13.19.pdf
Part D - Questionnaire - AstroTurf Corporation.pdf
Part E - Signature Forms - AstroTurf.pdf
Part F - Pricing Schedule - AstroTurf Corporation_Final.xlsx
Rekortan Track Product Specs.pdf
SYNLawn Landscape Product Specs.pdf