









PowerBlade Elite<sup>®</sup> is made with our advanced monofilament fibers and is the next generation in engineered performance. Designed around performance criteria that measures both athlete-surface and ball-surface interactions, PowerBlade Elite delivers a quality turf system with the best combination of durability, playability and safety. PowerBlade Elite is an engineered system specifically built to meet the stringent laboratory and field tests of FIFA. The FIFA Quality Concept ensures that your Shaw Sports Turf field delivers the maximum level of performance and quality to your athletes.

The PowerBlade Elite system is available in ten different configurations that can qualify for FIFA certifications, each with its own distinct benefits, pile heights, infill types and shock pad systems. System recommendations vary by usage and performance characteristics. Ask your sales representative to determine which system is best for your program.

**PowerBlade Elite 45** features a 1.75" (45 mm) HP+ fiber, 42-ounce pile weight and is comprised of a shock pad underlayment and either a sand / rubber layered infill or sand / TPE layered infill. **PowerBlade Elite 2.5** features a 2.5" (64mm) HP+ fiber and is available in a 40-ounce or 48-ounce pile weight with a sand/rubber layered infill. Also available with a shock pad underlayment specifically designed for the demands of rugby.

**PowerBlade Elite Geo** products are available as either a 1.75" or 2.5" Bolt fiber system but feature a layered infill that includes GeoFill<sup>®</sup>, an environmentally-friendly, organic infill.















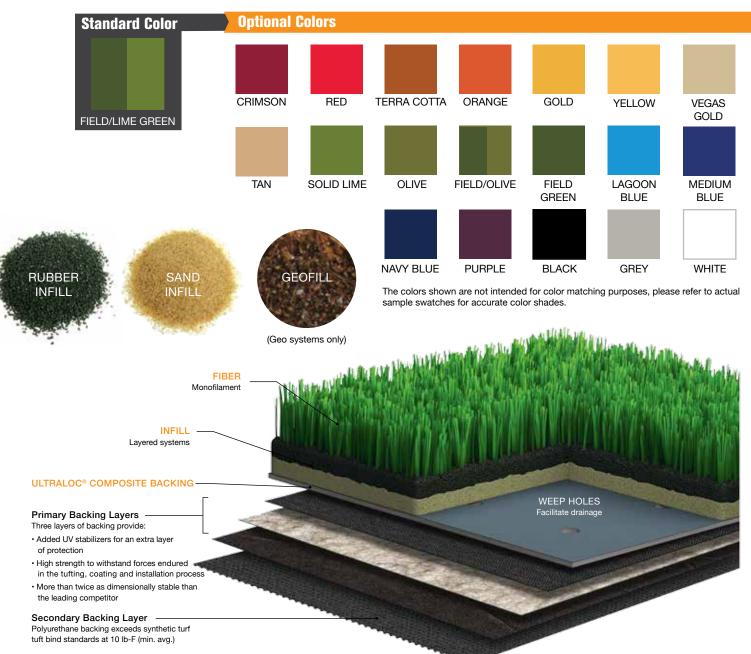
CHARACTERISTICS	PB ELITE <sup>®</sup> 45	PB ELITE <sup>®</sup> 2.5 (48 oz)	PB ELITE <sup>®</sup> 2.5 (40 oz)	PB ELITE® GEO 45	PB ELITE® GEO 2.5
Pile Weight*	42 oz/yd² - 1,424 g/m²	48 oz/yd² - 1,627 g/m²	40 oz/yd² - 1,356 g/m²	42 oz/yd² - 1,424 g/m²	48 oz/yd² - 1,627 g/m²
Pile Height*	1.75" - 45 mm	2.5" - 64 mm	2.5" - 64 mm	1.75" - 45 mm	2.5" - 64 mm
Yarn Denier*	10,800 (12,000 dtex)	10,800 (12,000 dtex)	10,800 (12,000 dtex)	10,800 (12,000 dtex)	10,800 (12,000 dtex)
Primary Backing*	8 oz/yd² - 271 g/m²	8 oz/yd² - 271 g/m²	8 oz/yd² - 271 g/m²	8 oz/yd² - 271 g/m²	8 oz/yd² - 271 g/m²
Secondary Backing**	23 oz/yd² - 780 g/m²	23 oz/yd² - 780 g/m²	23 oz/yd² - 780 g/m²	23 oz/yd² - 780 g/m²	23 oz/yd² - 780 g/m²
Product Weight*	73 oz/yd² - 2,678 g/m²	79 oz/yd² - 2,678 g/m²	71 oz/yd² - 2,407 g/m²	73 oz/yd² - 2,678 g/m²	79 oz/yd² - 2,678 g/m²
Infill	33% Rubber / 67% Sand	37.5% Rubber/ 62.5% Sand	37.5% Rubber/ 62.5% Sand	33% GeoFill/ 67% Sand	57% Rubber/24% Sand/ 15% GeoFill

\*All values are  $\pm 5\%$  \*\*All values are  $\pm 3 \text{ oz/yd}^2$ 

YARN POLYETHYLENE - Monofilament PRIMARY BACKING SYSTEM - Ultraloc **SECONDARY BACKING** - Polyurethane **TUFTING GAUGE:** 1/2"

ROLL WIDTH: 15' Perforation as required

Product specifications values are nominal; the information present is subject to change without notice. Shaw Sports Turf is not liable for technical or editorial errors or omissions contained herein. PowerBlade Elite® and Ultraloc® are trademarks of Shaw Sports Turf.



## POWERBLADE ELITE®



	SYSTEM COMPONENT	TEST	TEST PROCEDURE	SPECIFICATION	SPECIFICATION	SPECIFICATION
Iuma Duesky LenkyAsTM D157(a00(a00Backic GarwyASTM 072(a00(a03 gueccTolarusASTM 072(a03 guecc(a03 gueccBack StephASTM 0226(a03 guecc(a03 gueccTolarusASTM 0226(a01 guecc(a03 gueccTolarusASTM 0226(a01 guecc(a03 gueccTolarusASTM 0226(a01 guecc(a03 gueccTolarusASTM 0226(a01 guecc(a01 gueccTolarusASTM 0226(a01 guecc(a01 gueccTolarusASTM 0263(a01 guecc(a01 gueccPakagherASTM 0584(a01 guecc(a01 gueccPakagherASTM 1551(a01 guecc(a01 gueccPakagherASTM 1551(a14 guecc(a16 gueccPakagherASTM 1551(a16 guecc(a16 guecc	Yarn	Melt Point	ASTM D7138	120 °C	120 °C	120 °C
Specific GankyASTM D782O 805 opcO 805 opcThicknessASTM D278D 201norons (Ge 220 microns)2 201nicrons (Ge 220 microns)2 201nicrons (Ge 220 microns)Balks/Stein/AASTM D2782 201nicrons (Ge 220 microns)2 201nicrons (Ge 220 microns)2 201nicrons (Ge 220 microns)Balks/Stein/AASTM D2782 50%2 50%2 50%Tail Led ContentASTM D2782 600 pm2 50%2 600 pmBiblyASTM D2782 75° (4 mm)2 600 pm2 50° (4 mm)Tail Led ContentASTM D6982 75° (4 mm)2 600 pmBiblyASTM D6982 75° (4 mm)2 600 pm2 50° (4 mm)Tail Led ParleniASTM D6982 70° (5 microns)2 600 pmTail Book (MW)ASTM D6942 800/P2 800/P2 800/PTail Book (MW)ASTM D6942 800/P2 800/P2 800/PTail Book (Stremt)ASTM D6942 800/P2 800/P2 800/PTail Book (Stremt)ASTM D6942 800/P2 800/P2 800/PParlen Abrain ResoASTM D6942 800/P2 800/P2 800/PParlen Abrain ResoASTM D6942 800/P2 800/P2 800/PParlen Abrain ResoASTM F5511 6162 800/P2 800/PParlen Abrain ResoASTM F5511 Ritai 1 5 Gle 101 Ritai 1 5 Gle 10Parlen Arcon Forbul - PolyASTM F5511 Ritai 1 5 Gle 101 Ritai 1 5 Gle 10Parlen ResoASTM F5511 Ritai 1 5 Gle 101 Ritai 1 5 Gle 101 Ritai 1 5 Gle 10 <td></td> <td>Linear Density (Denier)*</td> <td>ASTM D1577</td> <td>10,800</td> <td>10,800</td> <td>10,800</td>		Linear Density (Denier)*	ASTM D1577	10,800	10,800	10,800
IndexIndexSIM 02:1620 Interos (6x2 20 micros)20 micros (6x2 20 micros)Beak SterighASTM 02:56> 561-F> 251-FBeak MarcinASTM 02:56> 60%> 251-FTablaad OntonASTM 02:56< 00%		Specific Gravity	ASTM D792	0.935 g/cc	0.935 g/cc	0.935 g/cc
Beak StrengthASTM 022625 LpFEnquationASTM 022626 M, 1Tal LadContentASTM 022627 M, 1Tal LadContentASTM 022627 M, 1Tal LadContentASTM 023026 M, 1Tal LadContentASTM 023027 M, 1Tal LadContentASTM 023028 A, 1Tal LadContentASTM 023028 A, 1Steh Pale PlenhonASTM 023028 A, 1Steh Pale PlenhonASTM 023028 A, 1Steh Pale PlenhonASTM 023028 A, 1Tal Bid AnghASTM 023028 A, 1Tal Bid AnghASTM 023020 LpFSteh Pale PlenhonASTM 023020 LpFTal Bid AnghASTM 023020 LpFSteh Pale PlenhonASTM 155120 LpFSteh Taction Scorer - DynASTM F15511Steh Taction Scorer - DynASTM 15511Steh Taction Scorer - DynASTM 15511Steh Taction Scorer - DynASTM 15511Steh Taction Scorer - DynASTM 2551Steh Taction Scorer - DynASTM 2551Steh Taction Sc		Thickness	ASTM D3218	240 microns (Geo 280 microns)	240 microns (Geo 280 microns)	240 microns (Geo 280 microns)
BiguinSynthySynthySynthySynthyTat Laad ContertATM D2765100 ppm100 ppmPieleigertATM D2765100 ppm200 ppmPieleigertATM D63231.5° (4mm)25° (4mm)Tufing GaugeATM D63412°100 pfmPieleigertATM D63412°200 pfmPieleigertATM D63412°200 pfmPieleigertATM D634200 pfm200 pfmPieleigertATM D634200 pfm200 pfmPieleigertATM D634200 pfm200 pfmTuf Bind AgingATM D634200 pfm200 pfmPieleigertATM D634ATM D634200 pfmPieleigert </td <td></td> <td>Break Strength</td> <td>ASTM D2256</td> <td>&gt; 25 lb-F</td> <td>&gt; 25 lb-F</td> <td>&gt; 25 lb-F</td>		Break Strength	ASTM D2256	> 25 lb-F	> 25 lb-F	> 25 lb-F
IndexFor ComparisonFor Comparison<		Elongation	ASTM D2256	> 50%	> 50%	> 50%
PieheighrSIXII D8821.75° (4 mm)2.5° (4 mm)PieheighrAGTM D68442 avg4°40 avg4°Tuffing GaugeAGTM D68442 avg4°40 avg4°Stoch Rafe PerinohAGTM D673380 needed12°Pimary Backing WTASTM D67480 needed20 avg4°Table Poduct WTASTM D68420 avg4°20 avg4°Table Adard Backing WTASTM D68420 avg4°20 avg4°Table Adard Backing WTASTM D68420 avg4°20 avg4°Table Adard Backing WTASTM D68420 avg4°20 avg4°Table Adard Strength LengthASTM D68420 avg4°20 avg4°Backing Strength LengthASTM D68420 avg4°20 avg4°Backing Strength LengthASTM D68420 avg4°20 avg4°GrankASTM D68420 avg4°20 avg4°20 avg4°Jose Taction Stocer DroyASTM F155120 avg420 avg4°Stor Taction Footbal - DroyASTM F155111 atle 1.4 Side 0.911 atle 1.5 Side 1.0Stor Taction Footbal - WeightASTM F155111 atle 1.4 Side 0.911 atle 1.4 Side 0.9Stor Taction Footbal - WeightASTM F155111 atle 1.4 Side 0.911 atle 1.4 Side 0.9Stor Taction Footbal - WeightASTM F155111 atle 1.4 Side 0.911 atle 1.4 Side 0.9Stor Taction Footbal - WeightASTM F155111 atle 1.4 Side 0.911 atle 1.4 Side 0.9Stor Taction Footbal - WeightASTM F155111 atle 1.4 Side 0.911 atle 1.4 Side 0.9Stor Taction Footbal - Weight <t< td=""><td></td><td>Total Lead Content</td><td>ASTM D2765</td><td>&lt; 100 ppm</td><td>&lt; 100 ppm</td><td>&lt; 100 ppm</td></t<>		Total Lead Content	ASTM D2765	< 100 ppm	< 100 ppm	< 100 ppm
PierweightASTM D584A convertA convertTufting GaugeASTM D57931/2"1/2"Sthch Rate /Per hothASTM D5793as neededas neededPimary Backing WtASTM D5793Backing WtBacking WtBacking WtSecondary Backing WtASTM D5848Backing WtBacking WtBacking WtTotal Product WtASTM D594Backing WtBacking WtBacking WtTotal Product WtASTM D594Backing WtBacking WtBacking WtTotal Broduct WtASTM D594Stord D504Backing WtBacking WtBacking Strength - LeighASTM D594Stord D504Stord D504Stord D504Grance Strength - NeightASTM D5034Stord D504Stord D504Stord D504Grance Strength - NeightASTM D5151Initiat 1. Stold D3Initiat 1. Stold D3Initiat 1. Stold D3Stord Tackin Fostal - WeightASTM D2834Stord M604Stord M604Stord M604Stord M604FarmabilityMittation FactoASTM D2834Stord M604Stord M604Stord M604Stord M604FarmabilityMittation FactoASTM D2834Stord M604Stor	Turf Fabric	Pile Height*	ASTM D5823	1.75" (45 mm)	2.5" (64 mm)	2.5" (65 mm)
Inting GaugeASTM D57901/2"1/2"Stich Rate (Per Inch)ASTM D5791as neededas neededPinany Backing WTASTM D5791as neededas neededSecondary Backing WTASTM D584420 acyd <sup>2</sup> 20 acyd <sup>2</sup> Total Product WTASTM D584420 acyd <sup>2</sup> 20 acyd <sup>2</sup> Pinany Backing WTASTM D584420 acyd <sup>2</sup> 20 acyd <sup>2</sup> Total Product WTASTM D584420 acyd <sup>2</sup> 20 acyd <sup>2</sup> Pinany Backing Stength - LengthASTM D594420 acyd <sup>2</sup> 20 acyd <sup>2</sup> Pinany Backing Stength - LengthASTM D593420 B-F20 acyd <sup>2</sup> Pinany Backing Stength - LengthASTM D593420 B-F20 B-FPinany Backing Stength - LengthASTM F505120 B-F20 B-FPinany Backing Stength - DayASTM F551ASTM F55120 B-FPinany Backing F551ASTM F551Initia 1.4 Sile0.9Initia 1.4 Sile0.9Pinany Backing F551ASTM F551Sile1.10Initia 1.4 Sile0.9Pinany Backing F551ASTM F551Sile1.10Initia 1.4 Sile0.9Pinany Backing F551ASTM F551Sile1.10Initia 1.4 Sile0.9Pinany Backing F551ASTM F551Sile1.10Sile1.10Pinany Backing F551ASTM F551Sile1.10Sile1.10 <td></td> <td>Pile Weight*</td> <td>ASTM D5848</td> <td>42 oz/yd<sup>2</sup></td> <td>40 oz/yd²</td> <td>48 oz/yd²</td>		Pile Weight*	ASTM D5848	42 oz/yd <sup>2</sup>	40 oz/yd²	48 oz/yd²
Sitch Rate (Per Inch)SITM D5793as neededas neededPinnary Backing Wt*ASTM D594880:/yd*80:/yd*Secondary Backing Wt*ASTM D594880:/yd*80:/yd*Total Product Wt*ASTM D594823.oz/yd*23.oz/yd*Tuf Bind (Aug)ASTM D594873.oz/yd*23.oz/yd*Pasking Strength - LengthASTM D594473.oz/yd*210.b-FPasking Strength - LengthASTM D594420.01b-F20.01b-FPasking Strength - WidthASTM D594420.01b-F20.01b-FPasking Strength - LengthASTM D594420.01b-F20.01b-FPasking Strength - DynASTM F151Initiat 1.4 Silde 0.920.01b-FPasking Strength - DynASTM F151Initiat 1.4 Silde 0.9Initiat 1.4 Silde 0.9Pasking Strength - DynASTM F151Initiat 1.4 Silde 0.9Initiat 1.4 Silde 0.9Pasking Strength - DynASTM D295Initiat 1.4 Silde 0.9Initiat 1.4 Silde 0.9Pasking Strength - DynASTM D295Strength - DynStrength - DynPasking Strength - DynBST044 Method4>14 I		Tufting Gauge	ASTM D5793	1/2"	1/2"	1/2"
Primary Backing WtASTM D5848BozydrBozydrSecondary Backing Wt**ASTM D584823 ozydr23 ozydrTotal Product Wt**ASTM D584873 ozydr73 ozydrTuf Bind (Arg)ASTM D503473 ozydr71 ozydrPaaking Strength-LengthASTM D5034200 b-F200 b-FPaaking Strength-LengthASTM D5034200 b-F200 b-FPaaking Strength-WidthASTM F1551200 b-F200 b-FPaaking Stoceer-DryhASTM F15512168 0.911181at 1.4 Side 0.9Shoe Traction (Soccer-Wei)ASTM F155111181at 1.4 Side 0.911181at 1.4 Side 0.9Shoe Traction (Footbal-Uryh)ASTM F155111181at 1.4 Side 0.911181at 1.4 Side 0.9Shoe Traction (Footbal-Uryh)ASTM D285980 f8 Pass80 f8 PassFarmabilityASTM D285980 f8 Pass80 f8 PassVertical Bal ReboundASTM P2117>06 m>06 m		Stitch Rate (Per Inch)	ASTM D5793	as needed	as needed	as needed
Secondary Backing WY:ASTM D584820 azydf20 azydfTotal Product WY:ASTM D584870 azydf71 azydfTuf Bind (Arg)ASTM D58470 azydf71 azydfBraking Strength - LengthASTM D5034>200 lb-F>10 lb-FBraking Strength - WithhASTM D5034>200 lb-F>200 lb-FBraking Strength - WithhASTM D5034>200 lb-F>200 lb-FJonaxASTM F555>165>200 lb-F>200 lb-FJonaxASTM F557<165		Primary Backing Wt*	ASTM D5848	8 oz/yd <sup>2</sup>	8 oz/yd²	8 oz/yd²
Tad Product WrASTM D5848To zydPTo zydPTur Bind (Arg)ASTM D584To zydPTo zydPIn Bind (Arg)ASTM D1333>101 b-F>101 b-FBracking Strength - LengthASTM D5034>200 1b-F>200 1b-FBracking Strength WidthASTM D5034>200 1b-F>200 1b-FBracking Strength WidthASTM D5034>200 1b-F>200 1b-FGranaxASTM D5034>200 1b-F>200 1b-FIn Praction (Scocer - Dry)ASTM F1551>165>200 1b-FShoe Traction (Scocer - Wei)ASTM F1551Initiate 1.4 Slide 0.9Initiate 1.4 Slide 0.9Shoe Traction (Forball - Dry)ASTM F1551Initiate 1.4 Slide 0.9Initiate 1.4 Slide 0.9Shoe Traction (Forball - Dry)ASTM F1551Initiate 1.4 Slide 0.9Initiate 1.4 Slide 0.9Shoe Traction (Forball - Wei)ASTM F1551Initiate 1.4 Slide 0.9Initiate 1.4 Slide 0.9Shoe Traction (Forball - Wei)ASTM F1551Initiate 1.4 Slide 0.9Initiate 1.4 Slide 0.9Inititation R		Secondary Backing Wt**	ASTM D5848	23 oz/yd <sup>2</sup>	23 oz/yd²	23 oz/yd²
Tuf Bind (Avg)ATM D133>101b-F>101b-FBeaking Strength - LengthATM D034>2001b-F>2001b-FBeaking Strength - WidthATM D034>2001b-F>201b-FBraaking Strength - WidthATM D034>2001b-F>201b-Fg-maxASTM D034>1065>2001b-F>201b-Fg-maxASTM F1551<165		Total Product Wt*	ASTM D5848	73 oz/yd²	71 oz/yd²	79 oz/yd²
Beaking Strength - LengthASTM D5034200 lb-F200 lb-FBeaking Strength - WidthASTM D5034200 lb-F200 lb-Fg-maxASTM F351200 lb-F200 lb-FRelative Abrasive IndexASTM F351<165		Tuft Bind (Avg)	ASTM D1335	>10 lb-F	>10 lb-F	>10 lb-F
Beaking Stength - WidthASTM D5034> 200 lb-F> 200 lb-Fg-maxASTM F355< 165		Breaking Strength - Length	ASTM D5034	> 200 lb-F	> 200 lb-F	> 200 lb-F
g-maxg-maxASTM F355Relative Abrasive IndexASTM F1551<45		Breaking Strength - Width	ASTM D5034	> 200 lb-F	> 200 lb-F	> 200 lb-F
ASTM F1551 <45   ASTM F1551 Initiate 1.4 Silde 0.9 Initiate 1.4 Silde 0.9   ASTM F1551 Initiate 1.4 Silde 0.9 Initiate 1.4 Silde 0.9   ASTM F1551 Initiate 1.4 Silde 0.9 Initiate 1.4 Silde 0.9   ASTM F1551 Initiate 1.4 Silde 0.9 Initiate 1.4 Silde 0.9   ASTM F1551 Initiate 1.4 Silde 0.9 Initiate 1.4 Silde 0.9   ASTM F1551 Initiate 1.4 Silde 0.9 Initiate 1.4 Silde 0.9   ASTM F1551 Initiate 1.4 Silde 0.9 Initiate 1.4 Silde 0.9   ASTM P2859 Initiate 1.4 Silde 0.9 Initiate 1.4 Silde 0.9   BS 7044 Method4 >14 in/hr >14 in/hr   ASTM F2117 >0.6 m >0.6 m	Turf System	g-max	ASTM F355	< 165	< 165	< 165
ASTM F1551 Initiate 1.4 Silde 0.9 Initiate 1.4 Silde 0.9   ASTM F1551 Initiate 1.4 Silde 0.9 Initiate 1.5 Silde 1.0   ASTM F1551 Initiate 1.5 Silde 1.0 Initiate 1.4 Silde 0.9   ASTM F1551 Initiate 1.4 Silde 0.9 Initiate 1.4 Silde 0.9   ASTM F1551 Initiate 1.4 Silde 0.9 Initiate 1.4 Silde 0.9   ASTM D2859 Initiate 1.4 Silde 0.9 Initiate 1.4 Silde 0.9   BS 7044 Method 4 > 14 in/hr > 14 in/hr   ASTM F2117 > 0.6 m > 0.6 m		Relative Abrasive Index	ASTM F1551	< 45	< 45	< 45
ASTM F1551 Initiate 1.4 Silde 0.9 Initiate 1.5 Silde 1.0   ASTM F1551 Initiate 1.5 Silde 1.0 Initiate 1.4 Silde 0.9   ASTM F1551 Initiate 1.4 Silde 0.9 Initiate 1.4 Silde 0.9   ASTM F1551 Initiate 1.4 Silde 0.9 Initiate 1.4 Silde 0.9   ASTM D2859 8 of 8 Pass 8 of 8 Pass   BS 7044 Method 4 > 14 in/hr > 14 in/hr   > 0.6 m > 0.6 m > 0.6 m		Shoe Traction (Soccer - Dry)	ASTM F1551	Initiate 1.4 Slide 0.9	Initiate 1.4 Slide 0.9	Initiate 1.4 Slide 0.9
ASTM F1551 Initiate 1.5 Slide 1.0 Initiate 1.4 Slide 0.9   ASTM F1551 Initiate 1.4 Slide 0.9 Initiate 1.4 Slide 0.9   ASTM D2859 8 of 8 Pass Initiate 1.4 Slide 0.9   BS 7044 Method 4 > 14 in/hr > 14 in/hr   ASTM F2117 > 0.6 m > 0.6 m		Shoe Traction (Soccer - Wet)	ASTM F1551	Initiate 1.4 Slide 0.9	Initiate 1.5 Slide 1.0	Initiate 1.4 Slide 0.9
ASTM F1551 Initiate 1.4 Silde 0.9 Initiate 1.4 Silde 0.9   ASTM D2859 8 of 8 Pass 8 of 8 Pass   BS 7044 Method 4 > 14 in/hr > 14 in/hr   ASTM F2117 > 0.6 m > 0.6 m		Shoe Traction (Football - Dry)	ASTM F1551	Initiate 1.5 Slide 1.0	Initiate 1.4 Slide 0.9	Initiate 1.4 Slide 0.9
ASTM D2859 8 of 8 Pass 8 of 8 Pass   BS 7044 Method 4 > 14 in/hr > 14 in/hr   ASTM F2117 > 0.6 m > 0.6 m		Shoe Traction (Football - Wet)	ASTM F1551	Initiate 1.4 Slide 0.9	Initiate 1.4 Slide 0.9	Initiate 1.4 Slide 0.9
BS 7044 Method 4 > 14 in/hr > 14 in/hr   ASTM F2117 > 0.6 m > 0.6 m		Flammability	ASTM D2859	8 of 8 Pass	8 of 8 Pass	8 of 8 Pass
ASTM F2117 > 0.6 m > 0.6 m		Infiltration Rate	BS 7044 Method 4	> 14 in/hr	> 14 in/hr	> 14 in/hr
		Vertical Ball Rebound	ASTM F2117	> 0.6 m	> 0.6 m	> 0.6 m

© 2014 Shaw Sports Turf

Except where noted as a minimum or maximum, the above specifications are nominal. \*All values are  $\pm$  5% \*\*All values are  $\pm$  3 cZ/yd<sup>e</sup>