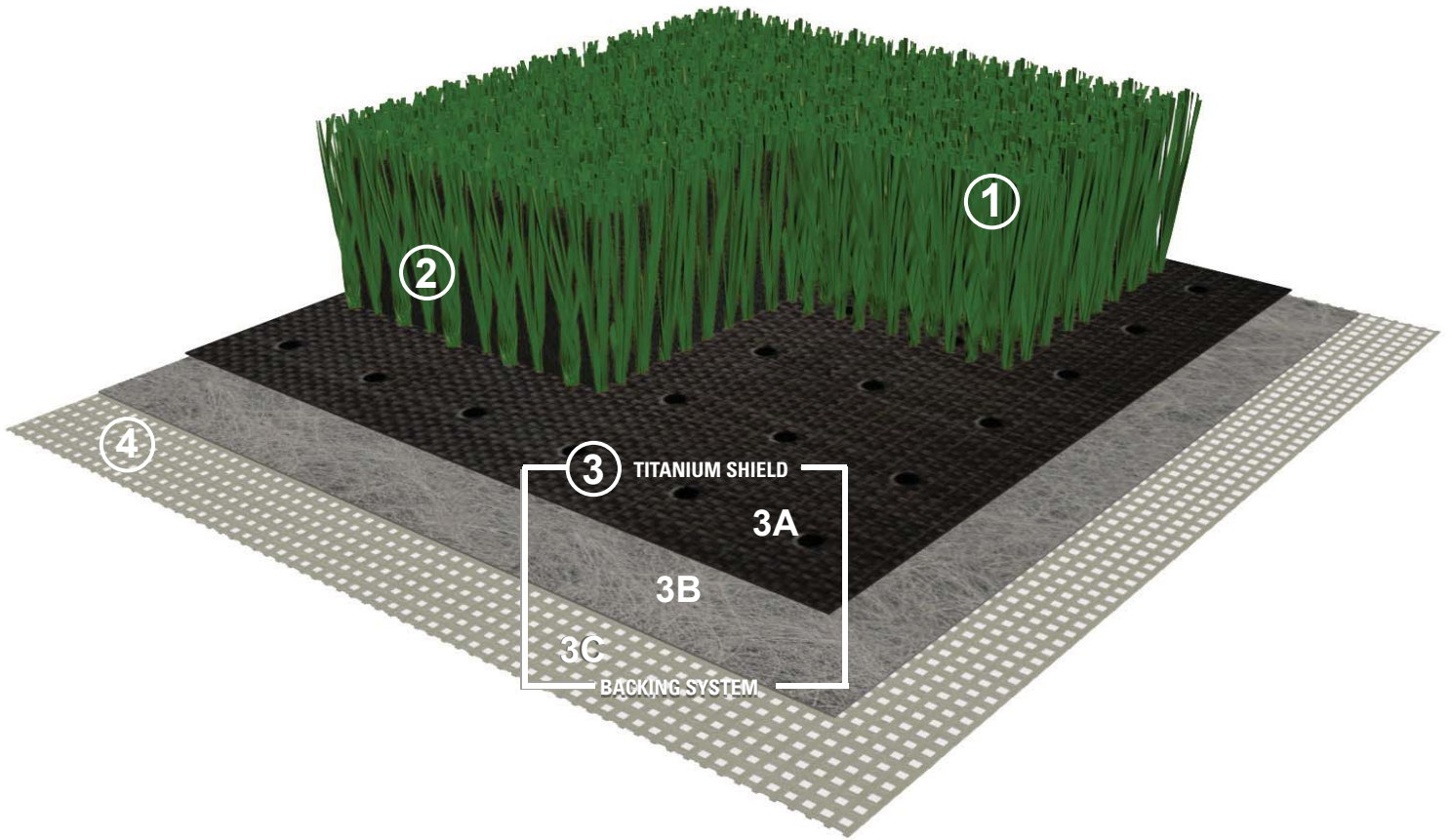


TURF
NATION™



TN-46-SM
PDS-TN-46-SM PRODUCT DATA SHEET



TN-46-SM SYNTHETIC TURF SYSTEM

- ① TN-46-SM Dual fiber is made with a blend of slit-film and monofilament for unsurpassed durability and performance.
- ② Specialized infill mixture designed to optimize performance and player safety.
- ③ **TITANIUM SHIELD BACKING SYSTEM**
Our premier backing system includes multiple layers for long lasting play and performance.
 - 3A.** Woven 18-Pic Polybac to secure fiber retention.
 - 3B.** Non-Woven 80-Gram Colbond affords maximum dimensional stability.
 - 3C.** Woven 5-Pic synthetic layer to enhance seaming properties.
- ④ Premium grade urethane coating to ensure a superior tuft bind.





The TN-46-SM is engineered to be an affordable dual fiber system. Incorporating the perfect balance of high grade monofilament and slit film fibers, the TN-46-SM features maximum player safety and optimal sports specific performance that is durable.

TN-46-SM FEATURES



SPECIFICATION	GRASS ZONE		PRODUCT SPECIFICATIONS: TN4651AXCM
FIBER	SLIT FILM	MONOFILAMENT	GRASS ZONE: 46 oz.
FIBER TYPE	SLIT FILM	MONOFILAMENT	S / M FIBER SYSTEM
FIBER HEIGHT	2.0 INCHES / 51 MM	2.0 INCHES / 51 MM	BACKING: 8 oz.
FIBER DENIER	9,000 DENIER / 10,000 DTEX	10,800 DENIER / 12,000 DTEX	SECONDARY BACKING: 22 oz.
FIBER MICRONS	115	350	TOTAL SYSTEM WEIGHT: 76 oz.
FILAMENT STRUCTURE	7 FIBRILS	6 FIBRILS	STANDARD COLOR: FIELD GREEN / OLIVE GREEN
FIBRIL WIDTH	0.0472 INCHES / 1.2 MM	0.0551 INCHES / 1.4 MM	AVAILABLE IN 2.25" AND 2.50" PILE HEIGHTS

* These specifications are standard and may vary slightly due to manufacturing tolerances or consumer specifications.

STANDARD COLORS

DESIGNER COLOR PALLETTE



Printed colors only approximate the actual fiber colors. Physical fiber samples are available upon request. Custom colors may also be available, additional charges and minimum quantities may apply to non-standard colors.



TURF NATION™ TN-46-SM

PRODUCT DETAIL SHEET



	TEST CODE	TEST RESULTS		TEST DESCRIPTION	TEST NAME
PERFORMANCE TESTING	ASTM F355-01	G _{max} 105 / 310 HIC		G _{max} Rating	Standard test method for shock-absorbing properties of playing surface systems and materials
	ASTM F1015-03	34 ± 2		RELATIVE ABRASIVE INDEX	Standard test method for relative abrasiveness of synthetic turf playing surfaces
	ASTM F2117-01	30.43 INCHES / 77.3 CM		AVERAGE BALL REBOUND HEIGHT	Standard test method for vertical rebound characteristics of sports surface/ball systems; acoustical measurement
	ASTM F2117-01	0.38 (CR)		COEFFICIENT OF RESTITUTION (CR)	Standard test method for vertical rebound characteristics of sports surface/ball systems; acoustical measurement
	ASTM F1551-03	30.96 INCHES / 78.63 CM		AVERAGE BALL BOUNCE	Standard test methods for comprehensive characterization of synthetic turf playing surfaces and materials
	ASTM F1551-03	STATIC COF: 1.35 DYNAMIC COF: 0.84		SOCCER SHOE TRACTION – DRY	Standard test methods for comprehensive characterization of synthetic turf playing surfaces and materials
	ASTM F1551-03	STATIC COF: 1.29 DYNAMIC COF: 0.80		SOCCER SHOE TRACTION – WET	Standard test methods for comprehensive characterization of synthetic turf playing surfaces and materials
	ASTM F1551-03	STATIC COF: 1.30 DYNAMIC COF: 0.82		FOOTBALL SHOE TRACTION – DRY	Standard test methods for comprehensive characterization of synthetic turf playing surfaces and materials
	ASTM F1551-03	STATIC COF: 1.130 DYNAMIC COF: 0.80		FOOTBALL SHOE TRACTION – WET	Standard test methods for comprehensive characterization of synthetic turf playing surfaces and materials
SYSTEM TESTING	ASTM D5848-07	77.51 OZ Y ² / 2.19 KG M ²		TOTAL WEIGHT	Standard test method for mass per unit area of pile yarn floor coverings
	ASTM D5848-07	46.5 OZ Y ² / 1.31 KG M ²		PILE WEIGHT	Standard test method for mass per unit area of pile yarn floor coverings
	ASTM D5848-07	7.72 OZ Y ² / 0.21 KG M ²		PRIMARY BACKING WEIGHT	Standard test method for mass per unit area of pile yarn floor coverings
	ASTM D5848-07	23.29 OZ Y ² / 0.66 KG M ²		SECONDARY BACKING WEIGHT	Standard test method for mass per unit area of pile yarn floor coverings
	ASTM D5823-05A	2.25 INCHES / 57.15 MM		PILE HEIGHT	Standard test method for tuft height of pile floor coverings
	ASTM D1335-05	EXCEEDS STC STANDARDS		TUFT BIND STRENGTH	Standard test method for tuft bind of pile yarn floor coverings
	ASTM D5034-09	(MD) 301 LBS FORCE / 1339 N		GRAB TEAR STRENGTH	Standard test method for breaking strength and elongation of textile fabrics (grab test)
	ASTM D5034-09	(CMD) 337 LBS FORCE / 1499 N		GRAB TEAR STRENGTH	Standard test method for breaking strength and elongation of textile fabrics (grab test)
	ASTM D5793-05	9 PER 3 INCHES / 9 PER 7.6 CM		STITCHES PER 3 INCHES	Standard test method for binding sites per unit length or width of pile yarn floor coverings
	ASTM D5793-05	3/8 INCH / 9.5 MM		MACHINE GAUGE	Standard test method for binding sites per unit length or width of pile yarn floor coverings
	ASTM D2859-06	PASS		FLAMMABILITY – PILL BURN	Standard test method for ignition characteristics of finished textile floor covering materials
	ASTM E648-08B	N/A		FLAMMABILITY – RADIANT PANEL	Standard test method for critical radiant flux of floor-covering systems using a radiant heat energy source
	ASTM F1951-09	PASS		WHEEL CHAIR ACCESSIBILITY	Standard specification for determination of accessibility of surface systems under and around playground equipment
	BS7044 - METHOD 4	EXCEEDS 40 INCHES (1016 MM) PER HR		INFILTRATION RATE	Determination of infiltration rate-buffered ponding-type infiltrometer
	FIBER TESTING	ASTM D1907-07	SLIT FILM: 9,000 DENIER / 10,000 DTEX	MONOFILAMENT: 10,800 DENIER / 12,000 DTEX	FIBER DENIER
ASTM D3218-07		SLIT FILM: 0.041 INCHES / 1.041 MM	MONOFILAMENT: 0.03 INCHES / 0.762 MM	FIBER THICKNESS	Standard specification for polyolefin monofilaments
ASTM D3218-07		SLIT FILM: 0.04 INCHES / 1.2 MM	MONOFILAMENT: 0.05 INCHES / 1.4 MM	FIBER WIDTH	Standard specification for polyolefin monofilaments
ASTM D789-07		SLIT FILM: 248°F / 120°C	MONOFILAMENT: 250°F / 121°C	FIBER MELTING POINT	Standard test methods for determination of solution viscosities of polyamide (pa)
ASTM D792-08		SLIT FILM: 0.95	MONOFILAMENT: 0.95	FIBER SPECIFIC GRAVITY	Standard test methods for density and specific gravity (relative density) of plastics by displacement
ASTM D2256-02(2008)		SLIT FILM: 25.46 LBS/FORCE/FT	MONOFILAMENT: 27.40 LBS/FORCE/FT	FIBER BREAKING STRENGTH	Standard test method for tensile properties of yarns by the single-strand method
ASTM D2256-02(2008)		SLIT FILM: 34.2 %	MONOFILAMENT: 79.6 %	FIBER ELONGATION	Standard test method for tensile properties of yarns by the single-strand method