TENCATE

PROPOSAL FORM 1:
TECHNICAL PROPOSAL

"Creating healthier more beautiful communities."

Response to Equalis Group
RFP COG-2164
Sports Surfacing and Related Solutions

REQUEST FOR PROPOSALS:

Sports Surfacing & Related Solutions

RFP #:

COG-2164

ISSUED BY:

The Cooperative Council of Governments

On Behalf of Equalis Group

6001 Cochran Road, Suite 333

Cleveland, Ohio 44139

DATED:

March 7, 2025

SECTION TWO:

Proposal Submission Documents, Technical Proposal, Cost Proposal and Other Required Forms

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PROPOSAL FORM CHECKLIST

The following documents must be submitted with the Proposal

The below documents can be found in Section 2; Proposal Submission and Required Forms and must be submitted with the proposal. Please note Proposal Form 2 is a separate attachment (attachment B).

TECHNICAL PROPOSAL

- ☒ **Proposal Form 1: Technical Proposal**

PROPOSAL PRICING: Attachment B is provided separately in a Microsoft Excel file and is required to complete your cost proposal.

- ☒ **Proposal Form 2: Cost Proposal**

OTHER REQUIRED PROPOSAL FORMS:

- ☒ **Proposal Form 3: Diversity Vendor Certification Participation**
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PROPOSAL FORM 1: TECHNICAL PROPOSAL

1. OVERVIEW & QUALIFICATIONS

1.1. Company Information

1.1.1. ***Company Name***:	Polyloom Corporation of America dba TenCate Grass N.A.
1.1.2. ***Corporate Street Address***:	736 Market Street, Ste 1700, Chattanooga, TN 37402
1.1.3. ***Website***:	www.tencategrass.com
1.1.4. ***Formation***. In what year was the company formed? For how long has your company been operating under its present business name? If your company has changed its business name, include the most recent prior business name and the year of the name change.	Please see below.

PLEASE NOTE: We are responding as Polyloom Corporation of America doing business as TenCate Grass, N.A.. All future references to respondent will be as TenCate Grass, TenCate Grass Sports Division or TCG and is representative of the entire TenCate Grass organization of companies identified herein.. Our founding company's roots date back to the early 18th century beginning as a yarn distributor and linen product manufacturer in the Netherlands and worldwide. In the late 1960s, TenCate began developing the first generation of artificial turf fibers and backings for sports fields. TenCate evolved into a global manufacturer of synthetic yarns for giants in the aerospace industry, such as Boeing and NASA. TenCate's team of scientists and engineers continue to work cohesively to take those same revolutionary technologies and apply them to our line of artificial sports surfaces manufactured today. The TenCate family has grown in large part by establishing a significant U.S. presence through Polyloom Corporation of America dba TenCate Grass N.A. in 1982 beginning with the supply of its revolutionary synthetic turf to the top turf companies in the U.S. Through the years TenCate Grass has acquired the top sports turf and landscape companies across America to ensure quality control of the sports surfaces it manufactures. Now, our Ten Cate Grass Sports Division, a collective of industry-leading companies, is unified by a single goal: pushing boundaries to create and install the safest, most innovative, highest quality sports playing surfaces. TenCate Grass Sports Division has strengthened our capabilities and broadened our reach. Alongside our core sports surfacing products, we go beyond the surface, offering the distribution and complete turnkey construction of the athletic facilities that house them nationwide. We strive to be the clear market share leader in terms of percentage of the U.S. covered by TenCate Grass' synthetic sports surfaces from NFL Fields to back yards. Please visit our website for more information at https://tencategrass.com/ and our subsidiary company websites listed therein. The Ten Cate Grass Sports Division's companies are made up of a vast network of locations and sales personnel strategically located throughout the entire country. There is no territory in the U.S. left untouched

1.1.5. ***Primary Point of Contact***. Provide information about the Respondent representative/contact person authorized to answer questions regarding the proposal submitted by your company:	Name:	Ruth Hawley
	Title:	Director of Cooperative Purchasing
	Phone:	512-809-9509
	E-Mail Address:	r.hawley@tencategrass.com
1.1.6. ***Authorized Representative***. Print or type the name of the Respondent representative authorized to address contractual issues, including the authority to execute a contract on behalf of Respondent, and to whom legal notices regarding contract termination or breach, should be sent (if not the same	Name:	Martin Olinger
	Title:	President, TenCate Grass Sports Division
	Phone:	404-229-4135

individual as in 1.1.9., provide the following information on each such representative and specify their function).	E-Mail Address:	m.olinger@tencategrass.com
1.2. Financial Strength & Legal Considerations		
1.2.1. ***Financial Strength***. Demonstrate your financial strength and stability with meaningful data. This could include, but is not limited to, such items as financial statements, SEC filings, credit & bond ratings, letters of credit, and detailed refence letters. **Note**: If the information disclosed in your response is considered "Trade Secret" as defined in Ohio Revised Code, Respondents may mark the information as a "Trade Secret" and the response will be redacted from any future use of the RFP response.	We are financially stable. Please see bonding capacity provided herein under 1.2.1 below. Financial Statements are available upon request.	
1.2.2. ***Bankruptcy & Insolvency*.** Describe any bankruptcy or insolvency for your organization (or its predecessors, if any) or any principal of the firm in the last three (3) years.	None	
1.2.3. ***Litigation*.** Describe any litigation in which your company has been involved in the last three (3) years and the status of that litigation.	This is confidential and privileged information. We do not have any past or present litigation, bankruptcy or reorganization that would negatively impact our performance under any awarded Master Agreement.	
1.3. Industry Qualifications		
1.3.1. ***Company Identification.*** How is your organization best identified? Is it a manufacturer, distributor, dealer, reseller, or service provider?	TenCate Grass N.A. is a manufacturer of synthetic turf products. Several of our subsidiary companies are manufacturers of sports surfacing products also offered under this RFP. All products manufactured by the TenCate Grass organization/family are herein offered for sale and installation by the TenCate Grass family of companies.	
1.3.2. ***Manufacturer Authorization.*** If your company is best described as a distributor, dealer, reseller, or similar entity please certify that your organization is authorized to sell the products and services at the price points disclosed in this proposal.	The TenCate Grass organization manufacturers the sports surfacing products herein proposed. TenCate Grass certifies that our organization will not offer products that may be considered open market products to customers that we are not authorized to sell and/or install.	
1.3.3. ***Authorized Distributors, Agents, Dealers, or Resellers***. Describe the different channels in which this contract will be made available to Equalis Group Members.	Please see response to this 1.3.3 provided below.	

Your response should include, but is not limited to, whether your organization will serve as the single point of sale or if the contract will be made available through a network of distributors, agents, dealers, or resellers. **NOTE:** Respondents intending to authorize distributors, agents, dealers, or resellers must complete **Proposal Form 7 - Dealer, Distributor and Reseller Authorization Form**.	

Contract will be made available through the TenCate Grass Sports Division comprised of our network of affiliated/subsidiary companies and network of dealers to include the following (TenCate reserves the right to add and remove from the below this as companies are acquired and/or dealers vetted and added or removed). All sales through any awarded Equalis contract are to be submitted through our SalesForce CRM system or otherwise reported to our dedicated TenCate Cooperative Purchasing Department immediately upon award by an Equalis Member. Our Cooperative Purchasing Department is responsible for tracking the sale and reporting it directly to Equalis.

Academy Sports Turf, Inc.
3740 South Jason Street
Englewood, CO 80110
800-372-6639
https://www.academysportsturf.com/

Established in 2000, Academy Sports Turf designs, builds and maintains premium sports surfaces in Colorado and neighboring states. It is known as the first adopter of TenCate Grass' Ironturf Woven Sports Turf and for its outstanding install capability.

Applied Landscape Technologies, Inc.
145 River Road
Montville, NJ 07045
973-402-6544

Applied Landscape Technologies is a Heavy Civil General Contractor that focuses on turnkey Ballfield Construction, both Synthetic Turf and Natural Grass.

Athletic Fields of America, Inc.
1179 Knoll Rd
Boonton, NJ 07005
973-794-3999
https://www.athleticfieldsofamerica.com/

Athletic Fields of America is an industry leader in synthetic turf serving the greater New York, New Jersey and Eastern PA regions delivering hundreds of both synthetic turf and natural grass sports fields from youth and recreational levels all the way up to the highest standards and requirements of the NCAA.

ATT Sports, Inc.
115 B. Cross Keys Road
Berlin, NJ 08009

856-767-3088
www.attsports.com

ATT Sports, Inc. was started in 2004 by Tony Cunningham in Berlin, N.J. bringing decades of experience in athletic facility construction around the country to a specialized, trust- and knowledge-driven all-weather running track company. His working philosophy at ATT Sports, Inc. has been and remains today that we will always do what is right by our customer. Certified Track Builder on staff issued by the American Sports Builders Association

Byrom-Davey , Inc.
13220 Evening Creek Drive South, Ste 103
San Diego, CA 92128
858-513-7199
www.byrom-davey.com

Byrom-Davey Inc., headquartered in San Diego, is the leading provider of athletic facility design and construction in Southern California. Founded in 2001 by Steve Davey and Joe Byrom, the company has built over 600 athletic facilities in the state.

GeoSport Lighting Systems LLC
7080 St Gabriel Ave suite B
St Gabriel, LA 70776
877-730-4762
https://geosportlighting.com/

GeoSport Lighting Systems LLC was formed in 2015 and functioned as a stand-alone division of Geosurfaces beginning in 2009. GSL was one of the first companies in the country to offer complete plug and play LED sport lighting systems. GSL is a tunrkey provider of high performing LED sport lighting “plug and play” systems including poles, cross arms, harnesses, boxes, controls, dynamic scenes and RGB capabilities.

GeoSurfaces
7080 St. Gabriel Ave
St. Gabriel, LA 70776
800-777-1320
www.geosurfaces.com

GeoSurfaces NE Office
217 New Boston St.
Woburn, MA 01801
800-777-1320

GeoSurfaces SE Office
150 River Park Road
Mooresville, NC 28117
704-660-3000

GeoSurfaces Midwest Office
10170 State Route 00
Bloomsdale, MO 63627
636-937-1268

GeoSurfaces SW Office

14425 Wagg Way Rd.
Houston, TX 77041
636-937-1268

GeoSurfaces has specialized in turn-key sports surface solutions for over 25 years, from design to installation. GeoSurfaces installed the first field in the Gulf Shores South at West Monroe High School in Louisiana in 2002 followed by the first field in Arkansas at Shiloh Christian School later that year. GeoSurfaces has introduced more industry changing intellectual property that any other in the industry to include involvement in the original infill turf patent to leading shock pad and structural base technologies.

Greenfields USA
1131 Broadway Street
Dayton, TN 37321
855-773-6668
info@greenfieldsusa.com

In 2010, Greenfields officially became a part of TenCate group of companies. This historic partnership assisted Greenfields in us elevating their brand and company position as a leader in the industry of synthetic sports turf.

Hellas Construction, Inc. (Main office)
12000 West Parmer Lane
Austin, TX 78613
800-233-5714
www.hellasconstruction.com
Certified Field, Track and Tennis Court Builders on staff issued by the American Sports Builders Association.

Hellas Construction, Inc. began operations in 2004. The Company's core competencies have revolved around the construction, design, manufacture, sale and installation of high-quality synthetic sports playing surfaces, sports lighting and athletic facilities from coast to coast. Hellas has over 1,000 pieces of construction equipment and 1,000 employees to include installation and construction crews located throughout the U.S. Please refer to US locations below.

One Cowboy's Way, Ste 180
Frisco, TX 75034

25700 IH 45 North, Ste 160
Spring, TX 77386

5135 Avenida Encinas, Ste A
Carlsbad, CA 92008

23104 57th Avenue West
Mountlake Terrace, WA 98043

8260 North Loop Drive
El Paso, TX 79907

2312 South Loop 1604 West
San Antonio, TX 78264

1401 North University Drive, Ste 501
Coral Springs, FL 33071

221 Sunpac Avenue
Henderson NV 89011

5347 West Like Ave, Ste 100
Glendale, AZ 85301

755 Boardman-Canfield Rd, Ste F8
Boardman, OH 44512

1440 E. English Street
Wichita, KS 67211

Manufacturing Facilities:
Liberty Hill, TX – Polyurethane Plant
Dadeville, AL – Polymers Plant
Chatsworth, GA – Turf Manufacturing Plant

The LandTek Group
105 Sweeneydale Avenue
Bayshore, NY 11706
631-691-2381
https://www.landtekgroup.com/

LTG Sports Turf One LLC
2240 West Woolbright Road, Ste 11
Boynton Beach, FL 33426
561-225-1113
https://www.ltgsportsturfone.com/

The LandTek group is a leading provider of turnkey athletic facilities throughout the East Coast to include athletic field engineering, construction and project management services. Based in Bay Shore, NY, the Company has operations throughout the East Coast from New York to South Florida. LandTek offers a range of solutions intended to meet the needs of both municipal and private projects, including the initial engineering and design process, installation and continued maintenance services. **Landtek holds an existing Equalis contract for Sports Construction Services COG-2138.**

Midwest Sports & Turf Systems, LLC
10138 S. Bode Street Unit E
Plainfield, IL 60585
800-269-4305
https://www.midwestsportandturf.com/

Midwest Sports & Turf Systems sells and install state of the art synthetic turf systems, and provides full design-build services including overall design, engineering, permitting and complete start to finish turf field construction in the Midwest including IL, KS, MI, MO and WI.

Valley Precision Grading, Inc.
3330 Luyung Drive
Rancho Cordova, CA 95742
916-638-8800
https://valleyprecisiongrading.com/

Valley Precision Grading, inc. is a full-service synthetic turf and track specialty contractor. They cover any aspect of track and/or field service needed from planning for ground up construction to maintenance and repairs building and servicing over 300+ fields over the last 15 years of the company's lifetime. VPG are experts in the process of field assessment and finding solutions to client's needs.

CG&B Enterprises
221 Sunpac Avenue
Henderson, NV

Celebrity Greens
Scottsdale, AZ
www.celebritygreens.com
1-888-507-7960

Challenger Turf
743 Hill Road
Dalton, GA 30721

SGW
1400 North Daly Street
Anaheim, CA 92806

Turf Now
8565 Canoga Ave, Canoga Park, CA 91304
(213) 577-2757

Emerald Artificial Greenery
5780 NW 72nd Ave, Miami, FL 33166
(866) 579-8211

Envy Lawn
743 Hill Rd, Dalton, GA 30721
(888) 368-9596

Five Star Turf
743 Hill Rd,
Dalton, GA 30721
855-483-3546

1.3.4.	***Network Relationship***. If your company is best described as a manufacturer or service provider, please describe how your dealer, distributor, or contractor network operates to sell and deliver the Products & Services proposed in your proposal. If applicable, is	Please see response below.

your network independent or company owned?	

The TenCate Grass Sports Division is made up mainly of wholly owned subsidiaries of TenCate Grass and some independently owned authorized dealers each of which have a sales team of Business Development Managers with their own respective territories throughout the U.S. Each company is responsible for their own leads which are acquired through a variety of ways such as repeat customers, referrals, lead service subscriptions, trade shows, marketing campaigns, social media, cold calling.

The cooperative purchasing method of procurement is our organization's preferred method of delivering our products and services to customers. Our larger TenCate owned companies have years of experience in the use and understanding of cooperative purchasing agreements and have experienced great growth in cooperative sales each year. As we have strategically acquired smaller successful companies throughout the country, it is our goal to take the successes and knowledge of our larger companies to ensure the TenCate Sports Division is entirely educated on how to leverage a cooperative purchasing contract for every public sale.

SALES MEETINGS

Our sales teams meet regularly and would be provided with updates and continuing education on any awarded Equalis contract to include market trends and initiatives. Our sales force is in constant communication with our Estimators, Directors of Sales and full-time Director of Cooperative Purchasing who will be very familiar with our Equalis pricing and facilitate proposals to our customers.

These Sales Meetings are integral to reinforcing the central focus of our sales efforts – which is to utilize cooperative purchasing as a sales tool.

MARKETING

We have an in-house marketing department where it is here that all marketing materials, collateral, and campaigns are created, developed and managed. We have in-house printing capabilities allowing us to provide our sales force with Equalis and TenCate co-branded print materials on demand.

We exhibit at various venues including those that target School Boards, Administrators, Procurement Officials, Coaches, Athletic Directors, Facilities Managers, etc. at every level from K-12 through post-secondary education.

We can collaborate on marketing efforts with EQUALIS' current and future members in the following ways:

- Multimedia public relation campaigns
- Create brochures to explain partnership with EQUALIS and membership advantages
- Special event coordination
- Website
- Modify our website to include EQUALIS relationship
- Partnering at trade shows
- Communicate with Equalis regarding trade show schedules
- Display Equalis signs at tradeshow booths
- Attend meetings hosted by Equalis
- Invite Equalis to present information to TenCate Grass sales team
- Create videos highlighting projects procured through EQUALIS awarded contract

DEDICATED COOPERATIVE PURCHASING DEPARTMENT

We have a Cooperative Purchasing Department led by Ruth Hawley, our Director of Cooperative Purchasing, whose responsibility is to educate and support every TenCate company and their respective sales teams and customers ensuring they are aware of the benefits of any newly awarded Equalis contract. TenCate is unique in having an entire

department dedicated to personally guiding our customers through the cooperative purchasing process and is an asset that has proven to raise awareness and increase our sales dramatically since inception.

1.3.5.	***Industry Experience.*** How long has your company provided the products and services outlined in your proposal? What percentage of your company's revenue in each of the last three (3) full calendar years was generated from these products and services?	Please see response to 1.1.4 and response below.

Our excellent reputation is deeply rooted. TenCate has been present in the synthetic turf market from the beginning of its existence, covering more than 300 years of textile technologies. During those years, we have repeatedly reinvented ourselves, responding to changes in the market and the world and allowing us to become the company we are today. We take pride in our journey, which reflects a commitment to innovation and excellence in the artificial grass industry.

1704 First involvement of TenCate in the Netherlands' textile industry.

1766 Hendrik TenCate founds new business in Almelo trading in textiles.

1841 TenCate starts manufacturing yarns.

1960 TenCate starts developing and producing artificial grass resulting in new generations of synthetic surfaces, particularly for sports fields.

1980 New polypropylene extrusion techniques provided more wear resistance and softer grass fibers, while woven backings provided greater stability, making synthetic turf the perfect surface for hockey worldwide in the 1980s.

1989 Already in 1989, TenCate switched its production of synthetic turf fibers towards fully environmentally friendly raw materials.

2001 Start of TenCate's global expansion with the first manufacturing plant in the US, followed by the first operations in the Middle East. The development of multilayered synthetic turf systems was the primary focus of TenCate.

2009 Start of forward integration into the supply chain by including companies in the group that offer system design and construction. This helps TenCate to be closer to the end user, a necessity to improve innovation.

2016 TenCate is delisted from the Amsterdam Stock Exchange and starts the process towards becoming an independent artificial grass manufacturer, adding landscaping to its portfolio.

2017 TenCate is fully committed to the forward integration process with various companies across the world joining the company, enabling us to serve the entire value chain, from R&D and manufacturing of grass, backing and turf to installation and maintenance.

2019 Partnership with GBN Artificial Grass Recycling to fully recycle and reuse all end-of-life turf in the Netherlands

2020 The Center for Turf Innovation is established. It plays a vital role in emphasizing the importance of user performance and offers solutions that are sustainable and foster circularity.

2022 With the introduction of our OneDNA Technology and corresponding components, we are taking steps towards new circular solutions.

2023 Today we are the largest fully integrated artificial grass company in the world. With our factories, TenCate Grass Components has global coverage while using sustainable processes and the latest techniques that enable us to offer our long-term partners in the industry a winning and full range of high-quality grass and primary backings for both sports and landscaping. All of our revenue stems for the sale of our manufactured products and services offered herein.

1.3.6. ***Geographic Reach.*** Describe your company's **current** service area in the United States and which areas you intend to offer services under a resulting contract if awarded.	All 50 states
1.3.7. ***Socio-economically Disadvantaged Business Engagement***. Does bidder commit to take all affirmative steps set forth in 2 CFR 200.321 to assure that minority businesses, women's business enterprises, labor surplus area firms are used when possible.	YES.
1.3.8. ***Certifications and Licenses.*** Provide a detailed explanation outlining the licenses and certifications that are i) required to be held, and ii) actually held by your organization (including third parties and subcontractors that you use). Has your company maintained these certifications on an ongoing basis? If not, when and why did your company lose any referenced certifications? **NOTE**: Provide copies of any of the certificates or licenses included in your response in **Proposal Form 5 - Certifications and Licenses**.	Prior to any sale or installation being completed, all of TenCate Grass Sports Division companies will have the licensing required from state and/or local levels to sell the products and perform the work. Our organization currently holds the required state certificates of authority to do business and state contractor licenses in each jurisdiction where work is to be performed. Required local business licenses are acquired prior to commencing work. Please see list of current licenses provided below. Further, our TenCate Grass Sports Division companies employ highly knowledgeable individuals many of whom hold certifications from the American Sports Builders Association in the building of synthetic turf fields, running tracks and tennis court construction and are incorporated herein by reference. Our manufacturing facilities have received ISO certifications in recognition of quality management, health and safety, environmental performance and sustainability. ISO Certificates are provided herein under Supplemental Information.

Company: **GeoSurfaces, Inc.**

State	License No	Classification
Alabama	54897	MU-S; Recreational Areas, SC; Athletic Fields
Arkansas	0383350624	Building - Commerical & Residential
Louisiana	67614	Building Construction; Electrical; Specialty: Recreation & Sporting Facilities & Golf Courses
Mississippi	23140-SC	Athletic Fields/Golf Courses; Bleachers & Grandstands; Electrical
Tennessee	73676	BC; CE

Company: **GeoSurfaces Southeast, Inc.**

State	License No	Classification
North Carolina	L.81851	Unclassified
West Virginia	WV063492	General Engineering Specialty
Georgia	GCCO006836	General Contractor Company
Massachusetts	CS-118561	Unrestricted - Buildings of any use group >35k cubic ft of enclosed space
South Carolina	CLG.122331	BD5, HI5, HY5, WL5, WP5
Virginia	2705173460	Class A CBC

Company: **Academy Sports Turf, Inc.**

State	License No	Classification
Idaho	RCE-57318	
Montana	254561	
New Mexico	412414	
Utah	11717082-5501	

Company: **Valley Precision Grading, Inc.**

State	License No	Classification
California	783244	A - General Engineering / C-61 and D12 - Synthetic Products
Nevada	0089144	A - General Engineering
Nevada	0089587	C-10 Landscape Contracting - Artificial Turf Only

Company: **Byrom-Davey, Inc.**

State	License No	Classification
Utah	7299831-5501	S330 - Landscape and Recreation
Nevada	0059162	A-12 Excavating, Grading, Trenching and Surfacing, A22 Unclassified

Company: Hellas Construction, Inc.

STATE	LICENSE TYPE	LICENSE #
Alabama	State GC License Class BC-S: Concrete , Metal, Sitework, MU-S: Rec Areas, SC: Athletic Area Buildingds, Install of Turf, Tracks & Tennis Courts.	40384
	State GC Subcontractor Installation Class SC: Athletic Turf/Tracks	S-50209
Alaska	State Business License: 23 Construction	932849
	State Construction Contractors License: General Contractor Without Residential Contractor Endorsement	CONE34940
Arizona	State General Commercial & Engineering License Class: A	
	State Specialty Dual License Class: CR-5	ROC 201701
Arkansas	State Commercial Contractors License Class: Sport & Recreational Surfaces	153840625
California	State Contractors License Class: C-61/ D12- Synthetic Products, A- General Engineering, B - General Building, C10- Electrical	852751
	State Public Works Contractor License Class: C61/D12, A,B,C10	1000008779
Florida	State Construction Industry License (General Contractor)	CGC1520756
Georgia	State General Contractor License	GCQA005262
Hawaii	State GC Business License Class: A General Engineering , C-17 Excavating, Grading and Trenching, C-68FF synthetic Field Surface	CT-30516
Idaho	State GC Business License	RCE-40755
	State Public Works GC License	PWC-C-16872
Iowa	State Contractor Certificate Division Of Labor	C094005
Kentucky	Secretary of State Business Registration	625725
Louisiana	State GC Business License Class: BUILDING CONSTRUCTION; SPECIALTY: RECREATION & SPORTING FACILITIES & GOLF COURSES	42197
Maryland	State Business License Class: 66 Out-of-State Contractor (Not for home Improvement)	11234853
Massachusetts	State General Contractor License (Construction Supervisor)	
Mississippi	State GC License Class: Building Construction , Install of Athletic Turf, Running Tracks , Tennis Courts	07329-MC
Montana	State GC Registration	69995544607

Nebraska	State GC Registration Certificate	42346-23
Nevada	State GC License Class: A Genaral Engineering	0059089
	State Business License	NV20041450788
New Jersey	State GC License Classifications: C061 Athletic Fields/ Synthetic Turf, C060 Athletic Fields/Tracks/ Courts, C019 Concrete, Found. Footings / Masonry Work, C022 Fencing, C059 Road Construction & Paving, C107 Seating /Bleachers, C056 Sewer Piping & Storm Drains, C054 Site Work.	
	State Business Registration	1063789
New Mexico	State GC Licence Class: GB98 General Building , GF05 Recreation Areas	90360
	State Certificate Of GC Registration Effective 09/16/2022	71720050714
	State Public Works	71720050714
North Carolina	State GC License Class: Unlimited Building & Highway	68065
North Dakota	State GC License Class: A	37269
Oregon	State GC License Class: Commercial General Contractor Level 1	196949
Rhode Island	State GC License Class: Commercial Contractor	GC-38999
South Carolina	State GC License Class: BD5 Building Unlimited	CLG.114510 GS
Tennessee	State GC License Class:BC-19 , BC-25 Unlimited (Tennis Courts), BC-28, BC-31, BC-7; S-Synthetic Tur; S-Wtr&Swr Systm	52685
Texas	State Electrical Contractor License	34802
Utah	State GC License Class: B100 General Contractor, S310 Foundation,Excavation and Demolotion, S330 Landscape and Recreation Contractor	5764605-5501
Vermont	State GC License	110021
Virginia	State GC License Class: A	2705125931
Washington	State GC License Class: CC01- General	HELLACI967QH
West Virginia	State GC License Class: General Building Painting	WV045897

ATT Sports, Inc.
State Licenses and Registrations

State	Document	License Number
Connecticut	Department of Revenue Services – **Tax Permit**	Reg. Number 003288651-001
Delaware	City of Wilmington – **Business License**	Acct. Number 11003746 License Number 65095
	State of Delaware Department of Finance Division of Revenue **Non-Resident Contractor**	Active Business License 2006206972
	State of Delaware **Department of Labor Public and Private Work**	Certificate Number DE-2022-000006141
District of Columbia	Department of Consumer and Regulatory Affairs **Basic Business License**	Class A License Number 410521000607
New Jersey	State of New Jersey **Business Registration**	Certificate Number 1068885
	State of New Jersey **Division of Property Management and Construction (DPMC)**	Agg. - $15,000,000 Trade – C060 – Athletic Fields/Tracks/Courts
	State of New Jersey **Schools Development Authority (NJSDA)**	Agg. - $2,000,000 Athletic Fields/Tracks/Courts
	State of New Jersey **Department of Labor and Workforce Development Public Works Contractor Registration**	Certificate Number 636372
	State of New Jersey **Annual Report**	ID Number: 0100927594 Type: DP Formation Date: 06/2004
	State of New Jersey **Sales and Use Tax**	Reg. Number 200-690-367/000
	Certificate of Employee Information Reporting	Certificate Number 53804
New York	New York City School Construction Authority (SCA)	Pre-qualification Approval Tax ID – 20-0690367 **Paving and Surfacing (02700)** **Valued by SCA at <$1,000,000**

	Department of State Division of Corporations (Entity Information Annual)	DOS ID 3081451
	Department of Taxation and Finance	200690367
North Carolina	Annual Report	State ID 1380815
Pennsylvania	PA Corporation	State ID 3235131
Rhode Island	Foreign Corporation Filing	Annual Report
Virginia	Commonwealth of Virginia **Department of Professional and Occupational Regulation Class A Contractor**	License Number 2705140666
	Fairfax County BPOL Filing Dapeartment of Taxation	VA State License Number 2705140666 Conf. # 2478007
	Virginia State Corporation Commission	Entity ID F1796111

LANDTEK CONTRACTOR LICENSES

New York Licenses	Issuing Authority	License Number
Certificate of Incorporation	NYS Dept of State	
Certificate of Authority-Sales Tax	Div. of Taxation and Finance	
Sales and Use tax Certificate	Div. of Taxation and Finance	60-8017912796-6
Business Corporation Biennal Statement	NYS Dept of State	NYS DOS ID# 1296258
Certificate of Good Standing / Annual Report	NYS Dept of State	
Dun and Bradstreet number	Dun and Bradstreet	805090248
NYS Unemployment Identification Number	NYS DOL	85214713
Vendor Responsibility NYS	NYS	
Vendor Responsibilty - NYSDOT update (same as Vend Rep) CCA-2	NYSDOT	
Pesticide Applicator (3 year registration) LandTek	NYS Dept of Environ. Conserv.	01907
Kevin Malone (3A)	NYS Dept of Environ. Conserv.	C1629830
Guy Fitzgerald (3A)	NYS Dept of Environ. Conserv.	C1672396
Frank Phillips (3A)	NYS Dept of Environ. Conserv.	C2871918
Robert Touchette (3A)	NYS Dept of Environ. Conserv.	C1883835
Chris Fox (3B)	NYS Dept of Environ. Conserv.	C0895386
Vendex-MOCS / Pass Port	NYC Mayor's Office	Vendor #000555332
NYCSCA Prequalification Approval	NYC School Construction Authority	
NYCDOT Permittee Management System	NYC DOT	23012
NYCDOT Street Obstruction Bond	NYCDOT	B'LY1920068
NYC Department of Buildings (bond and insurance)	NYC Department of Buildings	Tracking #602041
NYC Permits - NYC Streets.net	NYC Department of Buildings/DOT	Permittee # 23012
Certificate of Tax Clearance-Hwy Use	Dept of Taxation and Finance	
International Fuel Tax Agreement (IFTA)	NYS Dept of Taxation & Finance	112945683
Highway Use Tax Registration	NYS Dept of Taxation & Finance	112945683
Unified Carrier Registration	NYSDOT	1514464
Heavy Highway Use Reistration	US Treasury IRS	1514464
MCS-150 - Biennial Update	FMCSA	1514464
Suffolk County Hydrant Use Permit - TK77	SC Water Authority	300052376
Licensed as a Fleet Inspection Station	NYS DMV	7114190
Permit to Operate Hazmat Storage Facility	Suffolk County Dept of Health Services	approved
Home Improvement Contractors License	Nassau County - Consumer Affairs	H2218000000
Lead Certification - Needed for NC HI license - Ed Ryan	EPA/Able Safety/NC	R-I-75920-20-00181
Home Improvement Contractors License	Suffolk County - Consumer Affairs	52007-H
Town Of N. Hempstead Fence Erector License	Town Of N. Hempstead	0328 FE
Incorp.Village of Valley Stream Fence Contractor License	Inc. Village of Valley Stream	8372
Town Of East Hampton Home Improvement License	Town of East Hampton	8236-2016

New Jersey Licenses	Issuing Authority	License Number
Certificate of Authority-Sales Tax	State of NJ	0100741727
Certificate of Good Standing / Annual Report	NJS Department of State	
Business Reg. Certificate	State of NJ	975955
Public Works Contractor Registration Act	NJ Dept of Labor	618910
Certificate of Authority-Sales Tax Use	NJ Division of Tax	I0000144436
Certificate of Employee Info. Report	State of NJ	35409
Payroll records outside of NJ	NJ Dept of Labor	12996
DPMC Prequalification Approval	NJ Dept of Treasury	
SDA Prequalification Approval	NJSDA-Schools Develop Authority	
NJ Election Law Enforcement Annual Report	Election Law Enforcement Commission	
Pesticide Applicator Business License - LandTek	NJ Dept of Environmental Protection	90179B
Kevin Malone	NJ Dept of Environmental Protection	54457B
Chris Fox	NJ Dept of Environmental Protection	55528B
Commercial Certified Fertilizer Applicator	see Kevin Malone	
Kevin Malone	NJ Dept of Environmental Protection	C003724
Hoboken BOE Vendor Information Form	Hoboken BOE	Vendor # 4677
CT Licenses	**Issuing Authority**	**License Number**
Certificate of Authority	CT Secretary of State	0002442280
Certificate of Good Standing / Annual Report	CT Secretary of State	
Business Tax Registration	CT Secretary of State	0323956-000
Major Contractor Registration - License	CT Dept of Consumer Protection	MCO.0903320
CT DAS - Dep't of Administrative Services Prequalification application	Department of Administrative Services	
CT DAS - Tax Status Letter	Department of Revenue Services	need for DAS renewal
DE Licenses	**Issuing Authority**	**License Number**
Certificate of Authority	State of Delaware	4389649
Certificate of Good Standing / Annual Report	DE Secretary of State	
DE Contractor License	State of DE - Division of Revenue	2009102753
DE Contractor Registration Certificate	State of DE	DE-2021-000000446
New Castle DE - Local Business registration	New Castle County	LC4557
City of Wilmington Business License	City of Wilmington (acct # 11025937)	91379
DNREC Sediment and Stormwater Program (Certified Responsible Person)	DE Dep't of Natural Resources	
District of Columbia (DC)	**Issuing Authority**	**License Number**
Certificate of Authority	Dept of Consumer & Regulatory Affairs	201006110198 35
Certificate of Good Standing / Annual Report	Dept of Consumer & Regulatory Affairs	
Annual Report - 2 year report	Dept of Consumer & Regulatory Affairs	
Federal Licenses	**Issuing Authority**	**License Number**
SAM - The System for Award Management	US Federal Government	805090248
Fema Industry Liason Program	Department of Homeland Security	
US Army Corp of Engineers (SAM)	US Federal Contractor Registration	
FL Licenses	**Issuing Authority**	**License Number**
Certificate of Authority	State of Florida	F12000000807
Certificate of Good Standing / Annual Report	State of Florida Department of State	
IL Licenses	**Issuing Authority**	**License Number**
Certificate of Authority	Office of Secretary of State	F6825-808-1
Certificate of Good Standing / Annual Report	Office of Secretary of State	F6825-808-1
MA Licenses	**Issuing Authority**	**License Number**
Certificate of Authority	Secretary of The Commonwealth of Massachusetts	13020863030
Certificate of Good Standing / Annual Report	Ma. Secretary of State	

MD Licenses	Issuing Authority	License Number
Certificate of Authority	State Department of Assesments & Taxation	n/a
Certificate of Good Standing / Annual Report	State Department of Assesments & Taxation	F12889242
Sales & Use Tax License	Comptroller of Maryland	1478008
Out-of-State Contractor License	State of MD-Circuit Court(Prince Geo. County(90)	16363368
MI Licenses	**Issuing Authority**	**License Number**
Certificate of Authority	Dept of Licensing & Regulatory Affairs	60563X
Certificate of Good Standing / Annual Report	Dept of Licensing & Regulatory Affairs	60563X
NC Licenses	**Issuing Authority**	**License Number**
Certificate of Authority	Department of the Secretary of State	C201412700029
Certificate of Good Standing / Annual Report	Department of the Secretary of State	
PA Licenses	**Issuing Authority**	**License Number**
Certificate of Good Standing / Annual Report	Pa Dept of State	TSC1610121621113-1
Certificate of Sales Tax License	Dept of Revenue	85195624
PA WC insurer code (2020-2021)	2228	
PA unemployment account number	45-16752	
Radnor Township Contractor License	Township of Radnor	10172
Township of Lower Merion Contractor License	Lower Merion Township	12462
Philadelphia Licenses		
Commercial Activity License	City of Phila-Dept of Licenses	575048
Contractor's License Trade License	City of Phila-Dept of Licenses	41805
Certificate of Tax Clearance	City of Phila-Dept of Licenses	41805
RI Licenses	**Issuing Authority**	**License Number**
Certificate of Authority	State of RI and Providence Plantations	201438027520
Certificate of Good Standing / Annual Report	State of RI and Providence Plantations	
SC Licenses	**Issuing Authority**	**License Number**
Certificate of Authority	Office of Secretary of State	150327-0248
Certificate of Good Standing / Annual Report	SC Department on Revenue	
VA Licenses	**Issuing Authority**	**License Number**
Certificate of Authority	State Corp. Commission	F1826835
Certificate of Good Standing / Annual Report	VA Department of State	
Certificate of Registration for the Collection of Use Tax	Commonwealth of VA	
VA Class A Contractor's License	State of VA	2705136568
County Of Fairfax, BPOL	County of Fairfax	2157746
County of Fairfax, time and material approval	County of Fairfax	2060020
City of Richmond BPOL	City of Richmond	31760
University of Richmond - tax exempt certificate	Commonwealth of VA	SE540505965F02162017
Prince William County, BPOL	Prince William County	16L06352
Loudoun County, BPOL	Loudoun County	504840
Henrico County, BPOL	Henrico County (acct# 002-00614404)	T16614404
Virginia Fertilizer/Lime Contracor Applicator	Viginia Dept. of Agriculture & Consumer Services	57-504633
RLD Training (Responsible Land Disturber)	Department of Environmental Quality	
PWCSA - Water District - Hydrant Meter Permit	PWCSA	
Virginia School Boards Associations	VSBA	
W.V Licenses	**Issuing Authority**	**License Number**
Certificate of Authority	State Corp. Commission / Secretary Of State	UF000301915001
Worker's Comp Notification	Department of Commerce	
Certificate of Good Standing / Annual Report	Secretary of State (business4wv.com)	
Business Tax Registration	State Tax Department	2293-0341
Pass Through Entity Tax - Annual Partnership	State Tax Department	2292-4005
WV Unemployment Compensation	State of WV	registered 1/20/14
WV Contractor Registration	West Virginia Contractor Licensing Board	WV051802
City of Bridgeport Business License	Tax/License Division/Bridgeport	070136

1.4. Public Sector Experience

1.4.1. ***Public Sector Cooperative Contracts.*** Provide a list of the public sector cooperative contracts (e.g., state term contracts, public sector cooperatives, etc.) you currently hold and the annual revenue through those contracts in each of the last three (3) calendar years. Please exclude information and data associated with federal agencies or GSA contracts.	TenCate Grass currently holds cooperative contracts through Omnia and 1GPA both awarded in 2024 and currently does not have data for sales as these are newly awarded. TenCate has held a TIPS contract; however, this contract was utilized prior to our acquisition of large and notable companies in the sports surfacing industry nationwide and prior to TenCate's availability of our cooperative contracts to these companies which collectively have done hundreds of millions of dollars in cooperative sales independently throughout the US. It is our intent for all the TenCate Grass Sports Division companies to utilize TenCate's awarded cooperative contracts collectively. Please refer to our responses under this 1.4 section for the potential of cooperative sales under an awarded contract.

1.4.2. ***Education Success.*** What is the **i)** total dollar amount, and **ii)** percentage of your company's total annual revenue generated by sales to educational institutions (i.e., K-12 schools & school districts and high education)?	Tencate Grass N.A. total revenue for 2025 is projected to exceed $1.5 Billion. Approximately 75% will be from the educational sector K-12 and higher education, both public and private.
1.4.3. ***Government Success.*** What is the **i)** total dollar amount, and **ii)** percentage of your company's total annual revenue generated by sales to local governments (i.e., municipalities, counties, special districts, and state agencies)?	We project 10% of our total revenue in 2025 to be to governments and local municipalities. The remaining 15% would be to private development and professional teams.
1.4.4. ***Customer References.*** Provide references of at least five (5) local government or educational institution customers for which your company has provided products and services similar in nature and scope to those defined in this RFP in the last three (3) years. Each reference should include: **a.** Customer contact person and their title, telephone number, and email address; **b.** A brief description of the products and services provided by your company; **c.** Customer relationship starting and ending dates; and, ***d.*** Notes or other pertinent information relating to the customer and/or the products and services your company provided.	Please see response provided below under 1.4.4.

2. CAPABILITIES

2.1. PRODUCTS & SERVICES

2.1.1. ***Product Offering & Description(s).*** Provide a detailed description of the products you are offering as a part of your proposal. Your response may include, but is not limited to, information related to performance characteristics, differentiators, manufacturing capabilities & advantages, innovation and technology, regulatory & safety standards, or any other piece of information that would help understand the	We offer our sports surfacing products and the installation of those products. TenCate Grass and its subsidiaries are the manufacturers of our product offerings and have the capabilities to install new or replace, repair and maintain synthetic turf fields, running tracks, tennis, basketball, pickleball courts, playgrounds, natural grass playing fields. We offer all of the equipment and accessories necessary for a full turnkey installation of athletic facilities and offer construction services to include, but not limited to site work, civil work, demolition, excavation, stabilization, drainage, asphalt paving, post tensioned concrete, concrete flatwork, sidewalks, retaining walls. We offer new turnkey installation and renovations of athletic facilities to include any of the aforementioned items as well as sports pavilions and canopies, fieldhouses, bleachers/seating, press boxes

understand the breadth and depth of the proposed product offering. **IMPORTANT.** This description along with the products and services included in the **Attachment B – Cost Proposal** will be utilized to define the overall products and services available under a resulting contract.	and grandstands, restroom facilities, concession buildings, storage buildings , scoreboards and media displays, wall systems and panels, fencing, parking lots, irrigation, batting cages, dugouts, trails, landscaping and sports lighting. We offer services such as engineering, surveying, and design. Please also refer to our Pricing Sheets which include RS Means coefficients and alternative costing methods for products and installation services not expressly stated above and in unit pricing. Please also refer to documents provided under Supplemental Proposal Information.
2.1.2. ***Service & Solution Capabilities.*** Provide a detailed description of the services you are offering as a part of your proposal. Your response may include, but is not limited to, information related to turnkey capabilities, project management, design, engineering, installation or set-up, training services, maintenance services, testing, field and court marking, or any other piece of information that would help understand the breadth and depth of your products and service offering. **IMPORTANT.** This description along with the products and services included in the **Attachment B – Cost Proposal** will be utilized to define the overall products and services available under a resulting contract.	As stated in 2.1.1, TenCate and its family of companies offer turnkey installation of all products to include, but not limited to, estimating, design, engineering, testing, project management, installation, construction, maintenance training, repair, cleaning, and maintenance nationwide.
2.1.3. ***Value-Add or Additional Offering*****.** Please address any additional products and services your organization offers but is not included in the scope of this solicitation and will enhance and add value to this contract's participating agencies.	Please refer to prior response. We are able to offer sports equipment and any other ancillary products or services to enhance the sports surfaces and/or build an athletic facility that houses all the sports surfaces we are able to install. Our subsidiary GeoSport Lighting, LLC is a manufacturer and installer of sports lighting which all of our TenCAte companies can offer and install. We can also offer natural grass should a customer request. These can be provided at a cost below the RS Means unit price book and proposed coefficient or through alternative cost method proposed herein. Also, please see below for information on our Center for Turf Innovation which we believe adds value to our offerings and sets us apart from others..
We are part of a very competitive industry which motivates us and our most worthy competitors to place a great emphasis on product research, safety and innovation. This has resulted in state-of-the art surfaces far beyond the imagination of the first-generation turf products. As such, we must strive to pursue excellence and sustainability beyond that of our competition which has led to remarkable advancements in our turf technology. <u>CENTER FOR TURF INNOVATION</u> Our dedicated research and development team at the Center for Turf Innovation (CTI), established as a hub for research, development and collaboration, works tirelessly to create solutions that enhance the playability,	

safety, and longevity of synthetic turf systems. At TenCate, innovation is at the heart of everything we do, driven by our desire for performance, sustainability, and circularity. We achieve this through the CTI and our three-pillar approach:

• Player Perspective: Our innovation labs focus on understanding player-surface interactions. With the latest state-of-the-art testing and manufacturing technologies, we invite top-level players to test our developments, simulating real game situations. Our testing equipment is specially designed for easy transportation, allowing us to test our systems at any location around the world. This helps us design turf systems aimed at elevating athletes' overall performance.

• Sustainability: Committed to tackling global challenges like water scarcity and plastic waste, we create products that are environmentally conscious. Our zero-water hockey fields alone save approximately 3 million liters of water annually.

• Circularity: Emphasizing a circular design philosophy, our One-DNA turf solutions for landscaping and sports are made of a single material. This allows for easy recycling without compromising quality or performance.

By sharing our research, we empower partners and customers to join us in pioneering more sustainable, innovative solutions for society.

Our R&D team is led by Colin Young, Global Director of Research & Development at TenCate. Colin is heavily involved in the development and improvement of the synthetic turf industry at large and takes a keen interest in improving synthetic turf for the benefit of its users and the environment. He is Chair of the EMEA Synthetic Turf Council (ESTC) and of the Non-filled Working Group at the FIFA Technical Advisory Group.

ONE-STOP TURNKEY PROVIDER

Not only does our commitment and action in the field of research and development set us apart, but also our strategy to meet our goal of achieving the largest percentage of sports surfaces covering the U.S.

We have continued to build TenCate Grass through the acquisition of proven industry leaders not only in the manufacture of high-quality sports surfaces but in the installation of those surfaces and the proven capabilities and resources to also provide complete turnkey construction of the athletic facilities that house them. Our vision is to provide customers not only with superior and safe sports playing surfaces, but provide a one-stop solution from design to completion of an entire athletic facility. Our TenCate Grass family is comprised of state-of-the-art manufacturing facilities as well as companies with the proper General Construction and Specialty licenses in every jurisdiction (see , employees that include highly experienced sports construction superintendents and installation crews, sports lighting installers, ASBA certified turf, track and court builders, professional designers, engineers and own thousands of pieces of construction equipment, vehicles and trucks to deliver and build complete athletic complexes. Equalis members will only need to make one phone call for all of their sports playing needs.

2.1.4.	***Open Market Products.*** Provide a detailed description of your ability to accommodate requests for Open Market Products. Open Market Products is a category of products that cannot be found in your standard catalog offering or non-inventory products.	Please refer to our response to 2.1.3. The TenCate Grass Sports Division has a network of suppliers to include raw materials, sports equipment, and any sports surfaces and facility construction related products available due to the volume we sell and install as well as our longevity and excellent working relationships. This has allowed us to establish preferential terms, pricing and availability from many suppliers to accommodate the needs of our customers.

NOTE: For a definition of Open Market Items, please refer to **Part One, Section 5.4 – Other Pricing Scenarios.**	
2.1.5. ***Warranty.*** Provide a copy of the manufacturer's warranty. If required, please attach the warranty as an attachment, as instructed in this document. Describe notable features and/or characteristics of the warranty that a public sector customer would find interesting or appealing. Pricing related to the any extended warranty options must be included in ***Attachment B – Cost Proposal***.	Please see below response.

We are proud of the fact that many of our customers are repeat customers who are the best example of the superiority of our products and our after-the-sale commitment. Our surfaces and installations historically perform well past the warranty period provided the proper care and maintenance. Should the need arise, we do have a streamlined Warranty Claim process in place.

Our policy is to respond to customer warranty issues between 24 and 48 hours of notification. Our TenCate Grass Sports Division companies have installation crews working on projects throughout the U.S. at any given time and can dispatch a crew immediately depending on the urgency of the claim, if we have crews working in the area, and if Owner can secure the area for our crews to perform the work.

We will work closely with the Equalis Member (aka Owner) to schedule the work once we have received the information needed to assess the issue such as detailed photos from the Owner, we have verified the claim is within the warranty period and the Owner has made the premises available for our crews to mobilize and do the work.

We can perform repairs and warranty work at any time including after hours, weekends and holidays should the need arise at Owner's request. Our superintendents and crew foremen are equipped with cell phones, cameras and laptops enabling them to report progress in nearly real time if so requested.

Our team is always available to our customers with any questions regarding the maintenance of their surfaces by calling our dedicated customer service number provided to every customer prior to completion of their project. We will have a dedicated warranty and customer service hotline for Equalis Members to use no later than the end of this year.

The warranty periods for our product materials and labor are as follows:

Type	Product	Warranty Years
Synthetic Turf	Pivot	12 years
Synthetic Turf	Iron Turf	10 years
Synthetic Turf	All other than above	8 years
Shock Pad	MaxFlo+/GeoFlo+	25 years
Turf Base Construction	NA	1 year
Shock Pad	Cushdrain	25 years
Shock Pad	MaxFlo/GeoFlo	8 years

Shock Pad	The Wave	15 years
Shock PadPad	Soteria	20 years
Shock Pad	G-Max Drain	10 years
Polyurethane track new surface	All	5 years
Polyurethane track re-tops	All	1 Year
Latex track surfaces	All	3 years
Acrylic Court surfaces	All	1 Year
Sports Lighting	All	10 years for parts, 1 year for installation
Construction	NA	1 Year
Post Tension Concrete	Courts	1 year
Asphalt Base Construction	Tracks/Events	1 year

Should Equalis Members require products not manufactured by Polyloom, we will provide warranty information to the Member with our submittal package which is provided prior to use/installation for their written approval. Should any defects/performance issues arise in connection with such product or accessories, we will assist the Member with any return or replacement, if warranted.

Extended warranties are available (please refer to our pricing sheets); however, with proper maintenance and care of our surfaces, our surfaces can last beyond the warranty period. We offer training and guidance to our customers upon the completion of our surfacing projects so that they may maintain their fields with their own staff.

We also offer cleaning/maintenance services for all of our surfaces--pricing for which can be found in our Pricing Sheets.

Below is an example of what Equalis Members can do themselves to prolong the use of their turf playing surfaces. We are always available to answer maintenance questions.

3. Business Operations

3.1. Logistics

3.1.1. ***Distribution & Shipping Capabilities.*** Describe how supplier proposes to distribute the products/services in Respondent's defined geographic reach. Your response may include, but is not limited to, information related to the number of store or showroom locations, distribution facilities, supply chain partners, fill rates, on-	TenCate Grass is committed to providing efficient and reliable distribution of our products/services within North and South America. Our approach ensures timely fulfillment and delivery, supported by a robust supply chain and internal/external logistics network. • Distribution Facilities: Our distribution network operates with multiple manufacturing and warehousing facilities to provide convenient support and access to our products/services. All these facilities are strategically

time delivery rates, and your ability to accommodate expedited orders.	located to optimize inventory management and order fulfillment. • Supply Chain Partners: We collaborate with fully vetted partners to enhance efficiency and ensure consistent availability of products. • Fill Rates & On-Time Delivery: We maintain all fill rates and an on-time delivery rate of 97%, ensuring reliable service to our customers. • Expedited Orders: We offer expedited shipping options, including next day/two day delivery services with our logistic partners to accommodate urgent orders and meet critical deadlines. Our products and services are available in all 50 states. In addition to all of our TenCate Grass Sports Division locations included in our RFP response to 1.3.3, we have our manufacturing facilities as shown below.

3.2. Customer Service

3.2.1. ***Customer Service Department***. Describe your company's customer service department & operations. Your description may include, but is not limited to, hours of operation, number and	Our customer service support philosophy is to exceed our customer's expectations. We achieve this by striving to do the job right the first-time minimizing warranty issues, educating our customers on the proper maintenance of our products and quickly responding to any customer service issues. Our TenCate network has offices located throughout the U.S. and installation crews are

location of service centers, parts outlets, number of customer service representatives. Clarify if the service centers are owned by your company of if they are a network of subcontractors.	working on projects throughout the country at any given time. We can dispatch someone immediately if working in the area. We can perform repairs and warranty work at any time including after hours, weekends and holidays should the need arise. Our TenCate Grass Sports Division companies located nationwide can work and support each other on any customer service issues, repair requests, etc. that may need immediate attention which provides for a vast network of able and knowledgeable personnel most within driving distance to most locations that may need assistance. We are presently working on establishing a TenCate customer service hotline to further ensure quality assurance by our TenCate family of companies.
3.3. Customer Set Up; Order & Invoice Processing; Payment	
3.3.1. ***Proposal Development, Order, and Invoice Process.*** Describe your company's proposal development, order, and invoice process.	All sales are made directly through the TenCate Grass Sports Division companies' sales teams. Equalis members will work directly with a TenCate Grass or TCG company salesperson or team that is dedicated to serving their location. Our sales team will meet with the customer, visit and assess the site, and gather all of the necessary information needed by our in-house estimating departments to create an accurate estimate and proposal that does not exceed our Equalis discounted pricelist. Our CRM software is utilized to enter opportunities and input all the information our estimators need to accurately prepare a proposal that will contain an awarded Equalis contract number and pricing that does not exceed our Equalis price list (See response to 6.1.3). It is our goal for proposals to be firm, transparent and eliminate the need for any change orders. Once the Equalis member accepts our proposal, we will get the project on our project schedule to ensure the materials are ordered for timely delivery and installation and a contract will be drafted by us or the member or the member will issue a PO to the relevant TenCate Sports Division company referencing an Equalis contract number. We will promptly begin the submittal process for the customer/Equalis member to review and approve if not already begun during the proposal process. Most of our projects are billed through progress billing and based on a schedule of values and final retention payment after final acceptance.
3.3.2. ***Financing.*** Does your company offer any financing options or services? If yes, describe the financing options available to Members.	Yes. We are able to offer financing options.
3.4. Bonding Capabilities	
3.4.1. ***Bonding.*** Describe your company's bonding capacity. Your response may include, but is not limited to, the bonding company's surety rating.	Single $30,000,000 and Aggregate $100,000,000. Please see bonding capacity letter included herein.
3.5. ***Sustainable Company Initiatives***	
3.5.1. ***Sustainability, Reclamation, and Recycling Initiatives.*** Describe the ways in which your	**TenCate offers the first truly circular solution for artificial grass.** Employs a first-of-its-kind zero-waste field solution;

	company is addressing the issue of sustainability.	Diverts thousands of square feet of materials from landfill or incinerators; Provide tons of material to the circular economy; Ensures turf never contributes to a school or community's waste footprint PLEASE SEE TENCATE RECYLICING SOLUTIONS BROCHURE INCLUDED HEREIN
4. PRICING		
4.1. Cost Proposal		
4.1.1.	***Pricing Model.*** Provide a description of your pricing model or methodology identifying how the model works for the products and services included in your proposal. Your response should describe how the proposed pricing model is able to be audited by an Equalis Group member to assure compliance with the pricing in the Master Agreement.	We are submitting line items for turnkey (product and installation) unit pricing as well as material only unit pricing both of which will allow for the facilitation of auditing by Equalis. Shipping is included in line-item pricing. Taxes and prevailing wages are not included in line-item pricing. Turnkey line-item pricing is based on David Bacon wages in Travis County, TX. Construction items will be priced using an RS Means coefficient. An alternative method of costing is proposed for items not on our price list or available through RS Means. Open Market Items/Sourced Goods are to be priced through cost plus a not to exceed 20% markup for the product and RS Means for labor.
4.1.2.	***Auditable.*** Describe how the proposed pricing model is able to be audited by public sector agencies or CCOG to assure compliance with pricing in the Master Agreement.	To verify and audit pricing, Equalis members can request that we provide them with a line-item price breakdown that will show the not to exceed pricing and the pricing extended to the customer along with any further discounts. The breakdown makes it easy for the customer to compare their proposal pricing to our Equalis price list.
4.1.3.	***Cost Proposal Value.*** Which of the following statements best describes the pricing offered included in Respondent's cost proposal.	The prices offered in your Cost Proposal are: ☐ lower than what you offer other group purchasing organizations, cooperative purchasing organizations, or state purchasing departments. ☒ equal to what you offer other group purchasing organizations, cooperative purchasing organizations, or state purchasing departments. ☐ higher than what you offer other group purchasing organizations, cooperative purchasing organizations, or state purchasing departments. ☐ not applicable. Please explain below. Click or tap here to enter text.
4.1.4.	***Cost of Shipping.*** Is the cost of shipping included in the pricing submitted with your response? If no, describe how freight, shipping, and delivery costs are calculated.	Yes. Shipping is included in our line-item pricing for projects in the continental U.S.. Projects in Hawaii, Alaska, Puerto Rico and Hawaii may include shipping costs and mobilization costs far higher than those incurred in the continental US. These will vary on a case-

	by-case basis and will be commensurate with the additional costs incurred by TenCate Grass.
4.1.5. ***Pricing Open Market or Sourced Goods.*** If relevant, propose a method for the pricing of Open Market Items or Sourced Goods. **NOTE**: For a definition of Open Market Items, please refer to **Part One, Section 5.4 – Other Pricing Scenarios**.	An alternative method of costing is proposed for items not on our price list or available through RS Means. Open Market Items/Sourced Goods are to be priced through cost plus a not to exceed 20% markup for the product and RS Means for labor.
4.1.6. ***Total Cost of Acquisition.*** Identify any components from the total cost of acquisition that are ***NOT*** included in the Cost Proposal. This would include all additional charges that are not directly identified as freight or shipping. For example, permitting, installation, set up, mandatory training, site work, or initial inspection may be required but not initially considered in the Cost Proposal. Identify any parties that impose such costs and their relationship to the Respondent.	Geotechnical engineering/testing of soils is not included. We recommend a customer have soils tested independently to determine if any soil remediation is needed prior to the construction of a field, track or court. We are able to assist Equalis members with selection of a reputable firm and can provide this service under an awarded Equalis contract as an open market item. Permitting is a pass through.

5. GO-TO-MARKET STRATEGY

5.1. Respondent Organizational Structure & Staffing of Relationship

5.1.1. ***Key Contacts.*** Provide contact information and resumes for the person(s) who will be responsible for the following areas; 1. Executive Contact 2. Contract Manager 3. Sales Leader 4. Reporting Contact 5. Marketing Contact. ***Indicate who the primary contact will be if it is not the Sales Leader.	Please see 5.1.1 below

Executive Contact (Primary Contact)

Ruth Hawley, Director of Cooperative Purchasing
r.hawley@tencategrass.com
512-809-9509

Ms. Hawley began her career in the synthetic turf industry in 1998 with American Sports Products Group, Inc. She has embraced various challenging roles with leading sports surfaces and construction companies encompassing compliance, project management, estimating, contracting and procurement. She began and led Hellas Construction, Inc.'s cooperative purchasing department for the last ten years with nearly $1 billion in sales through cooperative contracts. She now brings her experience to TenCate Grass. She will be the main contact for Equalis upon an award. Ms. Hawley holds a B.A. Degree in International Studies and Economics from St. Edwards University in Austin, TX.

Contract Manager

Ruth Hawley, Director of Cooperative Purchasing
r.hawley@tencategrass.com
512-809-9509

Sales Leader(s)

Martin Olinger, President TenCate Grass Sports Division
m.olinger@tencategrass.com

Marty Olinger comes to Tencate with 16 years of experience in the industry. Prior to that he held successful senior leadership positions with industry leading consumer product and consumer service companies. He is a graduate of Miami University, OH with a degree in Business Management.

Sydney Stahlbaum, Vice President Sales Operations and Enablement
s.stahlbaum@tencategrass.com

Reporting Contact

Ruth Hawley, Director of Cooperative Purchasing
r.hawley@tencategrass.com
512-809-9509

Marketing Contact

Erika Rumpke, Director of Marketing
e.rumpke@tencategrass.com
513-484-6795

5.1.2. ***Sales Organization.*** Provide a description of your sales organization, including key staff members, the size of the organization, in-house vs. third-party sales resources, geographic territories, vertical market segmentation, etc.	Please see response that follows below

Our sales team consists of the following:

Highest level executive in charge of national sales team:

Martin Olinger, President of TenCate Sports Division
Phone: (404) 229-4135
m.olinger@tencategrass.com

Mr. Olinger will oversee and manage the sales teams of all TenCate Grass Sports Division subsidiary companies. Each company also has a sales leadership team all of which report to Mr. Olinger.

The Ten Cate Grass Sports Division's companies are made up of a vast network of locations and sales personnel strategically located throughout the entire country. There is no territory in the U.S. left untouched. Please refer to 1.3.3 that lists all of TenCate Grass companies and locations all of which have knowledgeable and motivated salespersons promoting the products and services provided under this RFP response.

TenCate Grass Sports Division Sales Team

First Name	Last Name	Job Title	Company	Region
Bob	Aurich	Technical Sales/Construction Project Director	Academy Sports Turf, Inc.	CO, NM, UT, WY, ID
Steve	Jewell	Sr. Sales Manager	Academy Sports Turf, Inc.	CO, NM, UT, WY, ID
Paul	Kelley		Academy Sports Turf, Inc.	CO, NM, UT, WY, ID
Doug	Kahler	Sales Director	Academy Sports Turf, Inc.	CO, NM, UT, WY, ID
Phil	Pirro, JR	VP	Applied Landscape Technologies	Northeast & Mid-Atlantic
Allen	Hubbard	Sales Manager	Athletic Fields of America	Northeast & Mid-Atlantic
Patrick	Buganski	Business Development Manager	ATT Sports	NE
Roman	Slaybaugh	VP, Business Development (Western Region)	GeoSport Lighting	West Coast & Southwest / Mountain Region, Pacific NW
Bill	Smith	President	GeoSport Lighting	Broad US
Don	Massey	Business Development Manager	GeoSport Lighting	TX
Dan	Leahy	Sales	GeoSport Lighting	Northeast & Mid-Atlantic
Charlie	Dawson	CEO, TenCate Sports	TenCate	Broad US
Ryan	Bowie	Regional Sales	GeoSurfaces	GA, TN
Michael	Cain	Mgr., Track Sales & Marketing (West Region)	GeoSurfaces SE	Broad US, focused on West Coast / Southwest
Bryan	Conley	Director of Tracks (SE)	GeoSurfaces SE	Southeast
Billy	Dawson	Dir., Business Development (BTR)	GeoSurfaces BTR	LA, AR
Lauren	Doneski	Dir., Business Development (NE)	GeoSurfaces NE	Northeast & Mid-Atlantic
John	Huard	VP, Project Manager (NE)	GeoSurfaces NE	Northeast & Mid-Atlantic
Anthony	James	Track Sales (SE)	GeoSurfaces SE	VA, NC, SC, GA, FL
Jason	Melot	Business Development Mgr. (BTR)	GeoSurfaces BTR	OK
Todd	Penley	VP, Business Development (SE)	GeoSurfaces SE	VA, NC, SC, GA, FL
Lance	Rosenberger	Sr. VP, Construction Services (SE)	GeoSurfaces	VA, NC, SC, GA, FL
Jim	Stalford	Sr. VP, Track Division	GeoSurfaces	Broad US
Adele	Styborski	Sales Coordinator (SE)	GeoSurfaces	VA, NC, SC, GA, FL
Jeff	Trexler	Sales (SE)	GeoSurfaces	VA, NC, SC, GA, FL
Matt	**Wait**	Dir. of Business Development (BTR)	GeoSurfaces	VA, NC, SC, GA, FL

Danny	Williamson	Track Sales (SE)	GeoSurfaces	VA, NC, SC, GA, FL
Peter	Kirsch	Director of Business Development	GeoSurfaces	LA, TX, MS
Mark	Driver	Business Development	GeoSurfaces	Southeast
James	Beever	Sales	GeoSurfaces	IL, IN
Brian	Cole	Sales	GeoSurfaces	OH, IN, MI
John	Eldridge	Director of Business Development	GeoSurfaces	LA, AR
John	Lantz	Business Development	GeoSurfaces	KT, TN, AL, MS
Jody	Factor	President	Midwest Sport and Turf Systems	Midwest
Tom	Cunniff	Sales	Midwest Sport and Turf Systems	Midwest
Kevin	Reynolds	Sales	Midwest Sport and Turf Systems	Midwest
Ryan	Anderson	Sales	Midwest Sport and Turf Systems	Midwest
Henri'	Childs	Sales	Midwest Sport and Turf Systems	Midwest
Robert	Norman	Sales	Midwest Sport and Turf Systems	Midwest
Steve	Einspanier	Regional Business Development Manager	TenCate	IA, MO, NE
Chad	Feris	Sr. VP, Sports Division	TenCate	Broad US
Chuck	Fleishman	Dir., Sports Business Development	TenCate	Deep South & Midwest
Ryan	Reid	Director of Baseball & Regional Business Development Manager	TenCate	Broad US
Cody	Robinson	Project Manager (GreenFields)	TenCate	Broad US
Troy	Squires	VP, Business Development	TenCate	Broad US
Hunter	Green	Sales & Project Manager	TenCate	Broad US
Dave	DiGeronimo	Sales Director (California)	VPG	West Coast
Lance	Ellis	VP, Sales and Marketing	VPG	West Coast
Lawrence	Hamocon	VP, Operations	VPG	West Coast
Kip	Olsen	President	VPG	West Coast
Jarrod	Lawson	Business Development	VPG	West Coast
Greg	Morales	Business Development	VPG	West Coast
Steve	Davey	President	Byrom Davey	Southern California
Eric	Jennings	Vice President	Byrom Davey	Southern California
Mike	Ryan	President	Landtek	East Coast
Ed	Ryan	Vice President	Landtek	East Coast
John	Sulinksi	COO	Landtek	East Coast
Marty	Lyons	Senior Vice President	Landtek	East Coast

John	Nitti	Vice President of Sales & Marketing	Landtek	East Coast
Chris	Hines	Account Manager	Landtek	Tri-State Area, PA
Kevin	Malone	Account Manager	Landtek	NY, NJ, CT, PA
Mike	Quick	Account Manager	Landtek	NY, NJ, CT, PA
Jason	Randall	Account Manager	Landtek	NY, NJ, CT, PA
Craig	Sampsell	Account Manager	Landtek	MD, VA, NC, SC, GA
Wes	Hardin	Account Manager	Landtek	FL
Chris	Spitznas	Account Manager	Landtek	PA, NJ
Marlene	Young	Account Manager	Landtek	NY, NJ, CT, PA
Kuhns	Michelle	Regional VP of Sales, Central Region	Hellas	KS, MO, NE, IA, ND, SD
Rose	Justin	Regional VP of Sales. West Coast and Pacific NW	Hellas	OR, WA,MT, ID
Towlsey	James	Regional VP of Sales, Western Region	Hellas	CA

Kanough	Mazen	Business Development Manager	Hellas	Southern California
Young	Jennifer	Business Development Manager	Hellas	Southern California
Belleci	Robert	Business Development Manager	Hellas	Northern CA
Chase	Ross	Business Development Manager	Hellas	CO, NM, WY
Winney	Jeff	Business Development Manager	Hellas	AZ
Fisher	David	Business Development Manager	Hellas	OK, AR, N. TX
Redovian	Jimmy	Business Development Manager	Hellas	KY, TN
Drummonds	Ryne	Regional VP of Sales SE	Hellas	AL, GA
Petrucelli	Shamus	Business Development Manager	Hellas	OH, PA, WV
Burtcel	Brian	Business Development Manager	Hellas	NJ
Valentine	Kyle	Business Development Manager	Hellas	LA, MS
Glass	Tina	Business Development Manager	Hellas	IN, SW OH
Quaye	Reginald	Business Development Manager	Hellas	VA, MD, DE
Linke	Dean	Regional VP	Hellas	NC, SC
McCoy	Daniel	Business Development Manager	Hellas	NC, SC
Swearingen	Jeff	Business Development Manager	Hellas	N. FL
Banker	Kolby	Business Development Manager	Hellas	S. FL
Ball	Mark	Business Development Manager	Hellas	NW Texas

Richardson	Chase	Business Development Manager	Hellas	North Central TX
McBride	Joe	Business Development Manager	Hellas	NE TX
Bullock	Randy	Senior Vice President of Business Development	Hellas	DFW Area
Rodriguez	Armando	Business Development Manager	Hellas	West Texas
Heath	Tony	Business Development Manager	Hellas	SE TX
Massey	Chris	Business Development Manager	Hellas	SE TX
O'Donnell	Knute	Business Development Manager	Hellas	Travis County, TX
Parks	Brian	Business Development Manager	Hellas	South TX
Weirich	Dwayne	Business Development Manager	Hellas	Central Texas

5.2. Contract Implementation Strategy & Expectations

5.2.1. ***Contract Expectations.*** What is your company's strategy to increase market share in the public sector while leveraging an Equalis Group Master Agreement?	Approximately 75% of TenCate Sports Division revenue will be from the educational sector K-12 and higher education, both public and private and we are already among the biggest players in the industry. We will continue our growth in this sector by continuing to with strategic acquisitions, emphasis on innovation, prioritizing customers and maintaining their loyalty, employment of a skilled workforce, ownership and quality control of manufacturing facilities, streamlining processes, and strategic marketing campaigns among other proven and new strategies. Our growth means growth of an Equalis contract.
5.2.2. ***Five (5) Year Sales Vision & Strategy.*** Describe your company's vision and strategy to leverage a resulting contract with Equalis over the next five (5) years. Your response may include but is not limited to; the geographic or public sector vertical markets being targeted; your strategy for acquiring new business and retaining existing business; how the contract will be deployed	Please see below TenCate 5-Year Growth Strategy. Also please refer to response to 1.3.4 regarding sales and marketing capabilities.

with your sales team; how you will market the contract, including deployment of the contract on your company website; and the time frames in which this will be completed.	

TENCATE 5-YEAR GROWTH STRATEGY - EQUALIS

Tencate is the world's leading supplier of turf solutions and has been for many years. We started as a fiber designer and manufacturer, but have evolved into a total integrated sports system developer, manufacturer, contractor, and installer. We do this thru a unique structure of corporate development and manufacturing facilities combined with local market leading contractors and installers that have been acquired over the past few years.

While we retain our local branding and service models with our regional companies, all are 100% owned and operated by Tencate and all represent best in class Tencate sports products and systems. This strategy will have Tencate as the leading sports system provider in the US and Worldwide in 2025. Customers will be seeking out our products and our companies. An Equalis contract can help them facilitate direct purchases, reducing time and costs.

5.2.3. ***Sales Objectives.*** What are your top line sales objectives in each of the five (5) years if awarded this contract?	2025: $1.5B; 2026: $1.7B; 2027: $2.0B; 2028: $2.3B and 2029: $2.6B

6. ADMIN FEE & REPORTING

6.1. ***Administration Fee & Reporting***	
6.1.1. ***Administrative Fee.*** Equalis Group only generates revenue when the Winning Supplier generates revenue based on contract utilization by current and future Members. The administrative fee is normally calculated as a percentage of the total Spend for agencies accessing product and services through the Master Agreement and is typically between two percent (2%) to three percent (3%). In some categories, a flat fee or another fee structure may be acceptable. **Please provide your proposed Administrative Fee percentage or structure.** **NOTE**: The proposed Administrative Fee language for this contract is based on the terms disclosed in the **Attachment A – Model Administration Agreement**.	[redacted]
6.1.2. ***Sales & Administrative Fee Reporting.*** Equalis Group requires monthly reports detailing sales invoiced the prior month and associated Administrative Fees earned by the 15th of each month. Confirm that your company will meet this reporting requirement. If not, explain why and propose an alternative time schedule for providing these reports to Equalis Group.	TenCate prefers quarterly reporting due to the structure of the organization and nature of our work. We are a large organization made up of a number of companies from whom we must receive information in order to report accurately. The majority of our sales not only consist of materials but of the installation of said materials which can take months to complete from start to finish. Not to mention, our Director of Cooperative Purchasing is currently solely responsible for all reporting and would be most appreciative of only having to report four times per year versus twelve.
6.1.3. ***Contract Utilization Tracking.*** Define the specific, step-by-step process for your sales and/or quote generation team to tie a quote, proposal, invoice, and/or purchase order to the Equalis cooperative contract in your Customer Relationship Management ("**CRM**"), sales system, or Enterprise Resource Planning ("**ERP**") system. Include any individuals and/or teams involved in this process.	Projects being pursued are recorded as Opportunities within our Salesforce CRM. Each Opportunity that is associated with an Equalis purchase is marked as such by the sales or estimating personnel entering the project details. Quotes are generated by devoted estimating teams and either uploaded as individual files attached to the Salesforce Opportunity or attached using the Quote related object in Salesforce. Upon the successful award of a contract, the Opportunity in Salesforce is marked as closed-won. Details stored in the Opportunity are then used to generate invoices and POs from our ERP system, Microsoft Dynamics 365 Business Central.

6.1.4. ***Self-Audit.*** Describe any self-audit process or program that you plan to employ to verify compliance with your proposed contract with Equalis Group. This process includes ensuring that your sales organization provides, and Members obtain the correct pricing, reports reflect all sales made under the Contract, and Winning Supplier remit the proper admin fee to Equalis.	Equalis members will work directly with a TenCate Grass salesperson or team that is dedicated to serving their location. Our sales team will meet with the customer, visit and assess the site, and gather all of the necessary information needed by our in-house estimating departments to create an accurate estimate and proposal that does not exceed our Equalis discounted pricelist. Our estimators understand the not-to-exceed pricing guidelines required by our cooperative master agreements. Upon award of an Equalis contract, our estimators will immediately be introduced to our Equalis price list which will always be available to them for reference when putting together their proposal. Further, the estimator will review the proposal with our Cooperative Purchasing Department to ensure compliance with our Equalis pricing. Once a project is complete, our dedicated Cooperative Purchasing Department will ensure all change orders are accounted for, the customer has been 100% billed, the project is reported and admin fee placed in line for payment the month following the project completion

SECTION 1.4.4
Customer
References

TENCATE

"Creating healthier more beautiful communities."

Response to Equalis Group
RFP COG-2164
Sports Surfacing and Related Solutions

INSTALLATIONS

PIVOT™ by Tencate

PRAIRIE GROVE HIGH SCHOOL
Location: Prairie Grove, AR

SPRINGDALE HIGH SCHOOL
Location: Springdale, AR

TYSON PARK (Baseball)
Location: Springdale, AR

SHILOH CHRISTIAN
Location: Springdale, AR

REFERENCES

PIVOT by Tencate

ARKANSAS

Project: Shiloh Christian School
Location: Springdale, AR
Application: Football (indoor)
SqFt: 35,000

Project: Tyson Park (Soccer)
Location: Springdale, AR
Application: Soccer
SqFt: 96,500

Project: Tyson Park (Baseball)
Location: Springdale, AR
Application: Baseball
SqFt: 65,400

Project: JB Hunt Park
Location: Springdale, AR
Application: Softball
SqFt: 92,900

Project: Springdale HS (Multi-purpose)
Location: Springdale, AR
Application: Mult-purpose
SqFt: 76,000

Project: Springdale HS (Football)
Location: Springdale, AR
Application: Football
SqFt: 84,000

Project: Prairie Grove High School
Location: Prairie Grove, AR
Application: Football
SqFt: 80,000

CALIFORNIA

Project: Fresno State
Location: Fresno, CA
Application: Baseball
SqFt: 18,000

Project: Santee Soccer
Location: Santee, CA
Application: Soccer
SqFt: 15,000

Project: Luther Burbank HS
Location: Sacramento, CA
Application: Multi-purpose
SqFt: 18,000

Project: Sequoia Elementary
Location: Shafter, CA
Application: Landscape
SqFt: 5,100

ILLINOIS

Project: Centralia High School
Location: Centralia, IL
Application:
SqFt: 85,000

Project: Mascoutah High School
Location: Mascoutah, IL
Application:
SqFt: 85,000

LOUISIANA

Project: Walker High School
Location: Walker, LA
Application: Football
SqFt: 117,035

OKLAHOMA

Project: Shawanee High School
Location: Shawanee, OK
Application: Football
SqFt: 93,300

TENNESSEE

Project: Brentwood Academy
Location: Brentwood, TN
Application: Baseball
SqFt: 28,180

TEXAS

Project: Bicentennial Park
Location: Southlake, TX
Application: Baseball
SqFt: 232,900

Project: Bob Jones (Soccer)
Location: Southlake, TX
Application: Soccer
SqFt: 227,800

Project: Bob Jones (Softball)
Location: Southlake, TX
Application: Softball
SqFt: 180,410

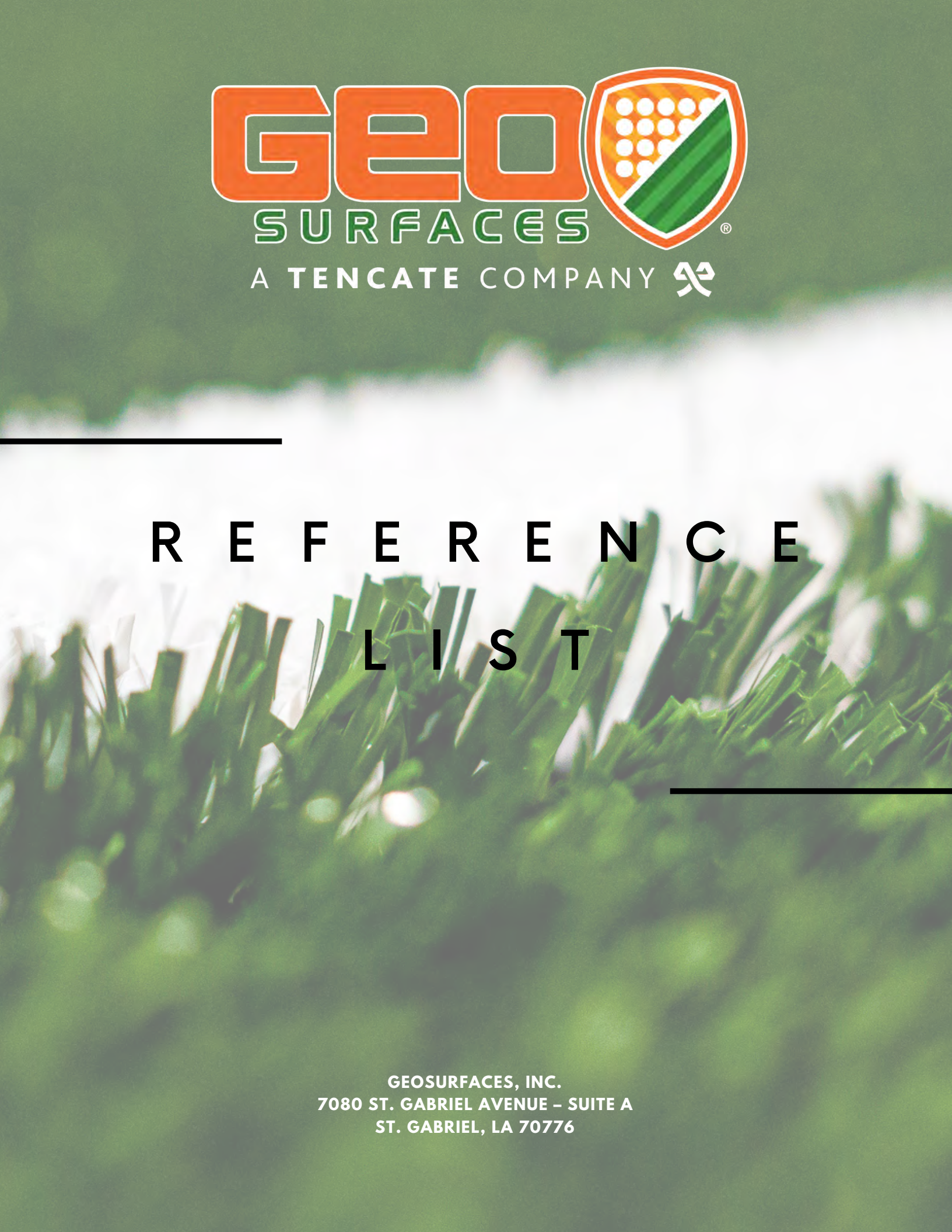
CANADA

Project: West Ham Soccer
Location: Burlington, Ontario
Application: Soccer (indoor)
SqFt: 8,800

TYSON PARK (Soccer)
Location: Springdale, AR

SANTEE SOCCER
Location: Santee, CA

PRAIRIE GROVE HIGH SCHOOL
Location: Prairie Grove, AR



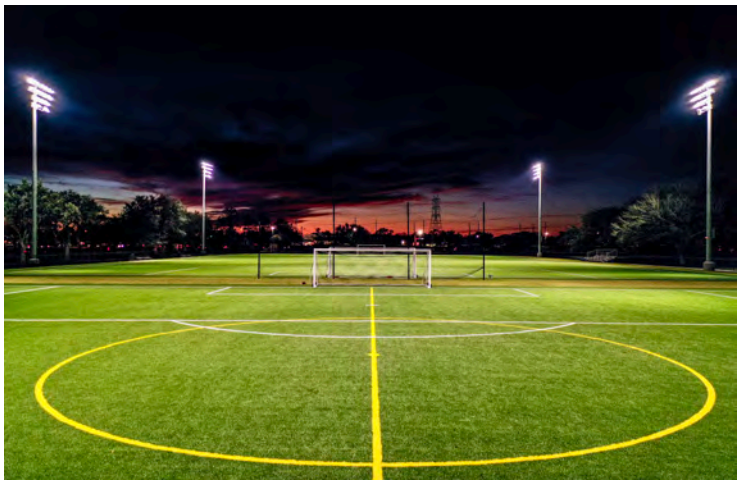
GEO SURFACES®

A TENCATE COMPANY

REFERENCE LIST

GEOSURFACES, INC.
7080 ST. GABRIEL AVENUE – SUITE A
ST. GABRIEL, LA 70776

Texas A&M University
Mondo Track
College Station, TX
Craig Valka, valka@athletics.tamu.edu



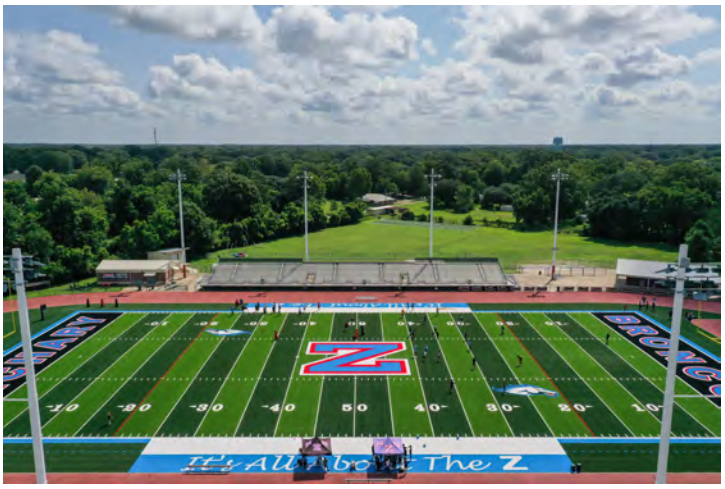
Lafreniere Park Fields 7 and 8
FIFA Certified Soccer Fields

Metairie, LA

Tripp Rabalais, trabalais@jeffparish.net

Live Oak High School
Football Field and Mondo Track Surface
Denham Springs, LA
Jesse Cassard, jesse.cassard@lpsb.org

Episcopal High School
FIH Certified Hockey Pitch
Bellaire, TX
Robert Buckelew, rbuckelew@ehshouston.org



Zachary High School Football Field

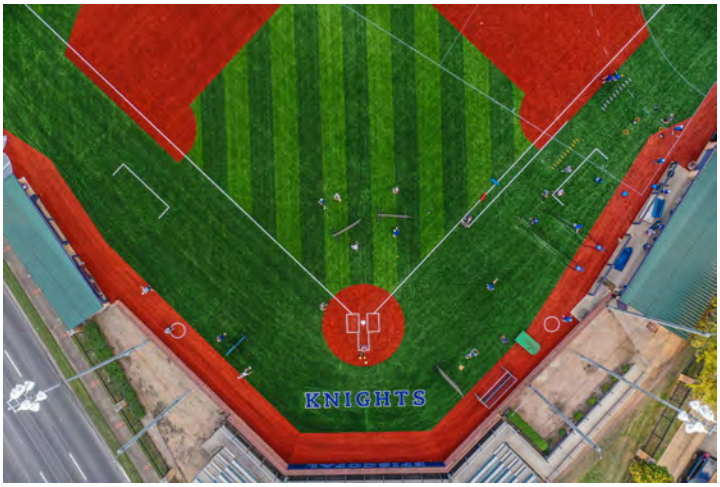
Zachary, LA

Donald Simpson, Donald.Simpson@zacharyschools.org

Southeastern Louisiana University
Football Field

Hammond, LA

Jay Artigues, jartigues@selu.edu



Episcopal High School
Baseball Field

Bellaire, TX

Robert Buckelew, rbuckelew@ehshouston.org

University of Central Florida
Baseball Foul Territory and Indoor Football

Orlando, FL

David Hansen, dhansen@athletics.ucf.edu

CLIENT LIST

Baylor University (TX) - Getterman Stadium Softball Field
Glenn Moore - 254.709.3106

Louisiana State University (LA) - Alex Box Stadium, LSU Practice Baseball Field, Tiger Park
Jill Smith - 225.266.2648

University of Louisiana Lafayette (LA) - Lamson Park Softball Field
Scott Hebert - 337.247.4945

McNeese State University (LA) - Cowboy Diamond Baseball Field & Cowgirl Diamond Softball Field
Justin Hill - 318.953.0802

Louisiana Christian University (LA) – Football Field & Billy Allgood Baseball Field
Mike Byrnes - 318.664.6232

Nicholls State University - Manning Field @ Guidry Stadium, Ben Meyer Field @ Didier Stadium, Colonel SB Field
Matt Roan - 540.818.4504

Marucci Sports (LA) – Marucci Elite
Kurt Ainsworth - 225.892.7627

Baseball USA (TX) – Recreational Baseball Fields
Chris Schultea - 713.703.2335

Southern Arkansas University (AR) – Rip Powell Football Field, Dawson Softball Field, Goodheart Baseball Field & Indoor Football Practice Field
Steve Browning - 501.912.2198

City of Broussard (LA) – Broussard Sports Complex BB & SB Fields, FIFA Certified Soccer Field
Zach Leleux - 337.330.2649

City of Youngsville (LA) – Youngsville Sports Complex Baseball & Softball Fields
Tim Robichaux - 337.581.3028

City of Euless (TX) – The Parks at Texas Star Baseball Fields, Legends Baseball Field
Ray McDonald - 817.685.1669

City of Grapevine (TX) – Oak Grove Park Baseball & Softball Fields
Kevin Mitchell - 817.253.9327

City of Ruston (LA) – Ruston Sports Complex Baseball & Softball Fields
Womack Construction/Chase Womack - 225.610.6880

Cypress Mounds Baseball Complex (LA) – Recreational Baseball Fields
Mack Chuilli - 225.610.6880

City of Zachary (LA) – Zachary Youth Park Baseball Fields & Indoor Batting Cage Facility
Shane Hebert - 225.268.9323

City of Sterlington (LA) – Sterlington Sports Complex Baseball & Softball Fields
Kerry Elee – 318.366.4166

City of Thibodaux (LA) – Peltier Park Baseball Field
Kevin Clement – 985.803.0142

Jackson Parish Recreation (LA) – Recreational Baseball Fields & Batting Cage Facility
Mike Simonelli - 318.533.3630

Lafourche Parish Recreation (LA) – Recreational Baseball Fields
Kirk Chaisson - 985.438.0663

Terrebonne Parish School Board (LA) – Terrebonne Parish Baseball Field
Becky Breaux - 985.855.1533

University High School (LA) – Football Stadium & Baseball Field
Andy Martin – 225.892.1682

Shiloh Christian School (AR) – Football Stadium, Baseball Field, Softball Field & Indoor Practice Field
Ben Mayes - 479.756.1140

Conway School District (AR) – Conway High School Football Field & Indoor Practice Facility
Clint Ashcraft - 501.450.4880

Parkview Baptist School (LA) – Eagle Football Field, Baseball Field & Softball Field
Darron Mitchell - 225.405.3753

Ouachita Parish School Board (LA) - West Monroe High School Rebel Football Stadium & Practice Field
Jerry Arledge - 318.509.9188

Calcasieu Parish School Board (LA) - Westlake High School Football Field, Baseball & Softball Complexes
John Richardson – 337.842.0436

St. James Parish School Board (LA) - Lutcher High School Baseball & Softball Field
Clay Slagle - 225.252.4826

St. James Parish School Board (LA) - St. James High School Baseball & Softball Field
Clay Slagle - 225.252.4826

Livingston Parish School Board (LA) – Live Oak High School Baseball, Softball & Football Field
Jesse Cassard – 225.810.7529

City of Crowley (LA) – Recreational Baseball & Softball Fields
Peter Kirsch - 337.253.932

ADDITIONAL CLIENTS

COLLEGES and UNIVERSITIES:

New England Patriots (MA) – Empower Fieldhouse
University of Central Florida (FL) – Nicholson Fieldhouse
Auburn University (AL) – Outdoor Training Fields
Clemson University (SC) – Outdoor Training Fields
University of South Carolina (SC) – Indoor Track
Western Carolina University (NC) – Football/Soccer Stadium
University of North Carolina at Chapel Hill (NC) – Softball Indoor Training Center
Arkansas State University (AR) – Centennial Bank Stadium & Indoor Practice Facility
University of Arkansas Pine Bluff (AR) – Simmons Bank Field
Henderson State University (AR) – Carpenter-Haygood Stadium & Football Practice Field
Henderson State University (AR) – Baseball Field & Softball Field
Harding University (AR) – Sonic Field
University of Central Arkansas (AR) – Estes Stadium Football Field
University of Central Arkansas (AR) – Baseball Field & Softball Field
University of Central Arkansas (AR) – Intramural Softball Fields
Lyon College (AR) – Indoor Practice Facility
Rhodes College (TN) – Baseball Field
Southern Nazarene University (OK) – Football/Soccer Field
Southern Nazarene University (OK) – Indoor Training Center
Oklahoma Christian University (OK) – SNU Stadium Softball Field
Oklahoma Baptist University (OK) – Crain Family Stadium at the Hurt Complex Track
Pearl River Community College (MS) - Lion Stadium Football Field
Pearl River Community College (MS) - Baseball Field
Holmes Community College (MS) – Baseball Field & Softball Field
Southeastern Louisiana University (LA) – Strawberry Stadium Football Field
Southeastern Louisiana University (LA) – Lady Lions Softball Field & Pat Kenelly Diamond Baseball Field
University of Louisiana Monroe (LA) – Lady Warhawks Softball Field
University of Louisiana Monroe (LA) – University Recreation Complex
Louisiana State University Shreveport (LA) – Pilot Baseball Field

ARKANSAS – PARKS and SCHOOLS:

Ashdown High School Football Field
Bauxite High School Indoor Practice Facility
Bentonville High School Baseball, Softball & Football Field
Bentonville West High School Baseball & Softball Field
Blytheville High School Football/Soccer Field
Bryant High School Football/Soccer Field & Indoor Practice Facility
Cabot High School Baseball, Softball & Football Field
Cabot Parks & Recreation – Baseball & Softball Fields
Christ the King Outdoor Soccer Facility
City of Jonesboro – Baseball Fields
Conway Christian School Baseball Field
Crossett High School Football Field & Indoor Multi-Purpose Field
DeQueen High School Football Field

DeWitt High School Indoor Practice Field
Drew Central High School Baseball, Softball & Football Field
El Dorado Recreational Complex – Baseball & Softball Fields
Episcopal Collegiate High School Soccer Field
Greenbriar High School Indoor Practice Facility
Greenland High School Baseball, Softball & Football Field
Gurdon High School Football/Soccer Field & Turf Track
Hamburg High School Football/Soccer Field
Harmony Grove High School Football Field
Helena-West Helena High School Football Field & Practice Field
Hope High School Football/Soccer Field & Indoor Football Field
Jacksonville High School Indoor Facility
Jonesboro High School Indoor Practice Field
Lakeside High School Football Field
Lincoln High School Football Field
Mineral Springs High School Football/Soccer Field
Nashville High School Baseball Field
Newport High School Football Field
Northshore Business Soccer Complex
Palestine-Wheatley High School Baseball, Softball & Football Field
Pea Ridge High School Football Field
Prairie Grove High School Softball Facility
Quitman High School Football Field
Star City High School Football/Soccer Field & Indoor Practice Field
Stuttgart High School Football/Soccer Field
Sylvan Hills High School Indoor Practice Facility
Trumann High School Football Field
Van Buren High School Indoor Practice Facility

LOUISIANA – PARKS and SCHOOLS:

Airline High School Football Field
Archbishop Rummel High School Baseball Hitting Facility
Archbishop Rummel High School Multi-Purpose Field
Beekman Charter High School Football Field
Breaux Bridge High School Football/Soccer Field
BREC – Central Park Baseball & Softball Fields
BREC – Howell Park Putting Greens
BREC – Oak Villa Sports Complex
Calcasieu Parish Ward 3 Recreation – Legion Field
Calvary Baptist High School Baseball Field
Camp Beauregard Multi-Purpose Field & Turf Running Track
Carrollton-Audubon Batture Park - Baseball Field
C.E. Byrd High School Baseball Field
Cecilia High School Football/Soccer Field & Baseball Field
Central High School Baseball, Softball & Football/Soccer Field
Champion Sportsplex Baseball Field
City of Abbeville – Comeaux Park Baseball & Softball Fields

City of Carencro – City Park Baseball Fields & Batting Cage Facility
City of Lafayette – Clark Field & Fabacher Field Batting Facility
D'Arbonne Woods Charter School Football Field
Denham Springs High School Baseball, Softball & Football Field
East Iberville High School Football Field
East Ouachita Parish Osterland Sports Complex – Baseball & Softball Fields
Eunice Sports Complex Baseball Fields
Evangel Christian Academy Football Field
Farm Systems, LLC Baseball & Softball Fields
Geissler Project FIFA Soccer Field
Grant High School Softball Field
Hammond America Park Baseball & Softball Fields
Holy Savior Menard High School Baseball Field
Iowa High School Baseball & Softball Fields
Jesuit High School – John Ryan Stadium
John Curtis Christian School Multi-Purpose Field & Softball Field
LA Pepper Plex – Baseball, Softball, & T-Ball Fields
Lafayette Christian Academy Football Field
Lafayette Renaissance Charter Academy Playground
Lafraniere Park FIFA Certified Soccer Fields
Lakeview High School Football Field
Larose Regional Park Civic Field
Mandeville High School Baseball Field
Mandeville's Pelican Park Baseball Fields
Mangham High School Lobrano Field
Many High School Baseball, Softball & Football/Soccer Field
Northlake Christian High School Wolverine Football Field
Northshore High School Baseball Field
Northwood High School Football Field
Oak Grove High School Football Field & Turf Walking Track
Parkway High School Football Field
Plaquemine High School Baseball & Softball Complex and Football/Soccer Field
Premier Soccer Indoor Soccer Field
Rayville High School Football Field
Regala Park Recreational Baseball Fields
Sam Houston High School Football/Soccer Field
Scott Park Recreational Baseball & Softball Fields
South Beauregard Recreation Baseball Fields
St. Charles Catholic High School Baseball Field
St. Martinville High School Football Field
St. Pius Elementary School Multi-Purpose Field
St. Thomas Aquinas High School Baseball & Softball Field
St. Thomas More High School Softball & Football/Soccer Field
Sterlington High School Indoor Training Facility
Terrebonne General Medical Center Turf Running Track
Teurlings Catholic High School Baseball Field
Teurlings Catholic High School Rebel Stadium Football/Soccer Field & Turf Track
The Dunham School Indoor Training Facility

Tioga High School Softball Field
Total Package Sports Training Center
Traction CSE Baseball & Softball Fields
Wally Pontiff Jr. Foundation Baseball Field
Ward 10 Recreation Baseball, Softball & T-Ball Fields
West Baton Rouge Parish Parks Baseball & Softball Fields
West Feliciana Parish School Board Baseball & Softball Field
West Ouachita High School Football/Soccer Field
Westlate High School Baseball Field
White Castle High School Football Field
Zachary High School Football Field

TEXAS – PARKS and SCHOOLS:

Athlete Training + Health - Allen – Soccer Field & Indoor Training Facility
Athlete Training + Health - Katy – Soccer Field & Indoor Training Facility
Athlete Training + Health - Pearland – Memorial Hermann Sport Park
Athlete Training + Health - Spring – Indoor Training Facility
Bakersfield Park - Baseball Field
Bicentennial Park - Baseball Field & Playground
Cotton Sports Ranch - Multi-Purpose Field & Baseball Field
Episcopal High School - Baseball Complex
Episcopal High School FIH Certified Field Hockey Field
Hooks Independent School District Athletic Facilities
St. Paul II Catholic High School Football Field
The Parks at Texas Star Softball Fields

OKLAHOMA – PARKS and SCHOOLS:

Pawhuska High School Football/Soccer Field

OHIO – PARKS and SCHOOLS:

Bishop Hartley High School Football Field
Cardinal High School Football Field

MISSISSIPPI – PARKS and SCHOOLS:

Central Hinds Academy Baseball Field
Rankin Trails Park – Baseball & Softball Fields

TENNESSEE – PARKS and SCHOOLS:

Crockett Park Baseball Field

MISSOURI – PARKS and SCHOOLS:

Hayti School District Football Field

EXCELLENCE MADE HERE
CITY OF RUSTON

Mayor Ronny Walker

November 10, 2021

RE: GeoSurfaces Turf at the Ruston Sports Complex and Ruston High School Baseball Field

To Whom it May Concern:

Two years ago, the City of Ruston invested in a Sports Complex capable of serving as a host for such national events as the Dixie Youth World Series as well as large community events. One of the most important aspects of our facility construction was the utilization of sixteen artificial turf fields that are turfed from plate to fence. The City selected GeoSurfaces for the full construction of these fields. GeoSurfaces offers a range of technologies that were implemented on our field including the GeoBase structural base system, the GeoFlo synthetic drainage core/shock pad system and GeoGreen artificial surface.

To date, after playing more than 5,500 games, we have been pleased with all aspects of the system and the fields have performed better than advertised. GeoSurfaces has been responsive to all our service requests, and we have had no warranty claims. We would highly recommend the use of these technologies on any field you may choose to build.

Should you have any questions or need additional information on our experience with GeoSurfaces please contact my office.

Sincerely,

Ronny Walker, Mayor
City of Ruston

OKLAHOMA CHRISTIAN UNIVERSITY
ATHLETICS

May 28, 2015

Charles,

I want to send you this email concerning the artificial turf we purchase from you almost three years ago for the Oklahoma Christian University Softball complex. GEO's turf has held up extremely well and your patent drainage mat is outstanding.

This past week Oklahoma City had record setting rains during the NCAA Division II National Softball Tournament held at the Hall of Fame stadium. Due to about nine inches of rain over a three day period, the final two days of the tournament was held at the Lawson Softball Complex at Oklahoma Christian University. We are just ten miles north of the Hall of Fame Stadium and had the same amount of rain as they did.

After meeting with the NCAA comity Sunday morning, it was decided to play the semi final games on Sunday afternoon and the championship game on Monday. It rained three inches on Saturday and two inches on Sunday morning. All the rain drained and we started the first of three games at 4 p.m. Sunday afternoon. All three games went well and the championship game was played at noon on Monday as scheduled.

The NCAA Division II National Tournament would not have been completed if we did not have a turf field since the College World Series is scheduled the following Thursday.

Again, I just wanted to send you a note to thank you for developing an outstanding turf and draining mat that allows us the opportunity to play games and host tournaments.

Sincerely,

Tom Heath
Head Softball Coach
Oklahoma Christian University

2501 E. Memorial Road
Edmond, OK 73013
ph 405.425.5357
www.oceagles.com/softball

PARKVIEW
BAPTIST SCHOOL

January 12, 2013

GeoSurfaces
Attn: Charlie Dawson
6326 Highland Road
Baton Rouge, LA 70808

Charlie,

Thanks for all of the work you have done for us. We love the field and it has transformed our program and given us freedoms to get work done that could not be accomplished with a natural grass field. We are able to get more things done in less time and never consider possible rain when planning our practices or events. The drainage is fabulous and the field is first class. We still have a hard time believing that we are lucky enough to have such a first class field for our students and athletes.

We took bids from all of the self-proclaimed big boys in the turf business. We strongly considered FieldTurf and Hellas but after seeing the quality of your products and seeing the value of having a local company perform the construction and installation we simply could not be happier with the outcome. At first, we fell for the marketing hype that these companies rely on. But after comparing the products, the price and the service it was a very easy decision to make. We also feel blessed to have chosen a company that uses a shock pad. No other company even offered this feature. Safety is our number one priority and we are very happy we worked with you on this project.

Please share our story with anybody that may be considering installing a turf field. We would recommend your products and services without hesitation.

Thank you again for the support you have given our programs and the partnership you have built with us.

Sincerely,

Kenny Guillot
Athletic Director/Head Football Coach

Parkview Baptist School
5750 Parkview Church Road
Baton Rouge, Louisiana 70816
225.291.2500 Ext. 151

PORT ARANSAS
INDEPENDENT SCHOOL DISTRICT
EST. 1913

June 13, 2018

Geo Surfaces
Mr. Charles Dawson
17827 N. Ashford Rd
Baton Rouge, LA 70817

Dear Charlie,

Thank you for coming to Port Aransas to reconstruct our track and field after Hurricane Harvey. The track and field look amazing! We receive positive comments about it daily. In addition to our students and staff using it, we see community members using it every single day. We all are so happy to have a safe place to exercise or train. Having this facility re-opened for use has been a positive boost to our community during this long recovery from the hurricane.

When your crews were here working, we observed teamwork, expertise, great leadership, and a strong desire to do things the right way. I appreciate your professionalism and your partnership with us in providing an excellent athletic facility for our students, staff, and community.

We will gladly recommend your company to anyone looking to do a similar project.

Sincerely,

Sharon McKinney

Sharon McKinney
Superintendent of Schools

CHAMPEAUX
EVANS
HOTARD
ARCHITECTS
A.P.A.C.

702 Dr. Michael DeBakey Drive
Lake Charles, LA 70601

ph: 337.439.8871
fax: 337.439.8872

www.champeaux.biz

Date: **March 28, 2022**

To: **Rice University – Department of Athletics**
Dan McGarry, Assistant A.D. for Facilities & Events

From: **Champeaux Evans Hotard Architects**
Brad Evans, Louisiana Registered Architect, NCARB

Re: **Letter of Recommendation for GeoSurfaces, Inc.**

To Whom It May Concern,

I am pleased to provide this letter of reference for GeoSurfaces, Inc., based on their performance and professionalism exhibited during our past experiences.

The Sam Houston High School – Football Stadium Improvements project was Accepted by the Owner on March 9th, 2021. The Contract Amount was $1,290,000.00, and the project consisted of the replacement of an existing natural grass field and undersized drainage system with a new Multi-Sport Synthetic Turf Field over safety shock padding, drainable aggregate base with excess stormwater retention, and new drainage system; removal and resurfacing of the existing Running Track with a new LHSAA, NHSFA, NCAA, and IAAF compliant SBS Synthetic Running Track Surface and striping; perimeter fencing; and sidewalks. The contract required an aggressive timeline and approach to the work to deliver the Football Field prior to the first home game. GeoSurfaces' planning, approach, and execution of the Contract would have resulting in Beneficial Occupancy of the new field being granted several weeks ahead of the schedule, if not for the Landfall of Hurricane Laura. During the storm, windborne debris from the press box and adjacent buildings caused substantial damage to the just-completed field. GeoSurfaces wasted no time contacting their insurance company, ordering new turf, and mobilizing crews and additional manpower to remove, replace, and complete the field in time for the first track meet, held on March 12th, 2021.

Charlie Dawson, CEO, and Ben Moran, PLA, Project Manager, were instrumental in the construction and delivery of the project on time and under budget – not once, but twice.

Vinton High School Football Stadium Improvements was completed in October, 2019. This project included the removal, re-grading, re-contouring, and re-planting of the existing Natural Grass Football Field, installation of a new irrigation system, installation of new perimeter drainage system, re-surfacing of the existing track, sidewalks, site grading and re-contouring, and fencing. Once again, the project timeline was extremely aggressive, and required the successful contractor to have the new drainage installed, and the field planted and fully grown-in prior to the first home game. GeoSurfaces delivered the project on time, and within budget.

I have had the pleasure of working with Charlie, Ben, and the GeoSurfaces Team on several projects, all of which were a success.

As a testament to our confidence in their knowledge and expertise, our office is currently consulting with the GeoSurfaces Team on several upcoming Artificial Turf Field, Natural Grass Field, and Running Track projects that are in the planning stage.

It is without hesitation that I extend my highest recommendation of GeoSurfaces, Inc. to any public body or private client who may want a reference as to their performance, quality, and integrity.

Champeaux Evans Hotard, APAC

CC: CEH File

Brad Evans

ATHLETICS DEPARTMENT

TEXAS A&M ATHLETICS

February 26, 2024

Ben Moran
GeoSurfaces, Inc.
7080 St. Gabriel Ave.
St. Gabriel, LA 70776

RE: R.A. "Murray" Fasken '38 Indoor Track & Field

Dear Mr. Ben Moran,

Please accept this letter commending the efforts and product delivered by GeoSurfaces and Mondo.

In 2023 our Track and Field Program built a brand-new indoor facility. GeoSurfaces was contracted to provide and install the permanent banked track as well as the Mondo flooring throughout the event level. The GeoSurfaces and Mondo team's performance was nothing short of extraordinary. The level of professionalism, persistence, and dedication from the installation crews as well as the project management and administrative team was outstanding. The two worked collaboratively together to efficiently meet and exceed all expectations. Their experience and knowledge in the product and process is evident in the success of this project.

For three months, we watched as they worked; taking only one Sunday off, to complete the work and deliver a flawless product. The team installing the structure seamlessly handed their portion of the project over to the team responsible for installation of the surfacing. For the final two weeks, the surfacing team worked with the certification company to install all lines and markings to perfection.

We are proud to have the only permanent banked track of this kind in North America and are very thankful for both GeoSurfaces and Mondo for their level of dedication to our program.

Sincerely,

Craig Valka
Senior Associate Athletics Director – Capital Projects
Texas A&M Athletics

756 Houston St.
1228 TAMU
College Station, TX 77843-1234

Tel. 979.845.5129 Fax 979.845.1458
www.12thMan.com

CITY OF Zachary LOUISIANA

P.O. BOX 310
ZACHARY, LOUISIANA 70791
(225) 654-0287
CITYOFZACHARY.ORG

October 26, 2021

RE: GeoSurfaces turf at the Zachary Youth Park

To whom it may concern:

More than a decade ago, the City of Zachary, LA selected GeoSurfaces to construct the artificial turf surfaces at the Zachary Youth Park. We opted to specify and install the GeoBase structural base system with the GeoFlo shock pad and the high density GeoGreen turf. More than 20,000 games later, this system has performed better than expected and exactly as intended. To date, we have not experienced a single system failure or filed a single warranty claim. The City of Zachary would highly recommend the implementation of this GeoSurfaces' system at any facility in need of a high performing artificial turf system.

In October of 2021, we replaced these artificial turf surfaces with GeoSurfaces' latest turf field technology. During this process, we were able to inspect the originally installed GeoBase and GeoFlo and, despite more than a decade of use, found no measurable deterioration and no single area on any field that needed remediation.

GeoSurfaces has been a consistent, valuable, and responsive partner to all of our needs. Should you have any questions or need more information on our experience with GeoSurfaces and their products, please contact me directly.

Sincerely,

David Amrhein, Mayor
City of Zachary

PAST AND PRESENT PERFORMANCE QUESTIONNAIRE

A. **GENERAL INFORMATION**:

Contractor's Name: Academy Sports Turf
Address: 3740 S. Jason Street
Englewood, CO 80110

Telephone Number: 303 789-3172
Fax Number: 303 762-8190
Point of Contact: Stephen Jewett

Project Title and Brief Description of Work: Synthetic Turf Installation * at Buckley AFB, Aurora, CO

Contract Number Provided by Offeror: FA2543-05-D 0002 * Dollar Amount: *493,290 *

Contract Period or Dates of Performance Provided by Offeror: Nov 2009 - April 2010 *

Contractor performed as the ☐ **Prime** Contractor ☒ **Sub**-Contractor ☐ **Key** Personnel.

** Note: If offeror holds or has held other contracts with your agency/organization in the last 3 years, please complete separate evaluation forms for those contracts as well.*

B. **RESPONDENT INFORMATION**:

Name of Respondent: Greg Echols Title: Project Manager

Address: 600 S. Aspen
STOP 86
Buckley AFB 80011

Telephone Number: (720) 847-5397
Fax Number: (720) 847-9101
Email Address: Gregory.Echols@Buckley.Af.mil

C. **RETURN COMPLETED QUESTIONNAIRE VIA MAIL, FAX OR EMAIL TO**:

Mail:
10 CONS/LGCA
Attn: FA7000-11-R-0017/Aaron Schulz
8110 Industrial Drive, Suite 200
USAF Academy, CO 80840-2315

Fax: 719-333-6608

E-mail: aaron.schulz@usafa.af.mil

D. **PERFORMANCE INFORMATION**: Choose the appropriate letter on the scale (E, G, S, M, U, and N) that most accurately describes the contractor's performance or situation. ***PLEASE PROVIDE A NARRATIVE EXPLANATION FOR ANY RATINGS OF Exceptional, Marginal or Unsatisfactory.*** A block for the narrative is provided at the end of each Section for ***Quality of Work, Technical Performance, Schedule and Business Relations.***

E	G	S	M	U	N
Exceptional	**Good**	**Satisfactory**	**Marginal**	**Unsatisfactory**	**Neutral**
Performance meets contractual requirements with many exceeded to the Government's benefit. The contractual performance of the element or sub-element being assessed was accomplished with no more than a few minor problems for which corrective actions taken by the contractor were highly effective.	Performance meets contractual requirements with some exceeded to the Government's benefit. The contractual performance of the element or sub-element being assessed was accomplished with no more than some minor problems for which corrective actions taken by the contractor were effective.	Performance meets contractual requirements. The contractual performance of the element or sub-element contains some minor problems for which corrective actions taken by the contractor were satisfactory.	Performance does not meet some contractual requirements. The contractual performance of the element or sub-element being assessed reflects a serious problem for which the contractor has not yet identified corrective actions or the contractor's proposed actions appear only marginally effective or were not fully implemented.	Performance does not meet most contractual requirements and recovery is not likely in a timely manner. The contractual performance of the element or sub-element contains a serious problem(s) for which the contractor's corrective actions appear or were ineffective.	Performance was not observed or not applicable to the current effort being reported against.

Place an "X" in the appropriate column using the definitions matrix on the previous page.

		E	G	S	M	U	N
1	**Quality of Work**						
1.1	The contractor provided a quality finished project/product.	✓					
1.2	The contractor implemented procedures to find and correct performance discrepancies.	✓					
1.3	The contractor provided timely and complete documentation (includes, but not limited to, payroll reports, labor reports, progress reports, material submittals, shop drawings, and as-built drawings)	✓					
1.4	The contractor complied with all required federal, state, city, and local environmental policies and plans.	✓					
1.5	The contractor responded appropriately to any "Notices of Violations" from environmental enforcement authorities and took actions to correct the deficiency.						✓
1.6	The contractor complied with safety standards and/or number of safety related incidents, code compliance, as applicable.	✓					
1.7	The contractor responded appropriately to any safety deficiencies received from the safety enforcement authorities (OSHA, Safety Office, etc.) and took actions to correct the deficiencies.						✓
1.8	The contractor rectified any noted deficiencies in the work in a timely and efficient manner.						✓
1.9	Please provide your observations regarding **Quality**. See attached Remarks						
2	**Technical Performance**						
2.1	The contractor provided experienced managers and supervisors with the technical and administrative abilities needed to meet contract requirements.	✓					
2.2	The contractor demonstrated ability to hire, maintain, and replace, if necessary, qualified personnel during the contract period.	✓					
2.3	If the project required contractor employee background checks prior to working in a government secure area or similar commercial environment, the contractor employees had no problems obtaining the necessary credentials.	✓					
2.4	The contractor complied with labor standards and documentation	✓					

		E	G	S	M	U	N
2.5	The contractor's crewmembers were knowledgeable with respect to the tasks assigned.	✓					
2.6	The contractor's crewmembers possessed and used the appropriate Personal Protective Equipment (PPE).	✓					
2.7	The contractor's tools and equipment were in safe condition and included all appropriate safety features.	✓					
2.8	The contractor's crew kept the work site clear of trash and debris during the day and cleaned up the area at the end of each workday.	✓					
2.9	Construction activities were managed such that no ancillary damage was done to adjacent buildings, property, rooms, or automobiles.	✓					
2.10	The contractor responded to project manager's directives regarding any noted concerns of material appropriateness or installation procedures.	✓					
2.11	The contractor provided and effectively managed quality subcontractors and ensured those subcontractors complied with all contract requirements.	✓					
2.12	How has the contractor performed in projects involving soil and compaction testing?	✓					
2.13	How well did the contractor apply excavation and earthwork skills in projects?	✓					
2.14	How well did the contractor apply synthetic turf installation skills in projects?	✓					
2.15	How well did the contractor apply synthetic turf infill installation skills in projects?	✓					
2.16	How well did the contractor apply synthetic turf anchoring skills in projects?	✓					
2.17	How well did the contractor apply revegetation skills in projects?						✓
2.18	How well did the contractor apply lettering, numbering or graphic design installation skills in projects?	✓					
2.19	How well was the contractor able to manage the work site in projects?	✓					
2.20	Please provide your observations regarding **Technical Performance.** See attached Remarks						
3	**Schedule**						

		E	G	S	M	U	N
3.1	The contractor developed a realistic progress schedule and maintained scheduled progress.	✓					
3.2	The contractor was responsive to changes and provided complete, accurate and reasonable cost proposals that met the requirements of the stated change request.	✓					
3.3	The contractor took immediate corrective actions to improve schedule problems, if applicable.						✓
3.34	Please provide your observations regarding **Schedule.** Contractor completed 30 days early						
4	**Business Relations**						
4.1	The contractor was available to discuss the contract and project requirements during construction to meet the contract requirements.	✓					
4.2	The contractor identified problems as they occurred, displayed initiative to solve the problems and offered alternative solutions to problems encountered during the project.						✓
4.3	The construction project manager or superintendent had the authority to carry out the day-to-day operations of the project.	✓					
4.4	The contractor paid their employees, subcontractors and/or suppliers in a timely manner. Address any problems in the narrative.	✓					
4.5	The contractor provided the appropriate guarantees, warranties and other required close out documents such as as-built drawings, manuals and other such documentations as required by contract.	✓					
4.6	How would you rate the relationship between the contractor and client's/customer's team?	✓					
4.7	How would you rate the overall corporate management, reasonableness and cooperative conduct of the contractor?	✓					
4.8	Please provide your observations regarding **Business Relations.**						
5	**Summary**						

		E	G	S	M	U	N
5.1	Would you award another contact to the company being evaluated? If no, please explain.	YES/NO					
5.2	Was the customer satisfied with the finished product? If no, please explain.	YES/NO					
5.3	Have any cure notices, show cause letters, letter of reprimand, suspension of payment, or termination been issued? If yes, please explain:	YES/NO					
5.4	Were liquidated damages assessed? If so, please explain:	YES/NO					
5.5	Additional Remarks: See attached						
5.6	Overall rating for this firm:	E ✓	G	S	M	U	

Remarks

It is very significant that this project was conducted as a retrofit to an existing facility. The athletic field and surrounding running track were in place with a natural turf an irrigation system and drainage. Academy Sports Turf took extraordinary care to limit disturbance of the existing facility, to clean up work areas immediately after installation took place. The Quality of Workmanship was outstanding. Adequacy of the CQC Plan was outstanding. Each handworker, was briefed on the plan. Implementation of the CQC Plan was also outstanding with workers taking pride in the quality of their work. The Quality of the contractor's QC Documentation was Outstanding and submitted in a timely manner. The contractor's plan for storage and safeguarding of materials, was Outstanding. The formerly existing running track was carefully protected throughout construction. Adequacy of materials was Outstanding. The contractor did not offer the least expensive turf material, or the most expensive, but turf that is durable and will be readily available for replacement in the future if needed. Adequacy of Submittals was Outstanding. The contractor provided submittals well in advance of procurement and installation which gave the Government plenty of time to examine and approve it. Samples and mock-ups of the materials were also provided in order for the Government to see the material and make a good evaluation of them prior to installation. Adequacy of QC Testing was Outstanding. The mock-ups and field testing assured that the equipment would perform from day 1 of beneficial occupancy. Adequacy of As-Builts was Outstanding. Drawings and photographs were provided in hard copy and electronically which allowed the Government to enter the data into their system immediately. Use of Specified Materials was Outstanding. No substitutes were offered or considered. Identification/Correction of Deficient Work in a timely Manner was Outstanding. Nowhere in the project was there any deficient work performed, however the contractor did identify deficient work performed in the original construction of the field. Cooperation and Responsiveness was Outstanding. The contractor was able to remain flexible and work with the primary contractor through cooperation and responsiveness. Management of Resources/Personnel was Outstanding. The contractor's Coordination and Control of Subcontractor(s) was Outstanding. The contractor included all subcontractors in their Quality Control Plan and Safety Plan. The adequacy of site cleanup was Outstanding with the contractor cleaning as he progressed, leaving a clean and clear worksite each evening when they left work. The Effectiveness of Job-Site Supervision was Outstanding with a site supervisor present at all times to control and direct personnel. Compliance with laws and Regulations was Outstanding. No laws or regulations were broken throughout the project. Professional Conduct was Outstanding. The on-site supervisor resolved issues in a professional manner and all of his interaction with Government personnel was professional. Review/Resolution of Subcontractor's Issues was Outstanding. The contracted firm worked very closely with the subcontractor and no issues filtered through to government personnel. Implementation of Subcontracting Plan was Outstanding. The subcontractor was integrated into the general contractor's schedule seamlessly. Adequacy of Initial Progress Schedule was Outstanding. Adherence to the approved schedule was Outstanding. The contracted firm was able to remain on schedule throughout the

execution of the project. Resolution of Delays was Outstanding basically because there were no delays. Submission of Required Documentation was Outstanding. All submissions were provided in a timely manner which allowed the Government to review the documents and the opportunity to provide feedback well in advance of procurement and installation. Completion of Punch list Items was Outstanding. The punch list consisted of the expectation of O&M Manuals and as-built documentation which was provided in a timely manner and complete. The contractor provided as-built drawings and O&M manuals in a very timely manner upon completion of the project and beneficial occupancy. Submission of Updated and Revised Progress Schedules was Outstanding. Revised progress schedules were produced and provided immediately upon finalization of modifications. Warranty Response has been Outstanding and continues to be so (Warranty period is still in force). Correction of Noted Deficiencies N/A. Adequacy of Safety Plan was Outstanding. Implementation of Safety Plan was Outstanding. The contracted firm held weekly Safety meetings with their personnel and sub-contractors. Correction of Noted Deficiencies Outstanding (None noted).


Hellas
A TENCATE COMPANY

DALLAS COWBOYS

AT&T STADIUM – HOME OF THE DALLAS COWBOYS
FORD CENTER AT THE STAR
SPORTS THERAPY & RESEARCH FACILITY AT THE STAR

TOD MARTIN
Stadium General Manager
214-600-2012

HOUSTON TEXANS

NRG STADIUM
HOUSTON METHODIST TRAINING CENTER

DAVID J. GERDY
Director of Operations, ASM Global-NRG Park
832-250-8216

KEVIN HANSEN
Sports Field and Grounds Manager
832-250-3825

JACKSONVILLE JAGUARS

MILLER ELECTRIC CENTER
TIAA BANK FIELD
Stadium Perimeter

LORI WINDISCH
Project Manager, Development Projects
904-633-4631

NICK FEDEWA
Assistant Sportsfield Manager (ASM Global)
904-403-5199

KANSAS CITY CHIEFS

THE UNIVERSITY OF KANSAS
Health System Training Complex

BRANDON HAMILTON
Vice President of Stadium Operations & Facilities
816-920-4759

LAS VEGAS RAIDERS

ALLEGIANT STADIUM
INTERMOUNTAIN HEALTHCARE PERFORMANCE CENTER AT
Las Vegas Raiders Headquarters

RYAN LABELL
Senior Director of Production and Operations
725-233-6292

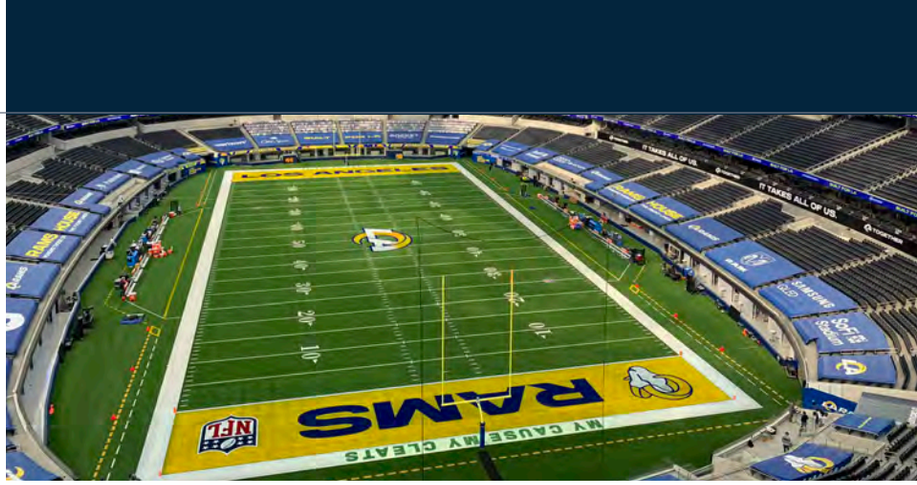
ZACH LONGENECKER
Head Groundskeeper
510-872-2236

LOS ANGELES RAMS

SoFi STADIUM

OTTO BENEDICT
Senior Vice President Facility and Campus Operations
310-617-2516

COLBY GARDNER
Director, Turf & Grounds
806-544-4643



LOS ANGELES CHARGERS

SoFi STADIUM

OTTO BENEDICT
Senior Vice President Facility and Campus Operations
310-617-2516

COLBY GARDNER
Director, Turf & Grounds
806-544-4643

MIAMI DOLPHINS

BAPTIST HEALTH TRAINING FACILITY AT Nova Southeastern University (2017)
BAPTIST HEALTH TRAINING COMPLEX AT Miami Gardens (2021)

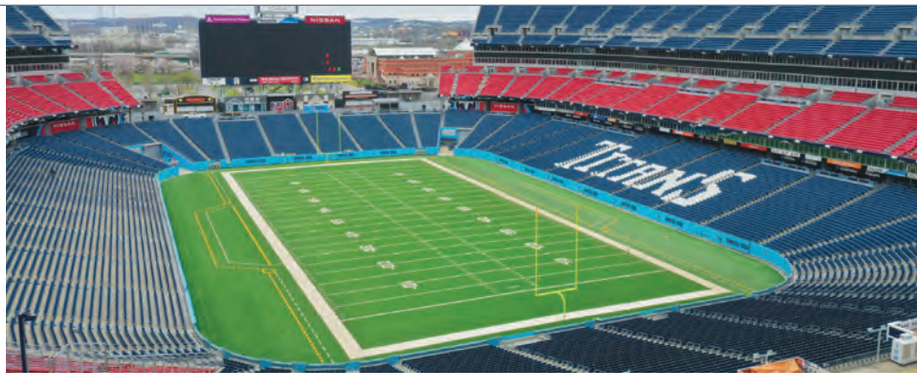
ED LAMOUR
Director of Grounds at Training Facility
754-224-1238

TENNESSEE TITANS

NISSAN STADIUM
ST. THOMAS SPORTS PARK

ADAM NUSE
Senior VP of Business Operations
615-788-3923

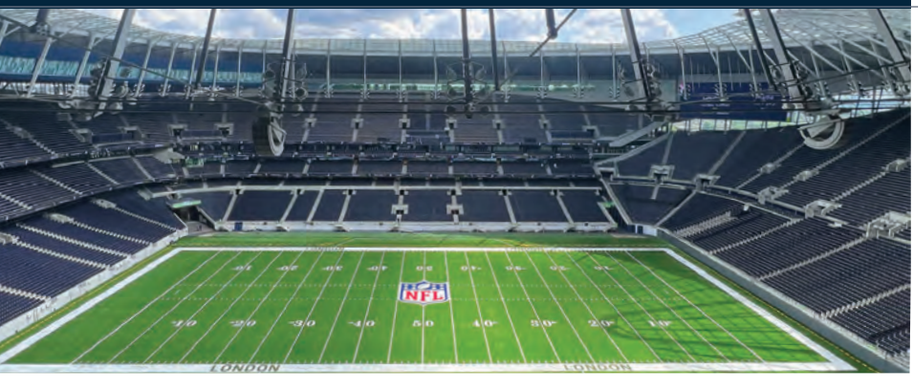
MIKE HENRY
Manager, Sports Field
615-308-2716



WASHINGTON COMMANDERS

COMMANDERS PARK
Orthovirginia Training Center

PETE BENEVENTO
Director of Grounds
301-276-6075



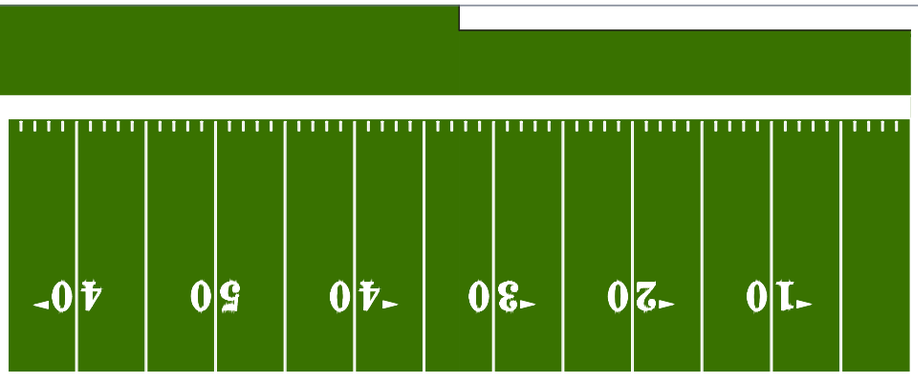
TOTTENHAM STADIUM

WAYNE BILLING
Stadium Grounds and & Transition Manager
+44-07990677417

ARIZONA CARDINALS

STATE FARM STADIUM
BUBBLE PRACTICE FACILITY

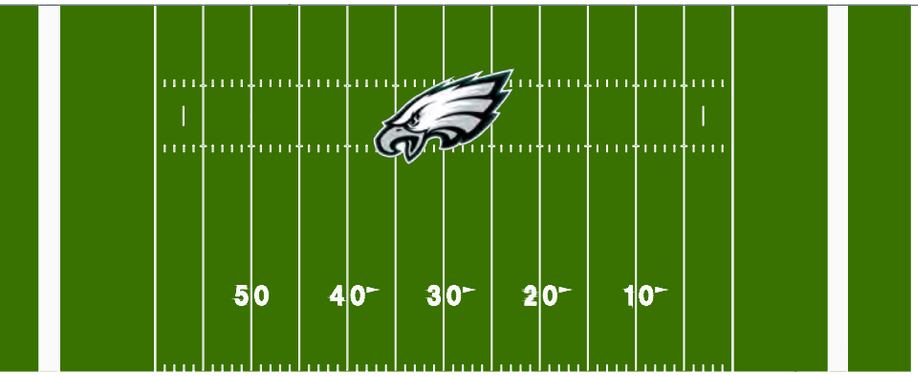
ANDY LEVY
Sport Turf Director
480-703-9573



GREEN BAY PACKERS

DON HUTSON CENTER (Coming 2023)

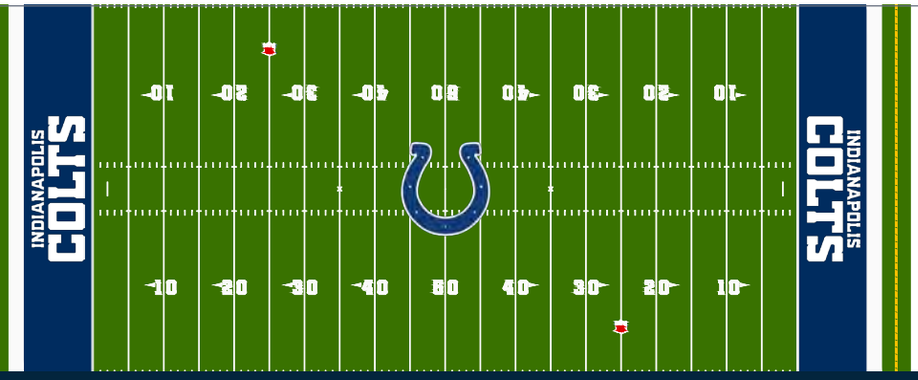
KYLE NOOKER
Titletown Facilities Manager
920-569-7436



PHILADELPHIA EAGLES

NOVA CARE COMPLEX (Coming 2024)

TONY LEONARD
Vice President of Grounds
215-806-8050
267-570-4105



INDIANAPOLIS COLTS

LUCAS OIL STADIUM (Coming 2024)

TROY GLENDENNING
Director of Grounds
317-716-3498
317-808-5166

UNIVERSITY OF KENTUCKY

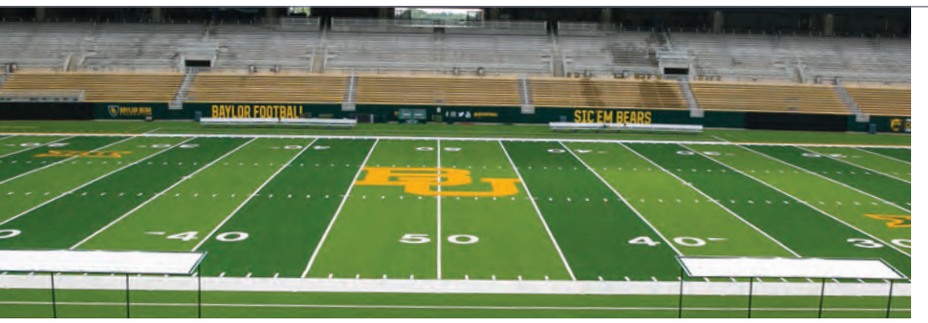
KROGER FIELD
NUTTER FIELD HOUSE

DONNIE MEFFORD
Associate Athletic Director for Operations
859-338-6580

CLEMSON UNIVERSITY

POE INDOOR PRACTICE FACILITY

DJ GORDON
Director of Football Operations & External Affairs
843-222-0639



BAYLOR UNIVERSITY

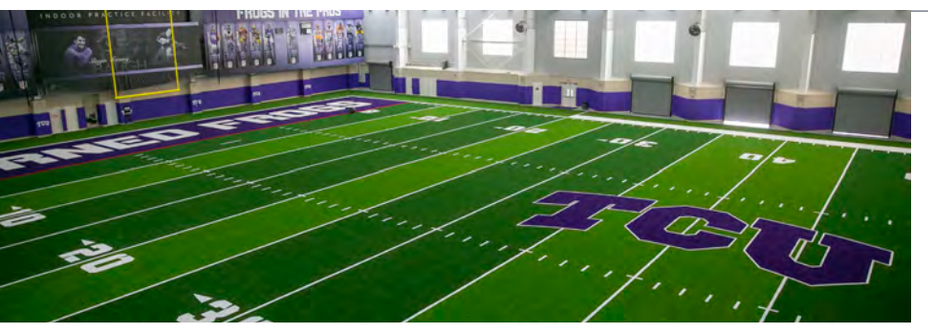
McLANE STADIUM

DREW PITTMAN
Associate Athletic Director,
Facilities & Event Management
254-749-2336

TEXAS TECH UNIVERSITY

JONES AT&T STADIUM

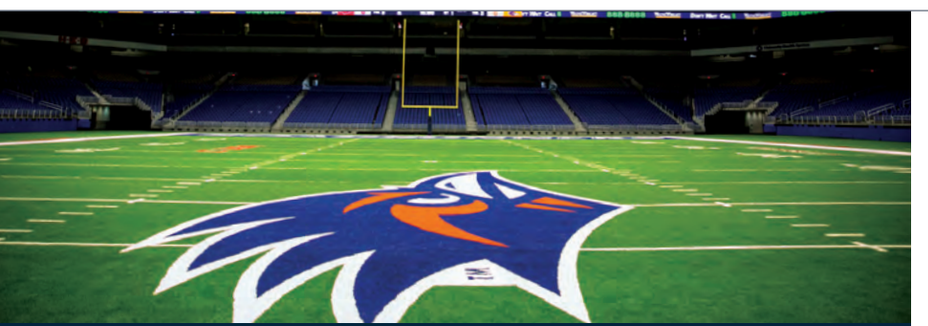
MICHAEL RYAN
Texas Tech Assistant Athletic Director For Facilities
mike.ryan@ttu.edu



TEXAS CHRISTIAN UNIVERSITY

SAM BAUGH INDOOR PRACTICE FACILITY

ANTHONY CRESPINO
Assistant Athletic Director
620-704-3378



UNIVERISTY OF TEXAS AT SAN ANTONIO

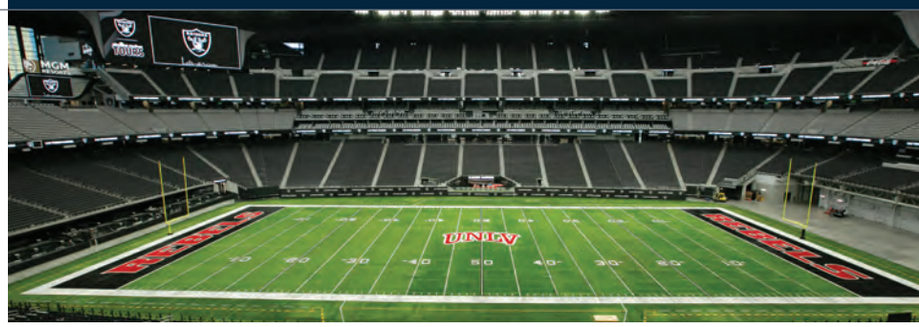
ALAMODOME

THOMAS MCAFEE
Facility Director
210-415-3717

UNIVERSITY OF NEVADA, LAS VEGAS

ALLEGIANT STADIUM

RYAN LABELL
Senior Director of Production & Operations
725-233-6292



IOWA STATE

BERGSTROM FOOTBALL COMPLEX
JOHNNY MAJORS PRACTICE FIELD

CHRIS JORGENSEN
Senior Associate Athletic Director/Operations
515-294-0307

UNIVERSITY OF IDAHO

KIBBIE DOME

TIM MOONEY
Deputy Athletic Director
208-885-0258

IDAHO STATE UNIVERSITY

HOLT ARENA

GEORGE CASPER
Director of Events
208-282-3339

TULANE UNIVERSITY

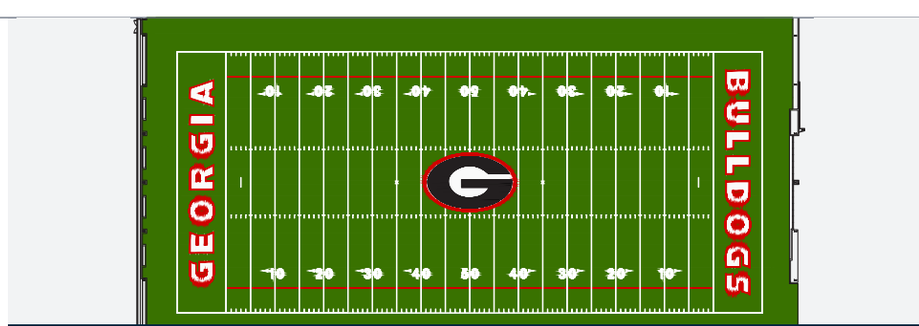
YULMAN STADIUM

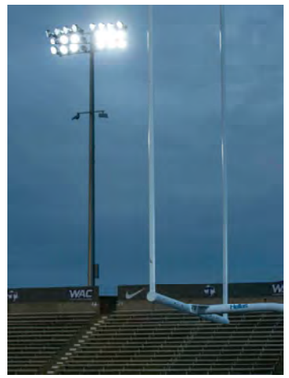
KORTNE GOSHA
Deputy Athletic Director, Operations & Capital Projects
615-809-8443

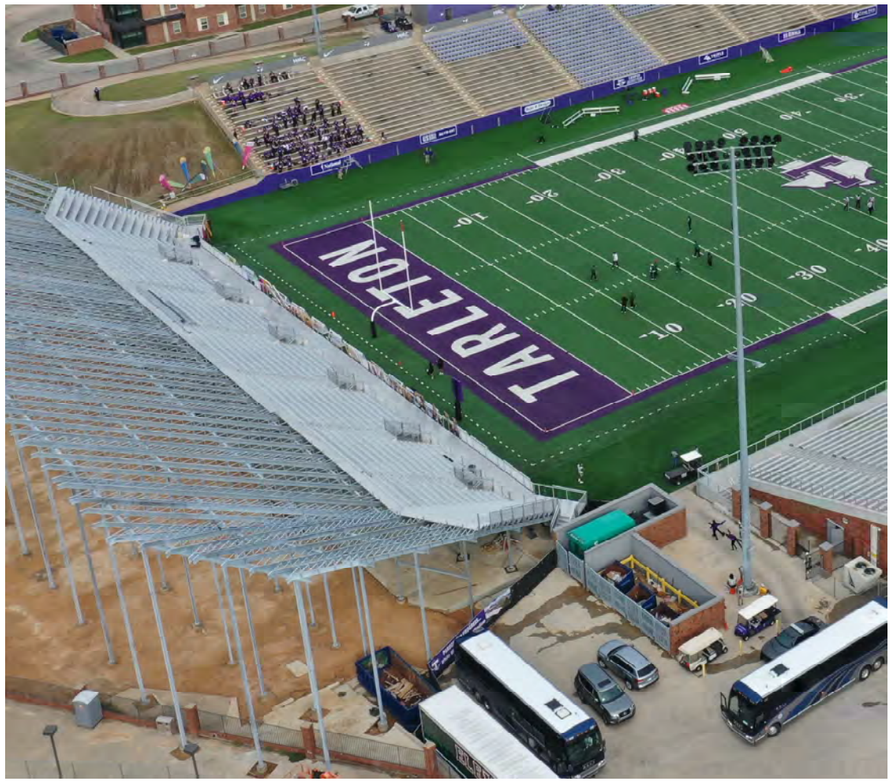
UNIVERSITY OF GEORGIA

PAYNE INDOOR ATHLETIC FACILITY

VINCE THOMAS
Assistant to the Athletic Director
vcthomas@uga.edu







TARLETON STATE

Stephenville, TX

2022

$15,139,104

TARLETON MEMORIAL STADIUM
Football Field Expansion, Bleachers (1,326 new seats)
$4,678,010 (In progress)

FIELD AND HCCA TRACK
Field for Intramural
$3,900,000 (In progress)

BASEBALL AND SOFTBALL
Bleacher expansion
$2,165,820 (In progress)

INDOOR TURF INSTALLATION
$299,983

SOFTBALL AND BASEBALL FIELDS
$2,678,836

NCCA SOCCER FIELD
$1,416,455

CITY OF CLYDE

HANNER SPORTS COMPLEX
Clyde, TX

Ongoing

D/B

$14,269,753

NAME OF PROJECT
CITY OF CLYDE

TYPE OF PROJECT
Design Build, New Construction

NATURE OF THE PROJECT
Athletic Complex construction, tennis and pickleball courts (8), lighting, parking, splash pad

START DATE
5-Jul-22

COMPLETION DATE
Ongoing

OWNER CONTACT INFO
Chris McGuire
cmcguire@clyde-tx.gov
(325) 899-2189

ARCHITECT CONTACT INFO
Eric Horn
ehorn@tait-pitkin.com
(512) 293-1862

Hellas

CARROLLTON-FARMERS BRANCH ISD

Carrollton, TX / Irving, TX

On Going

D/B

$31,891,469

ARTIFICIAL TURF IMPROVEMENTS PHASE I

TYPE OF PROJECT
Design Build, Renovation

NATURE OF THE PROJECT
Athletic complexes for football, baseball, and softball

CONTRACT AMOUNT
$11,941,340.00

START DATE
13-Nov-19

COMPLETION DATE
1-Dec-20

ARTIFICIAL TURF IMPROVEMENTS PHASE II

TYPE OF PROJECT
Design Build, Renovation

NATURE OF THE PROJECT
Athletic complexes for baseball and softball

CONTRACT AMOUNT
$11,441,785.00

START DATE
3-May-21

COMPLETION DATE
31-Dec-21

ARTIFICIAL TURF IMPROVEMENTS PHASE III

TYPE OF PROJECT
Design Build, Renovation

NATURE OF THE PROJECT
Bleachers and lighting for athletic complexes

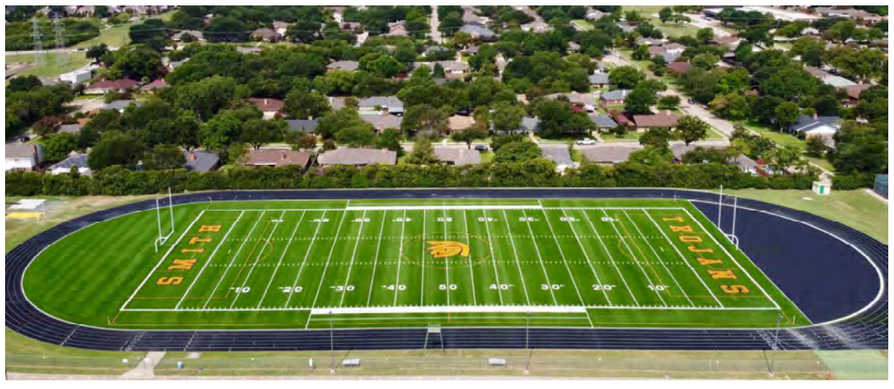
CONTRACT AMOUNT
$8,508,343.82

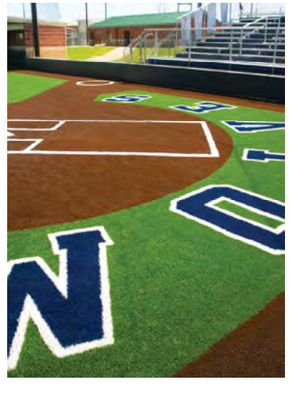
START DATE
3-Oct-22

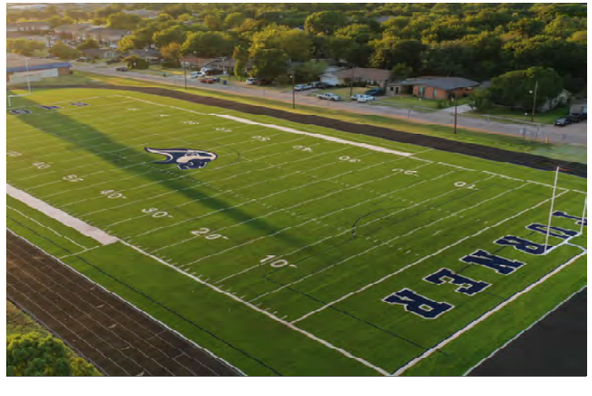
COMPLETION DATE
On Going

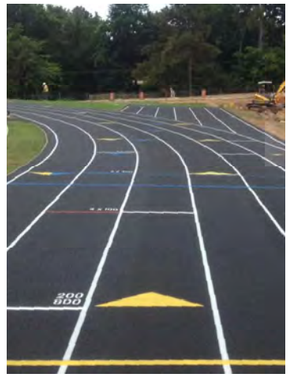
OWNER CONTACT INFO
Malcolm Mulroney
mulroneym@cfbisd.edu | (972) 968-6301

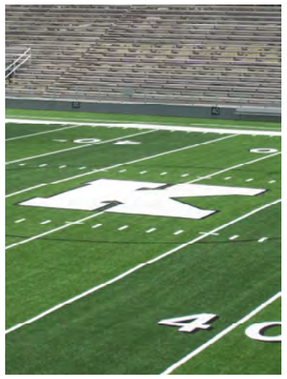
ARCHITECT CONTACT INFO
CEI Engineering & Associates, Inc.
jbresee@ceieng.com | (972) 488-3737

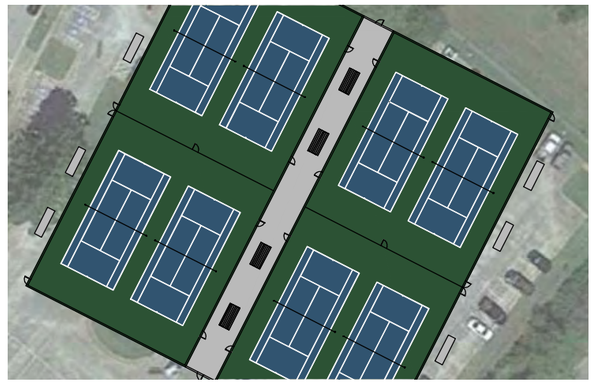


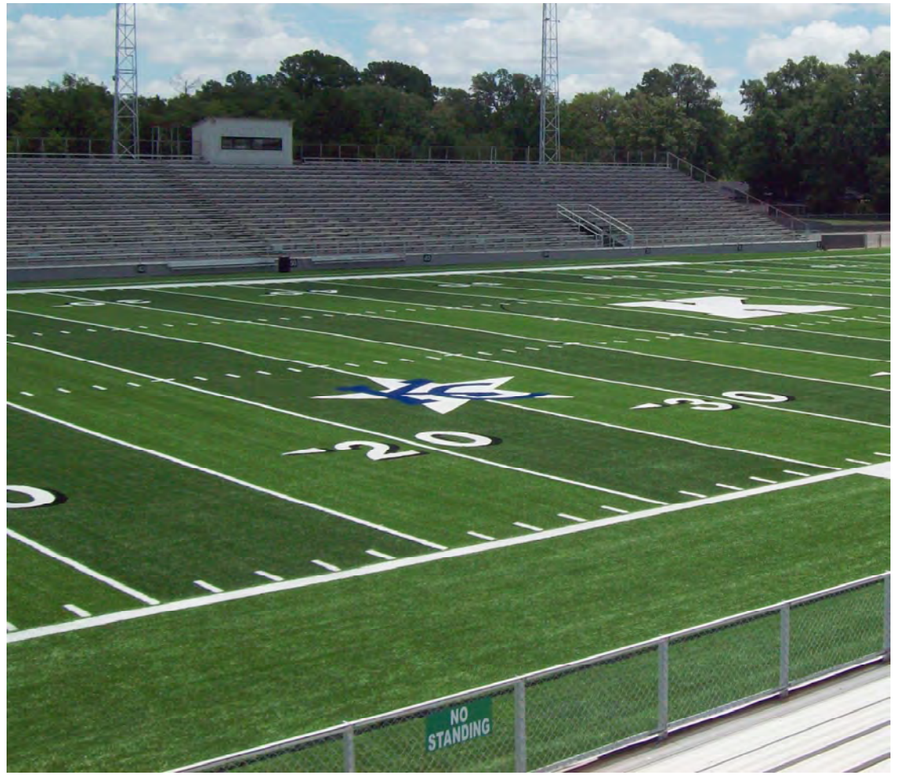












KILGORE ISD

Kilgore, TX

Ongoing

$10,905,230

KILGORE ISD

TYPE OF PROJECT
Design Build, Renovation, New Construction

NATURE OF THE PROJECT
Football/Soccer Field

CONTRACT AMOUNT
$4,029,330.00

START DATE
19-Apr-22

COMPLETION DATE
Ongoing

KILGORE SOCCER/TRACK/TENNIS

TYPE OF PROJECT
Design Build, New Construction

NATURE OF THE PROJECT
Soccer, Track, and Tennis

CONTRACT AMOUNT
$5,215,960.00

START DATE
15-Jun-22

COMPLETION DATE
Ongoing

KILGORE STADIUM AND INDOOR

TYPE OF PROJECT
Design Build, Renovation

NATURE OF THE PROJECT
Indoor, University, Stadium

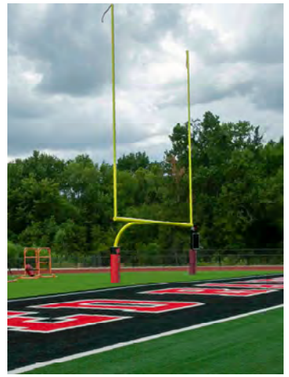
CONTRACT AMOUNT
$1,659,940.00

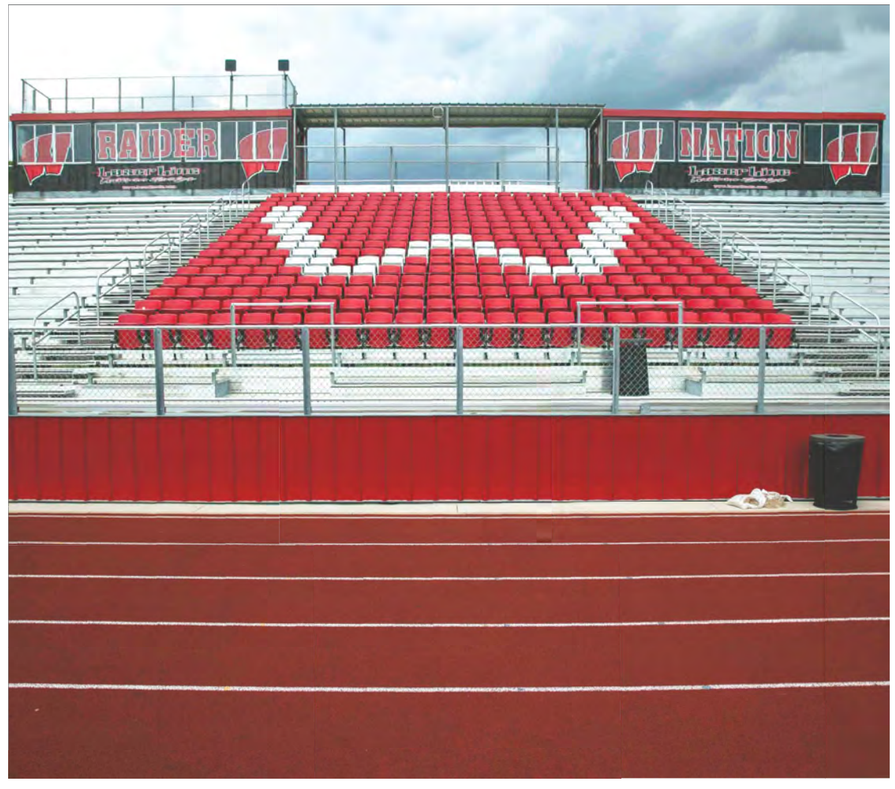
START DATE
16-May-22

COMPLETION DATE
Ongoing

OWNER CONTACT INFO
Andy Baker
abaker@kisd.org | (972) 345-9289

ARCHITECT CONTACT INFO
Eric Horn
ehorn@tait-pitkin.com | (512) 293-1862





WINNSBORO ISD

SPORTS COMPLEX
Winnsboro, TX

2022

$6,500,000

NAME OF PROJECT
WINNSBORO HS SPORTS COMPLEX RENOVATIONS

TYPE OF PROJECT
Design Build, Renovation & New Construction

NATURE OF THE PROJECT
Bleachers, football field turf conversion, running track, baseball and softball field construction, ag building, concessions

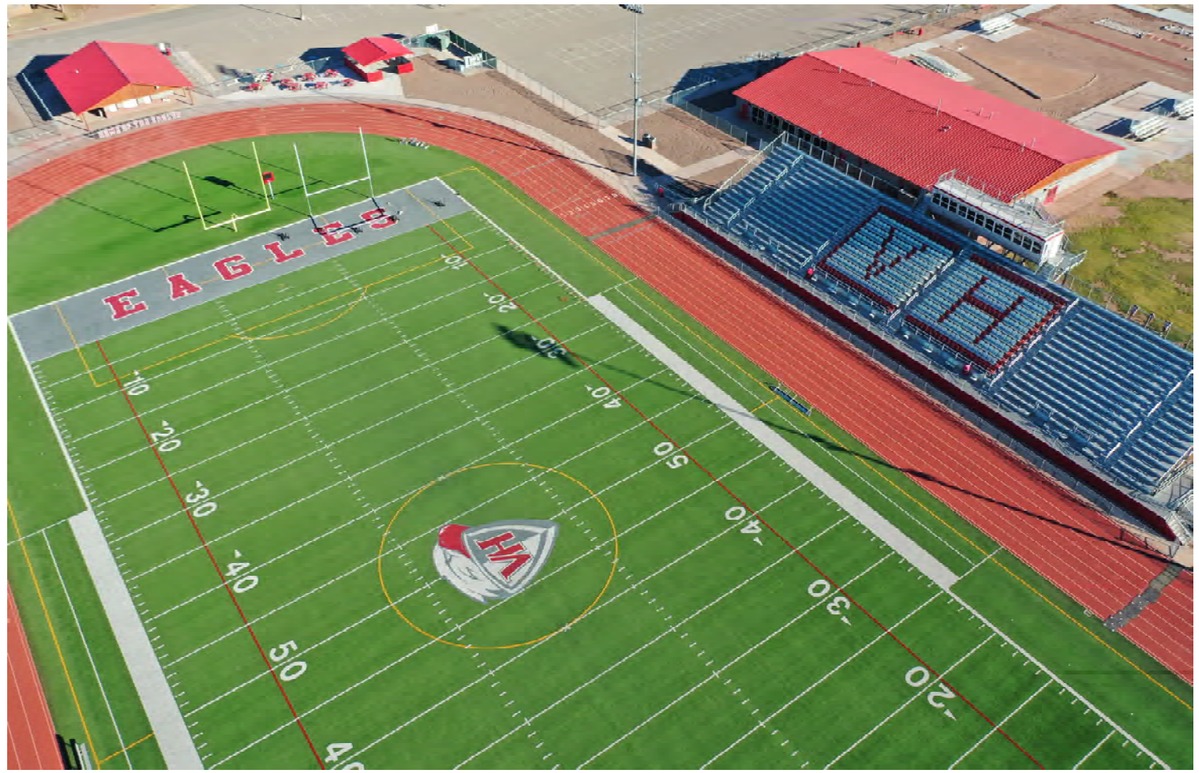
START DATE
9-Apr-21

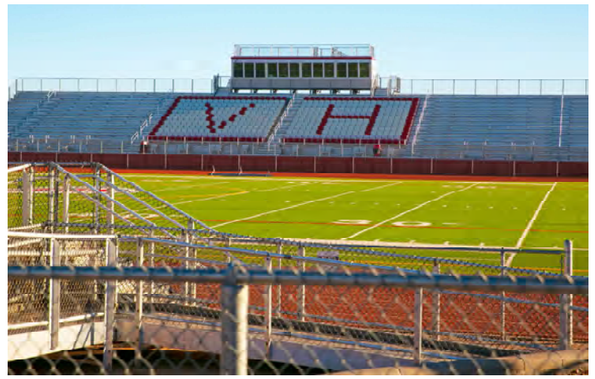
COMPLETION DATE
2-Feb-22

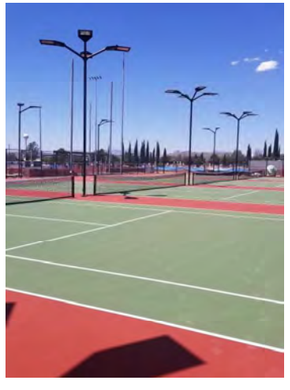
OWNER CONTACT INFO
Dave Wilcox
dave.wilcox@winnsboroisd.org
(903) 278-3426

ARCHITECT CONTACT INFO
Eric Horn
ehorn@tait-pitkin.com
(512) 293-1862

Hellas







CULBERSON COUNTY ALLAMOORE ISD

Van Horn, TX

Ongoing

D/B

$13,794,586

VAN HORN HIGH SCHOOL

TYPE OF PROJECT
Design Build, Renovation
NATURE OF THE PROJECT
Football Field, Track, Scoreboard, Field House Construction, Bleachers, Sports Lighting
CONTRACT AMOUNT
$5,482,110
START DATE 16-Oct-14
COMPLETION DATE 6-Aug-15

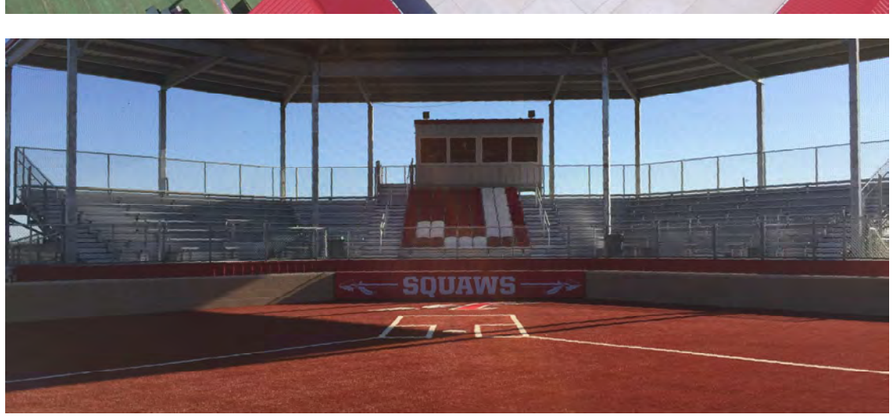
TYPE OF PROJECT
Design Build, Renovation
NATURE OF THE PROJECT
Parking Lot and Drainage Improvements, Lighting
CONTRACT AMOUNT
$4,143,203
START DATE 16-Nov-20
COMPLETION DATE 30-Apr-21

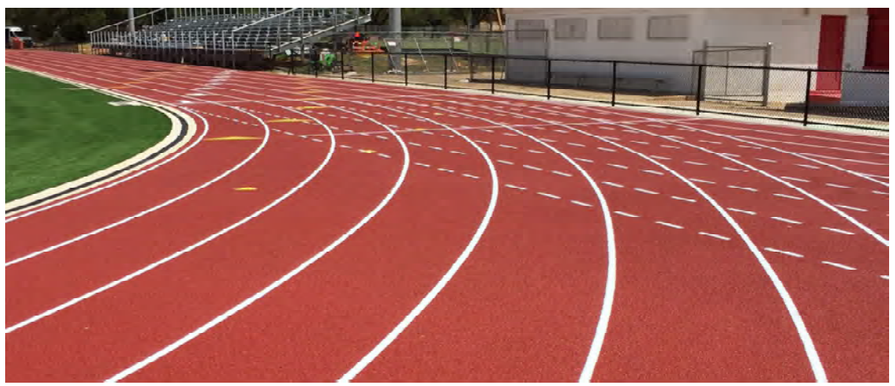
TYPE OF PROJECT
Design Build, New Construction
NATURE OF THE PROJECT
Concession, Locker Facility and Storage Construction
CONTRACT AMOUNT
$5,587,675
START DATE 27-Dec-19
COMPLETION DATE 15-Dec-20

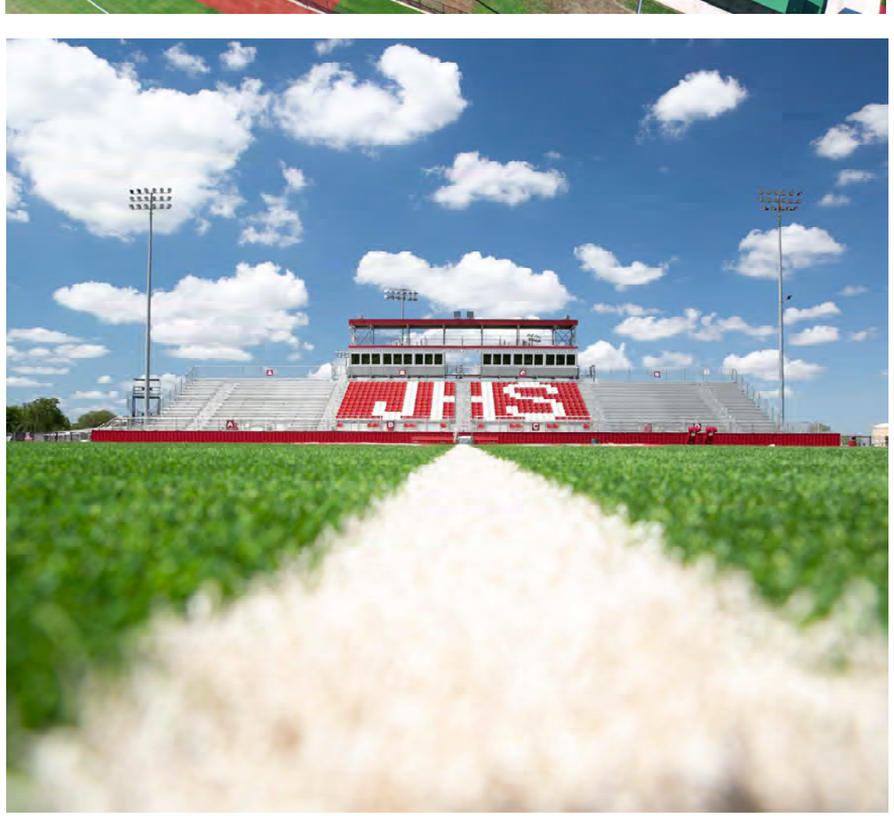
TYPE OF PROJECT
Design Build, New Construction
NATURE OF THE PROJECT
Bus Barn Construction, Maintenance Bldg, Covered Parking,Parking Lot, Lights, Practice Soccer Field, Basketball Court, Pickleball Court, Recreation Amenity, Baseball Complex, Dugouts, Storage, Lockers
CONTRACT AMOUNT
$5,587,675
START DATE 7-Dec-22
COMPLETION DATE Ongoing

OWNER CONTACT INFO
Ken Baugh | kbaugh@ccaisd.net | (325) 829-9399
ARCHITECT CONTACT INFO
Eric Horn | ehorn@tait-pitkin.com | (512) 293-1862

Hellas | VAN HORN HIGH SCHOOL FALCONS







JOURDANTON ISD

Jourdanton, TX

2016

$12,806,400

NAME OF PROJECT
JOURDANTON ATHLETIC FACILITIES

TYPE OF PROJECT
Design Build, New Construction

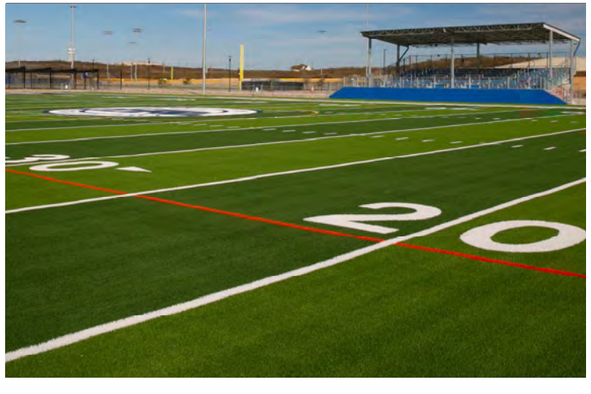
NATURE OF THE PROJECT
Lights, Bleachers, Restrooms, Concession Stands, Parking Lots, Sidewalks, Field Construction, Track Construction, Field Events Construction, Fencing, Dugouts, Goal Posts, Press Box, Tennis Courts

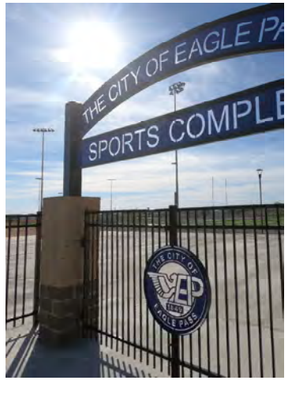
START DATE
15-Mar-16

COMPLETION DATE
3-Jan-17

OWNER CONTACT INFO
Darrell Andrus
dandrus@jisdtx.us
(830) 769-2408

ARCHITECT CONTACT INFO
Eric Horn
ehorn@tait-pitkin.com
(512) 293-1862





THE CITY OF EAGLE PASS

Eagle Pass, TX

2020

$15,493,000

NAME OF PROJECT
PATSY WINN SPORTS COMPLEX

TYPE OF PROJECT
Design Build, New Construction

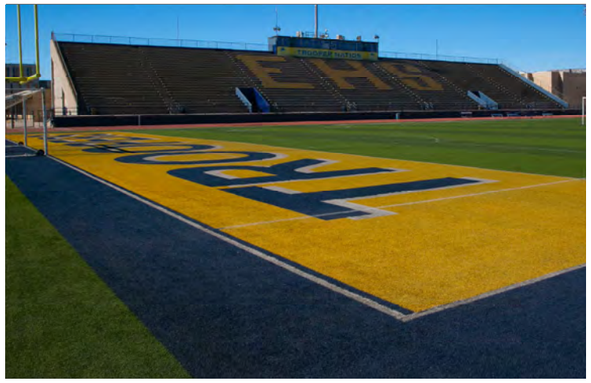
NATURE OF THE PROJECT
Athletic Complex, turf, track, tennis, lighting

START DATE
12-Nov-19

COMPLETION DATE
6-Dec-20

OWNER CONTACT INFO
George Antuna
George.Antuna@eaglepasstx.us
(830) 773-1111

ARCHITECT CONTACT INFO
Brian Rhodes
Rhodes Architecture, Inc.
raoffice@raoffice.com
806-468-7641



YSLETA ISD

El Paso, TX

2021

$28,417,975

YSLETA ISD FOOTBALL

TYPE OF PROJECT
Design Build, New Construction, Renovation, Multiple Schools

NATURE OF THE PROJECT
Turf, Landscape, Lighting

CONTRACT AMOUNT
$14,260,190.00 0

START DATE
16-Apr-16

COMPLETION DATE
23-Dec-16

YSLETA ISD BASEBALL/SOFTBALL

TYPE OF PROJECT
Design Build, New Construction, Renovation, Multiple Schools

NATURE OF THE PROJECT
Turf, Lighting

CONTRACT AMOUNT
$14,157,785.57

START DATE
27-Apr-20

COMPLETION DATE
12-Feb-21

OWNER CONTACT INFO
Xavier De La Torre
xdelatorre@yisd.net | 915-434-0000

ARCHITECT CONTACT INFO
Eric Horn
ehorn@tait-pitkin.com
(512) 293-1862

EL PASO ISD

El Paso, TX

2019

$13,097,704

EL PASO, AUSTIN, ANDRESS, & BOWIE HIGH SCHOOL

TYPE OF PROJECT
Design Build, New Construction, Renovation, Multiple Schools

NATURE OF THE PROJECT
Football Fields, Running Tracks, Goal Posts, Field Events

CONTRACT AMOUNT
$5,520,335.00

START DATE
27-Mar-18

COMPLETION DATE
24-Oct-18

FRANKLIN, CHAPIN, BURGES, CORONADO, IRVIN, JEFFERSON HIGH SCHOOLS

TYPE OF PROJECT
Design Build, New Construction, Renovation, Multiple Schools

NATURE OF THE PROJECT
Football Field, Running Track, Goal Post, Field Events

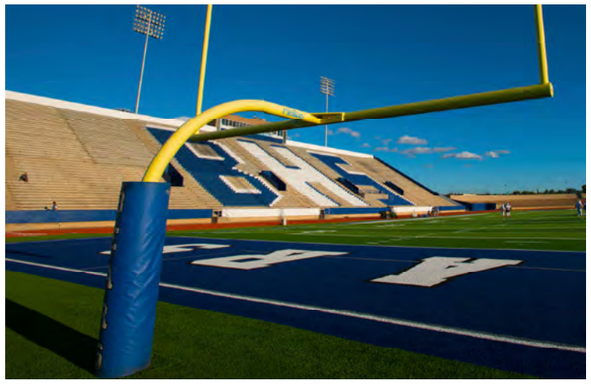
CONTRACT AMOUNT
$7,577,369.00

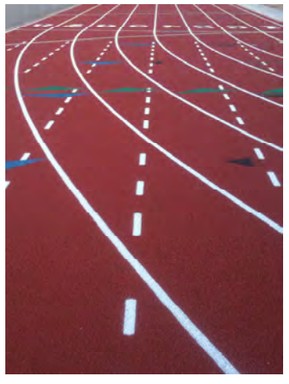
START DATE
5-Feb-18

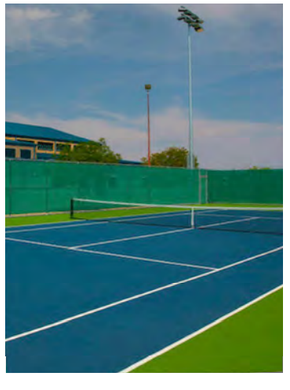
COMPLETION DATE
5-Dec-19

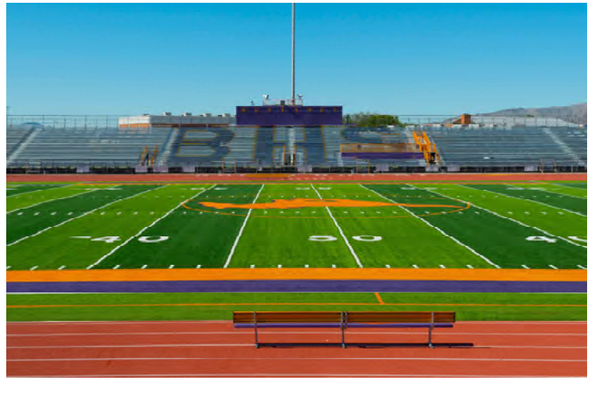
OWNER CONTACT INFO
Alan Wiernicki
aawiernicki@episd.org | (915) 236-4000

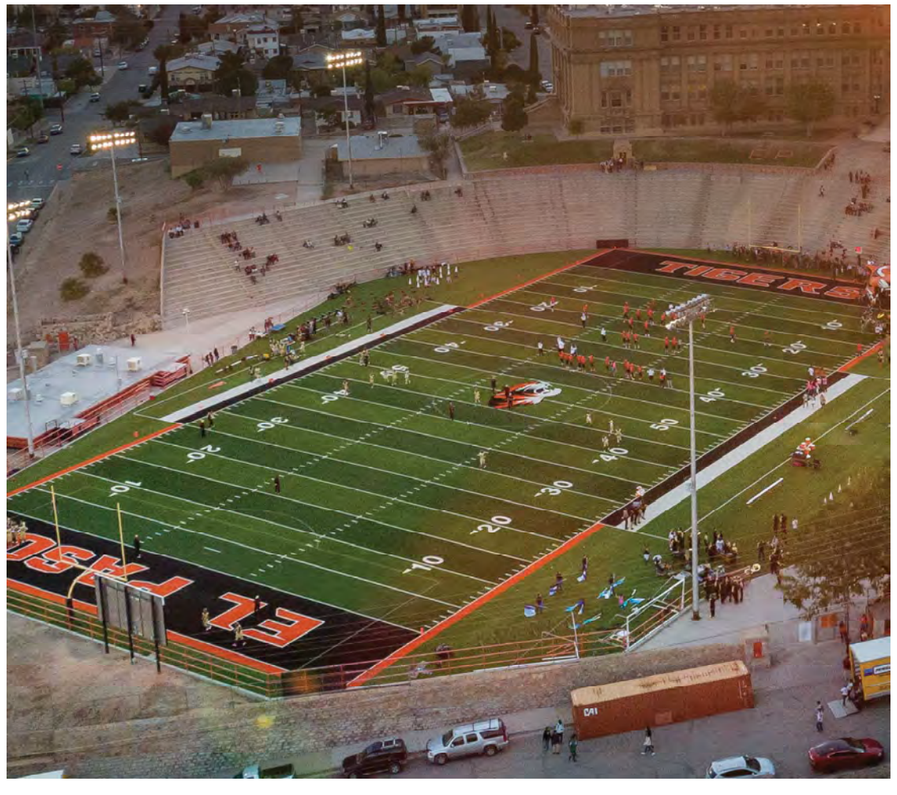
ARCHITECT CONTACT INFO
Eric Horn
ehorn@tait-pitkin.com | (512) 293-1862











ANNA ISD

Anna, TX

2017

$5,880,930

NAME OF PROJECT
ANNA ISD SPORTS COMPLEX

TYPE OF PROJECT
Design Build, New Construction

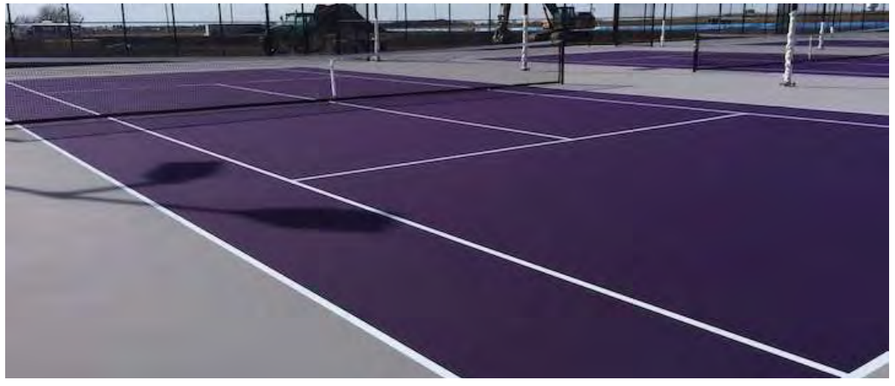
NATURE OF THE PROJECT
Lights, Bleachers, Restrooms, Concession Stands, Sidewalks, Field Construction, Fencing, Dugouts

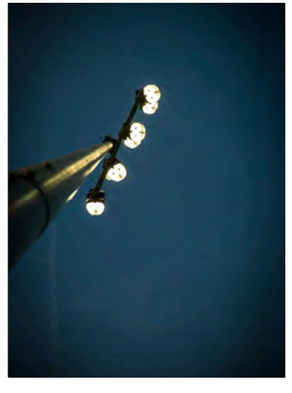
START DATE
6-Aug-16

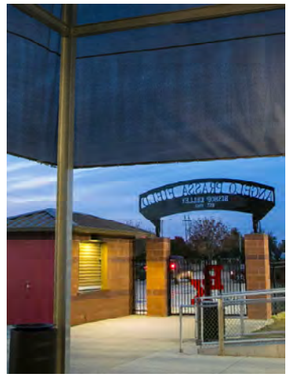
COMPLETION DATE
7-Feb-17

OWNER CONTACT INFO
Brad Duncan
bradley.duncan@annaisd.org
(972) 924-1022

ARCHITECT CONTACT INFO
Eric Horn
ehorn@tait-pitkin.com
(512) 293-1862







BISHOP KELLEY HIGH SCHOOL

Tulsa, OK

2020

$3,489,477

NAME OF PROJECT
BISHOP KELLEY HIGH SCHOOL

TYPE OF PROJECT
Design Build, Renovation

NATURE OF THE PROJECT
Turf, Field, Surface

START DATE
1-Nov-18

COMPLETION DATE
8-Aug-19

OWNER CONTACT INFO
Lance Parks
lparks@bishopkelley.org
(918) 770-5825

ARCHITECT CONTACT INFO
Brian Rhodes
Rhodes Architecture, Inc.
raoffice@raoffice.com
806-468-7641

Kansas State High School Activities Association

601 SW Commerce Place, Box 495 | Topeka, KS 66601-0495 | Phone: 785-273-5329 | Fax: 785-271-0236 | kshsaa@kshsaa.org | www.kshsaa.org
BILL FAFLICK, EXECUTIVE DIRECTOR
Assistant Executive Directors: Cheryl Gleason, Francine Martin, Mark Lentz, Jeremy Holaday, Craig Manteuffel, Bet Bauman
Office and Operations Manager: Brent Unruh
Member of the National Federation of State High School Associations

June 24, 2021

To whom it may concern,

In the fall of 2008, the citizens of Wichita demonstrated support of, and investment in, the students and staff of the Wichita Public Schools. This was signified with a favorable public vote on a school bond referendum. While the purpose of these new funds was multidimensional, district administration understood this was a critical and unique opportunity to enhance and build quality facilities to meet the short and long-term needs of our students.

In order to most effectively utilize these funds, staff understood the importance of purchasing quality products and then having them expertly constructed and installed. With a "once in a career" type of opportunity, I had the privilege of working with several building and district staff to review options, define criteria, and evaluate proposals for athletic facility upgrades including synthetic turf fields at each of the seven comprehensive high schools in the Wichita district. As part of the spec development process, we interviewed many athletic turf companies and walked on over 50 different turf fields across the Midwest. As we evaluated the many types of turf and turf systems, we came to understand the phrase "there is nothing more expensive than buying cheap" as we encountered many fields that did not withstand year-round use and diversely harsh Kansas climate.

Ultimately, the specs developed for turf fields allowed the proposals to be reviewed for quality systems to include multi-use turf and appropriate drainage infrastructure, safety and longevity backed by warranty, quality installation on a very aggressive timeline, dependable service for the inevitable maintenance challenges, and a product/installation that was within budget. In all of these categories, one product and one vendor were easy to identify as they came to the top of all rating criteria. The product was Real Grass Matrix and the vendor was Hellas Construction, and after a review of the proposals/bids, Hellas earned the contract to install 5 fields in the summer of 2008, and then two more fields in the summer of 2009.

Not only did Hellas deliver on their contractual obligation, they exceeded our expectations by mobilizing forces to earn a bonus which was promised if they could complete the three district stadiums prior to the start of the fall season. They also finished the fields at East and Southeast in the summer of 2008 on time; and the following summer, Hellas completed installation of fields at North and West on time and on budget. While I have worked with many contractors over the years, I cannot identify one that not only met, but far surpassed the expectations of our district. Hellas established a schedule, provided excellent communication throughout the construction and installation, and were able to successfully navigate the many challenges which came from converting natural grass fields to synthetic turf. The product met our safety expectations (pea gravel and SBR rubber did not compact and harden over time) and fulfilled longevity due with an eight-year warranty with annual testing to ensure G-Max rating was below identified safety threshold.

Hellas was much more a partner in this effort as opposed to just a vendor. They wanted the district to be satisfied with look, durability and value. And they achieved that satisfaction! They provided expert installation, and with the very few issues encountered over the years, responded immediately to address any and all concerns. I cannot provide any higher endorsement, these are the fields I want my kids to play on. There is no other company I would even consider for synthetic turf needs. From my perspective, Hellas is the best turf system, the best installation, and the best people to work alongside.

Please do not hesitate to contact me if you have questions in this regard.

Respectfully,

Bill Faflick

WICHITA SOUTHEAST HIGH SCHOOL
WICHITA, KS

WICHITA WEST HIGH SCHOOL
WICHITA, KS

GREATER WICHITA ATHLETIC LEAGUE

Wichita Public Schools
903 S. Edgemoor
Wichita, Kansas 67218
Athletic Department

Phone: (316) 973-4476 FAX: (316) 973-4541

Date: Wednesday, February 28, 2024
To: Michelle Kuhns, Hellas Construction
Fr: J. Means, District Athletic Director, Wichita Public Schools
Re: Wichita Public Schools

Ms. Kuhns;

In November 2008, the citizens of Wichita, Kansas passed a major bond issue for the Wichita Public Schools that included upgrades to our athletic facilities. Over the course of the next few months a group of Athletic Directors looked at eight different companies that provided turf fields, tracks, and tennis courts. Through our research we found one company that could do it all and do it well. Hellas Construction. In the summer of 2009 Hellas started replacing our grass football fields, old tracks (some of them cinder), and our old tennis courts. Our district was transformed from old, outdated facilities to state of the art facilities.

Hellas Construction was great to work with from the very start. They were responsive to our requests, made sure we were always in the loop and updated with any issues, and finished the work in a very timely manner. Hellas was there for us after they finished the projects also. While we did not have very many issues with any of the facilities, when we did they were just a phone call away. They would respond immediately to any of our issues.

With these upgrades to our facilities we were able to use them to the max. In late 2018, our district knew it was time to start replacing our football fields. The Hellas field held up very well but after 10 years, it was time to start replacing our fields. Our district could not afford to replace all seven at once so while the fields did still test out well and still look good, it was time to start the replacements. Again, after researching the products on the market and also knowing how well we liked our Hellas fields, our district once again made the commitment to use Hellas our turf field of choice.

In the summer of 2019 we replaced two of our stadium fields. I cannot say enough about how those two fields turned out. They are beautiful. We are in the process of replacing two more of our fields this spring. That means we still have three to replace and while they need it, after 12 years of play, they are still holding up well.

The Wichita Public Schools are proud to have Hellas products in our district and hope to continue to have a great relationship with them. That is the other part we really appreciate about working with Hellas Construction. They are truly a partner when you work with them.

WICHITA SOUTH HIGH SCHOOL
WICHITA, KS

Valley Center High School

9600 N. Meridian Ave.
Valley Center, Kansas 67147
(316)755-7070

October 25th, 2022

To Whom it May Concern:

It is my honor to write this letter of recommendation for Hellas Construction. I have personally worked with Michelle Kuhns for at least 10 years through different school districts on projects with the most recent being the last three years at Valley Center High School. We have strict criteria with our facility process and Hellas has always over achieved in all areas such as durability, playability, design, quality of all products, continued maintenance, and customer service. Any issue we have needed addressed over the last three years, no matter how small, have been address quickly and properly.

Valley Center has always worked to provide our students the best facilities possibly and feel that Hellas has always been a great partner to accomplish this goal. We currently have two practice turf fields located at our high school. One turf field and track located at our District Stadium. One track located at our MS stadium along with a varsity turf baseball and softball fields. Any future projects or replacements of any of our facilities arise we will look to Hellas to help fill those needs.

We host approximately one hundred and fifty games or invitationals on our Hellas facilities each year for High School sports. These facilities are also used for the multiple Middle School as well as being used daily by the community. Due to the great playability of our turf baseball and softball fields, we have may request and rentals of the NBC Mud Daubers team as well as a College Softball League. During KSHSAA post season play we also host many other schools' regionals because they enjoy playing on our fields.

Hellas has always worked with Valley Center School District to make sure we have the best quality of product for the best price. We have always felt they understand the needs of public schools and their need for budgets to purchase these items. With this I highly recommend using Hellas Construction for any project that falls under their expertise. If any person wishes to speak further Valley Center's or my experiences and working relationship, please contact me at 316-640-9762.

Sincerely,

Chris Asmussen
Athletic Director
Valley Center High School

Bruce Lolling — *Principal*
Chris Asmussen — *Assistant Principal, Activities/Athletic Director*
Kent Hipp — *Assistant Principal*
Melissa Seacat — *Assistant Principal*
Kristen Allen — *Post-Secondary Programs Coordinator*

VALLEY CENTER HIGH SCHOOL
VALLEY CENTER, KS

ANNA INDEPENDENT SCHOOL DISTRICT
ANNA, TX

WEST VIRGINIA UNIVERSITY
MORGANTOWN, WV

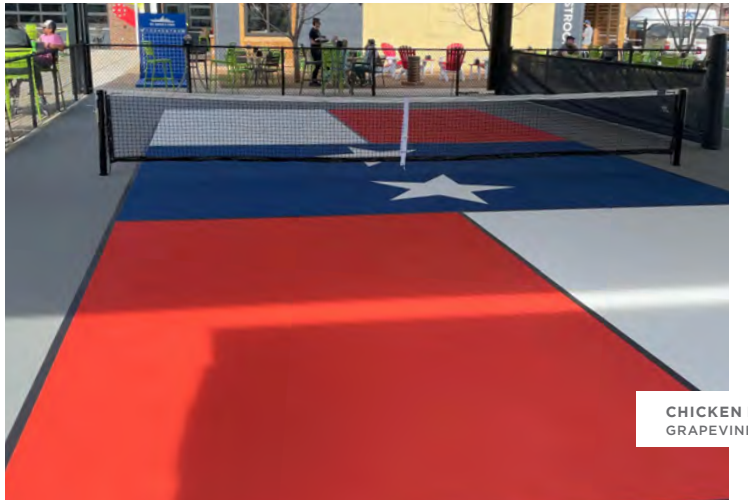
JOURDANTON HIGH SCHOOL
JOURDANTON, TX

COURT SURFACES - PICKLEBALL

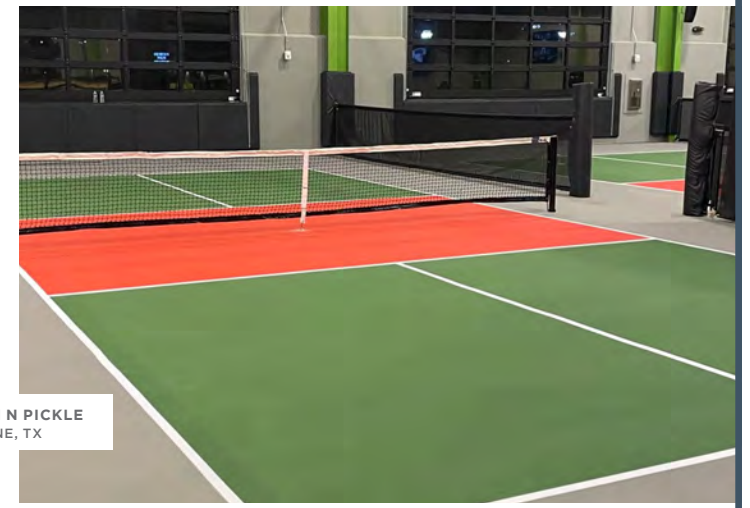
THE GREENS GOLF CLUB
OKLAHOMA CITY, OK

CHICKEN N PICKLE
OKLAHOMA CITY, OK

LEGION MEMORIAL PARK
ARLINGTON, WA



CHICKEN N PICKLE
GRAPEVINE, TX



Natural Grass
Featured References and Project Overviews

- Texas City ISD – La Marque Middle School
  - Leland Surovik
  - 979-549-5004
  - lsurovik@tcisd.org
- Cy-Fair ISD – Anthony Middle School
  - Josh Solis, PE
  - 713.679.3496
  - joshua.solis@cfisd.net
- Arlington ISD – 8 junior high school fields
  - Eric White
  - (682) 867-1950
  - ewhite2@aisd.net
- Prince of Peace School – Plano
  - Payton Self
  - 214-205-6140
- Midway ISD – River Valley Middle School
  - Shane Anderson
  - 254-761-5670
  - Shane.Anderson@MidwayISD.org

SALINE USD 306

United School District 306
5056 E K-4 Hwy, Gypsum, KS 67448

SPORTS

Track & Field, Football

PROJECT SCOPE & PRODUCTS

Track: epiQ Tracks V300
Turf: Natural Grass
Construction: Field Construction, Track Construction, Field Events Construction

CONTACT INFORMATION

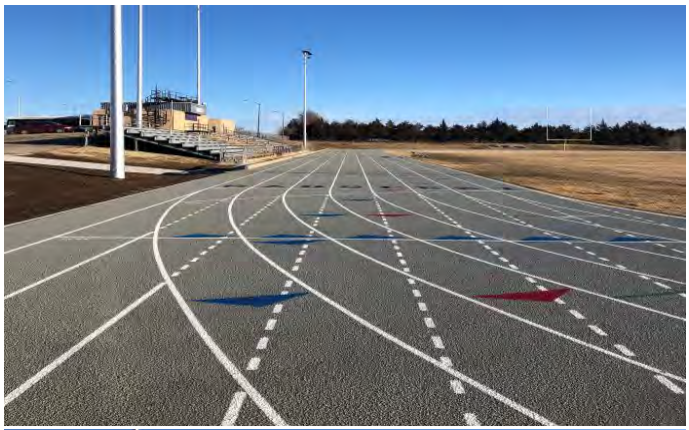
Roger Stumpf
785-536-4287 , 785-536-4291

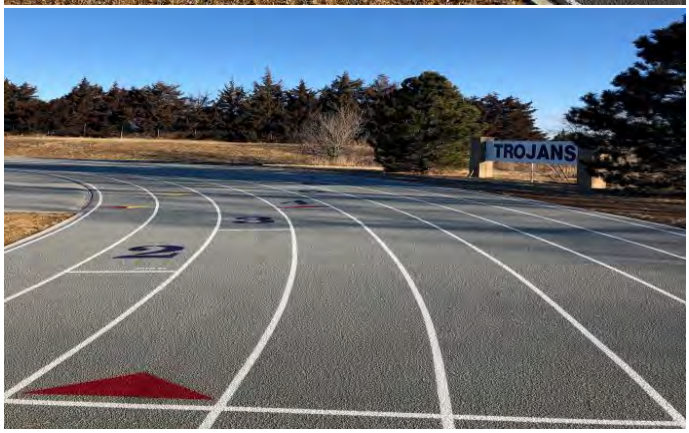
FINAL CONTRACT

$989,200

COMPLETION

2019





COWBOYS PRACTICE FIELD

Dallas Cowboys Football Club
One Cowboys Way, Frisco, TX 75034

SPORTS

Football

PROJECT SCOPE & PRODUCTS

Track: epiQ Tracks Z5000
Turf: Natural Grass
Construction: Field Construction
Landscape:

CONTACT INFORMATION

Mattew Barker
2145779548
mbarker@manhattanconstruction.com

FINAL CONTRACT

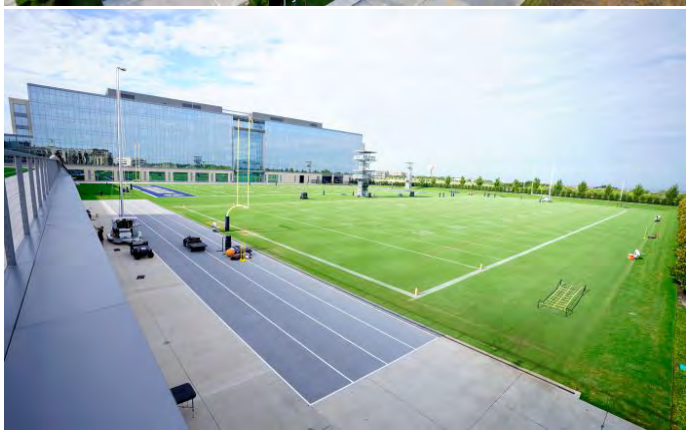
$1,215,610

COMPLETION

2019

PROJECT ID

20190090



LAS VEGAS RAIDERS PRACTICE FACILITY - SOD/TRACK

Las Vegas Raiders
1475 Executive Airport Drive, Henderson, NV 89052

SPORTS
Track & Field, Football

PROJECT SCOPE & PRODUCTS
Track: epiQ Tracks Z5000
Turf: Natural Grass, Real Grass
Construction: Field Construction, Track Construction, Goal Posts

CONTACT INFORMATION
Zach Longnecker
(510) 872-2236
zlongnecker@raiders.com

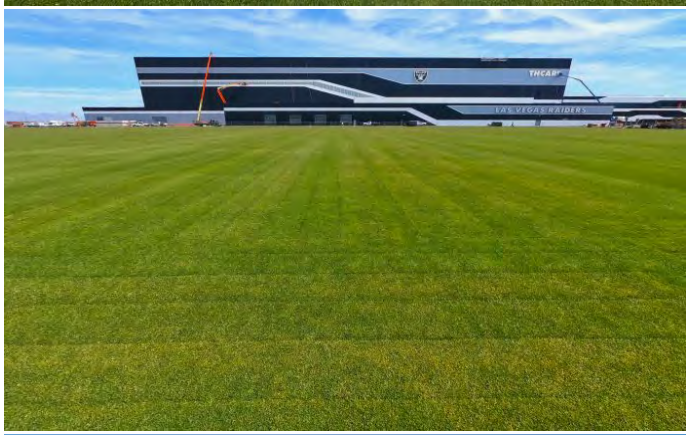
ARCHITECT - ENGINEER
D.A. Hogan and Associates

FINAL CONTRACT
$5,543,380

COMPLETION
2020

PROJECT ID
20190101






April 17, 2023

To Whom It May Concern:

The Tennessee Titans are proud to work with Hellas, The Official Turf provider of the Tennessee Titans.

Hellas recently completed the installation of a Matrix Helix turf system at Nissan Stadium, removing the natural grass surface we originally had in place. The turf system also includes Geo CoolFill infill and a Cushdrain shock pad below the surface. This is the same turf system Hellas installed inside our practice facility.

In the face of league-wide controversy around player safety, especially where surfaces are concerned, Hellas provides products that are thoroughly tested, made from the highest quality materials, and outperform other synthetic surfaces again and again.

As an open-air stadium in a region with a broad spectrum of climate challenges, Hellas worked with us to test products in every playing condition we could think. Not only were their products up to the test, but their team also went to nearly every possible length to provide assurances, and proof, that their products would perform exactly as they claimed they would.

Hellas demonstrates a commitment to excellence through their workmanship, quality products, and outstanding customer service.

We feel confident in our choice to convert our natural grass field to a Hellas turf system and we look forward to a long relationship with Hellas.

Regards,

Adam Nuse

Chief Revenue Officer

Tennessee Titans

CYPRESS FAIRBANKS
INDEPENDENT SCHOOL DISTRICT
Athletic Department
LEARN • EMPOWER • ACHIEVE • DREAM

Ray Zepeda
Athletic Director

Virginia Flores
Associate Athletic Director

Kirk Eaton
Associate Athletic Director

Charles Ament
Associate Athletic Director

April 17, 2023

To Whom It May Concern:

Cypress-Fairbanks Independent School District has worked with Hellas since 2005 for athletic improvements across our district. Most recently, Hellas installed seven (7) baseball and seven (7) softball fields at district High Schools and will soon begin the installation of an additional baseball field, softball field, a track and football field, and eight (8) tennis courts.

For previously installed football and multipurpose fields, we chose Matrix Helix turf laid over a Cushdrain e-layer with Ecotherm infill. Our newest baseball and softball fields use MajorPlay turf systems that also feature Matrix Helix turf, Cushdrain, and Ecotherm.

The customer service, professionalism, and dedication to meet our needs has made them a tremendous partner for Cypress-Fairbanks ISD.

Our community was willing to put a lot of financial backing into our athletic facilities and Hellas has provided us first class results with every project. From our premiere football stadiums turf to every other project we have partnered with Hellas, the result has always been excellence.

Cypress-Fairbanks ISD looks forward to a continued partnership with Hellas for our sports facility needs and highly recommends them to anyone else in need of a sports facility partner.

Respectfully,

Kirk Eaton
Associate Athletic Director
Kirk.eaton@cfisd.net

TEA "A" RATED
THE DISTRICT
YSLETA INDEPENDENT SCHOOL DISTRICT

Ysleta Independent School District

9600 Sims Dr. | El Paso, TX | 79925 | 915-434-0000

Xavier De La Torre, Ed.D.
Superintendent of Schools
Ysleta Independent School District (YISD)
9600 Sims Drive
El Paso, TX 79925

Dear [Prospective Client],

It is without hesitation or reservation that I personally endorse and strongly recommend Hellas Construction, who successfully designed and built twenty-one (21) athletic fields for the Ysleta Independent School District (YISD). This project was expeditiously completed in February 2021, and stands as a testament to their exceptional capabilities in the design and construction industry.

Hellas' approach to the design-build process was marked by innovation, collaboration, and a keen understanding of our unique requirements. The design phase showcased Hellas' commitment to tailoring each athletic field to the specific needs and visions of the individual schools within our district. Their ability to seamlessly integrate functionality, safety, and aesthetic appeal resulted in designs that exceeded our expectations.

Hellas's team was on top of every single detail ensuring that each athletic field was completed within the agreed-upon timelines and budget constraints. We feel our own team was well-informed at every stage of the projects.

The completion of the athletic fields in February 2021 has had a significant and positive impact on our school communities. The facilities have become integral to our students' athletic experiences, providing safe, state-of-the-art spaces for them to excel in their chosen sports.

I recommend Hellas for any future design and construction projects. They are undoubtedly the place to go to for a successful multiple athletic field project to be proud of.

Sincerely,

Xavier De La Torre, Ed.D.
Superintendent of Schools
Ysleta Independent School District
(915) 434-0032

CARROLLTON-FARMERS BRANCH ISD

1505 Randolph St
Carrollton, TX 75006

Bobby Shaw
Director of Facility Services

Office 972.968.6343
Shawro@cfbisd.edu

To Whom it may concern,

I'm writing to share my positive experience working with Hellas Construction Company during our recent athletic facilities projects at Carrollton Farmers Branch Independent School District (CFBISD). As the Director of Facility Services, I had the pleasure of overseeing these projects, totaling over $32 million, which included installing football field turf, track and events, bleachers, lighting, scoreboards, baseball and softball complexes, and tennis courts.

Hellas Construction has always demonstrated a commitment to excellence throughout the entire project, consistently meeting and exceeding our expectations. Their team has exhibited a high level of professionalism, expertise, and dedication from the initial planning stages to the final completion of the projects. The scope of work was extensive, covering multiple sports facilities, and Hellas Construction executed each aspect with precision and attention to detail.

What stood out the most was their ability to stick to schedules and budgets. Despite the challenges and various components involved, Hellas Construction consistently delivered on time and within the agreed-upon financial parameters. This reliability and efficiency significantly contributed to the overall success of the projects.

The quality of the workmanship and materials used by Hellas Construction is evident in the durability and functionality of the completed athletic facilities. The football field turf, tracks, bleachers, lights, scoreboards, baseball and softball complexes, and tennis courts all reflect the high standards that Hellas Construction upholds in their construction projects.

Communication and collaboration with Hellas Construction were outstanding. Their proactive approach to addressing challenges and providing regular updates ensured a smooth and transparent project management process. The positive working relationship fostered between Hellas Construction and CFBISD contributed to a successful partnership and a finished product that exceeded our expectations.

I highly recommend Hellas Construction Company for any future athletic facilities or construction projects. Their commitment to quality, adherence to schedules, and ability to stay within budget

CARROLLTON-FARMERS BRANCH ISD

1505 Randolph St
Carrollton, TX 75006

Bobby Shaw
Director of Facility Services

Office 972.968.6343
Shawro@cfbisd.edu

make them an outstanding choice for organizations seeking a reliable and experienced construction partner.

Should you require any additional information or have further questions, please feel free to contact me at Shawro@cfbisd.edu or 972-968-6343.

Sincerely,

Bobby Shaw

Director of Facility Services

CARROLLTON-FARMERS BRANCH ISD
HIGH EXPECTATIONS FOR ALL

Office: 972.968.6343

Cell: 469-289-8651

CFBISD Service Center

1505 Randolph St

Carrollton, TX 75006

THERESA AXFORD
Superintendent of Schools

MONROE COUNTY
SCHOOL DISTRICT

June 18, 2024

To Whom It May Concern,

As the Director of Construction and Distribution Services for Monroe County School District, it is my honor to write a Letter of Recommendation on Behalf of Hellas Construction.

I had the pleasure of working with Hellas Construction as part of a Design Build at Key West High School. The 6.4-acre sports complex replacement project included a rubberized track, synthetic turf multi-use football/soccer/lacrosse field and synthetic softball field using Ecotherm infill to aide in surface temperature reduction.

Hellas worked hard to ensure the District's athletic facility needs were met and completed on time. Key West High School Lead Groundskeeper of Athletics said it best, "Seeing is believing and what we've seen out here is first class".

Sincerely,

Douglas Pryor
Director

241 Trumbo Road · Key West, FL 33040
Tel. (305) 293-1400
www.KeysSchools.com

MIDWEST SPORT AND TURF SYSTEMS, LLC ILLINOIS REFERENCES

Entity Name	Contact Person	Phone
District 228	Terry Masterson	708-305-7394
Evergreen Park High School District 321	Tom O'Malley	708-398-1230
River Falls Baseball	Greg Peters	715-307-2360
Bloomington High School	Tony Bauman	309-828-5201
Bloom High School	Joe Reda	708-372-2045
North Mac High School	Ryan Savage	618-212-6744
Shorewood High School	Levar Ridgeway	414-736-5468
New Richmond High School	Casey Eckardt	715-781-3640
Lakeland University	Joe Beniger	920-207-7021
Menasha School District	Dave Elliot	920-209-9693
Durand-Arkansas HS	Greg Doverspike	715-672-8919
Pulaski HS	Janel Batten	920-822-6706
Lakeland Union HS	Jim Bouche	715-356-5252
Mequon School District	Kyle Thompson	414-588-3527
Whitefish Bay HS	Shawn Yde	414-963-3928
Vernon Hills Park District	Dave Brown	847-918-3544
Milwaukee Public Schools	Joe Pepitone	414-412-0297
Uhlein Park	Alvaro Garcia	414-373-1150
Hudson School District	Nick Oullette	715-377-3702
University of Wisconsin	Doug Pearson	608-785-8019
Menonmonee Falls HS	Keith Brightman	262-408-3049
Milwaukee Public Schools	Steve Hayes	815-955-6894
Fall River School District	Mike Garrow	920-484-3333
Hortonville School District	Dave Wuebben	920-779-7907
Muskego School Distrcit	Ryan McMillen	608-712-5227
Z-Sports	Zoran Savic	913-609-3129
Missouri Rush Soccer Complex	Matt Hicks	314-567-7997
Wentzville School District	Carol Harvey	636-327-5090
LaDue School District	Mike Noonan	314-983-5341
Swope Park Soccer Complex	David Ficklin	816-329-4377
US Soccer National Training Center	David Ficklin	816-329-4377
City of Booneville	Jameson Sheley	314-567-7997
Cardinal Ritter HS	Rob Wallace	314-446-5504
Lindburgh School District	Soctt Luczak	314-729-2400
Moberly HS	Curtis Walk	660-269-2600
Washington University	Anthony Azama	314-935-5825

EVERGREEN PARK COMMUNITY HIGH SCHOOL DISTRICT 231
9901 S. Kedzie Avenue Evergreen Park, Illinois 60805-3416
Phone: 708/424-7400 Fax: 708/424-3045
www.evergreenpark.org

Mr. Thomas O'Malley
Superintendent

Mr. William Sanderson
Assistant Superintendent/Principal

March 8, 2022

To Whom It May Concern:

I am pleased to provide a letter of recommendation for Midwest Sport and Turf Systems with whom I have worked on multiple projects. Specifically, Midwest Sport and Turf Systems installed turf fields on the Evergreen Park Community High School baseball field, softball field, and also at our recently acquired sports complex. We have received a great deal of adulation for the transformed fields, including a comment from a retired professional baseball player who attended our grand opening. He was most impressed and declared the finished project the "premier fields in Illinois, if not the country."

I can assure you that Midwest Sport and Turf Systems adheres to its philosophy as posted on its website. Throughout the installation process and beyond, they have been professional, prompt, and honest in responding to questions or concerns, were always budget conscious, and pricing was fair.

In summary, Midwest Sport and Turf Systems has done an excellent job. The Board of Education and I are extremely pleased with the work of Midwest Sport and Turf Systems. I do not hesitate to give them our highest recommendation.

If you have questions or would like to discuss my recommendation in further detail, you are welcome to contact me at 708/398-1230.

Sincerely,

Thomas P. O'Malley

Thomas P. O'Malley
Superintendent

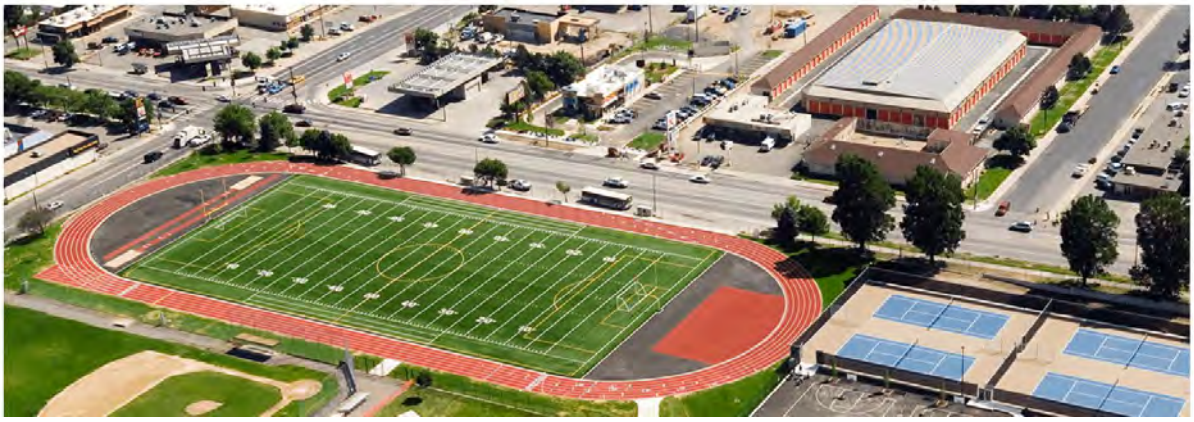
ACADEMY
SPORTS TURF

CFB
AMERICAN SPORTS BUILDERS ASSOCIATION
CERTIFIED FIELD BUILDER ON STAFF

COLORADO
SPORTS TURF
MANAGERS ASSOCIATION

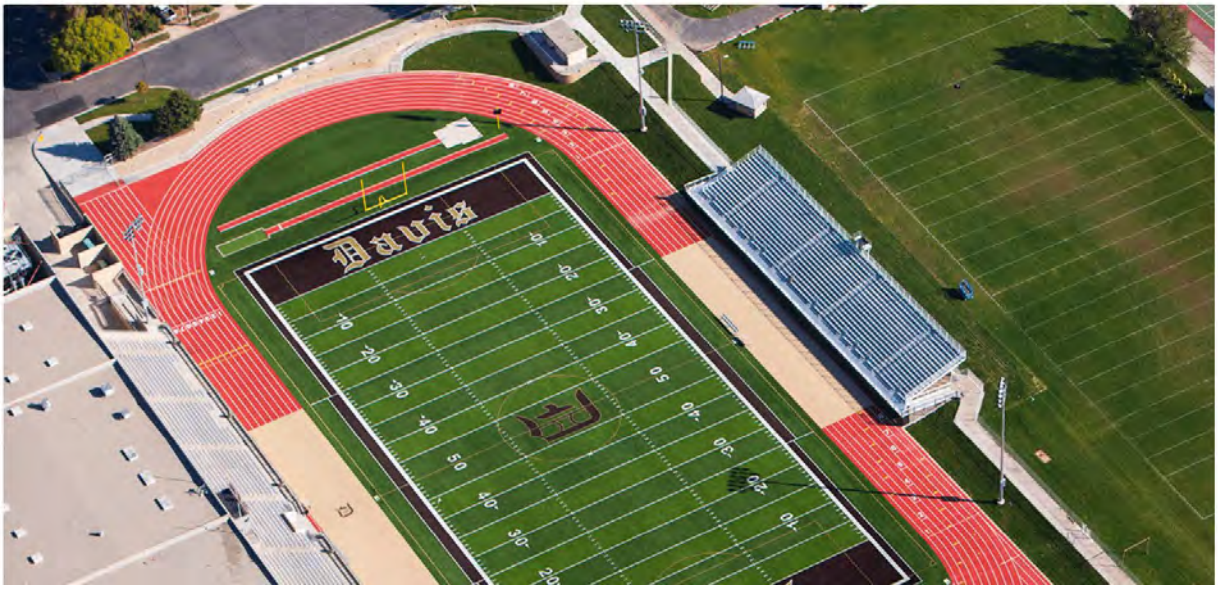
LEED
Leadership in Energy and Environmental Design
GREEN BUILDING

Abraham Lincoln H.S., Denver, CO



Coeur D'Alene High School, Idaho

Davis HS, Kaysville, UT



East High School, Cheyenne, WY

FDU- ELIZABETH R. HENNESSEY FIELD

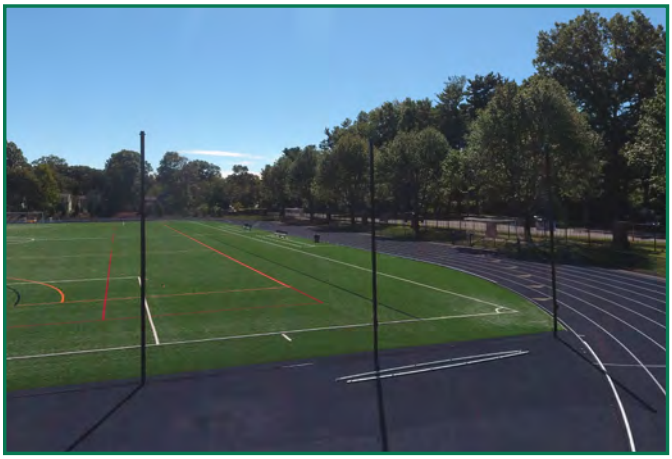
LOCATION: TEANECK, NJ

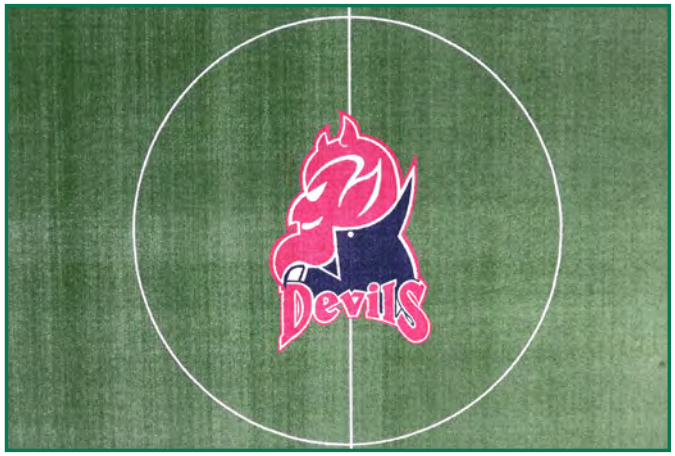
PROJECT HIGHLIGHTS

- New 8 Lane Running Track
- Multi-purpose Synthetic Turf Field
- Ball Stop Netting
- Chain-link Athletic Fencing

PROJECT OVERVIEW

The LandTek Group recently completed the construction of The Elizabeth R. Hennessey Field at the Fairleigh Dickinson University in Teaneck, NJ. The multi-purpose turf field is designed for both men's and women's soccer, men's and women's Lacrosse, and field hockey. The synthetic turf field is surrounded by a custom blue 8 lane running track, new digital scoreboard, chain-link athletic fencing, and a ball stop netting system. LandTek also constructed a new asphalt parking a lot with concrete walking paths adjacent to the new athletic field.





THE LANDTEK GROUP, INC.
LANDTEK

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FDU- VINCENT J. & LENDA F. NAIMOLI BALLPARK

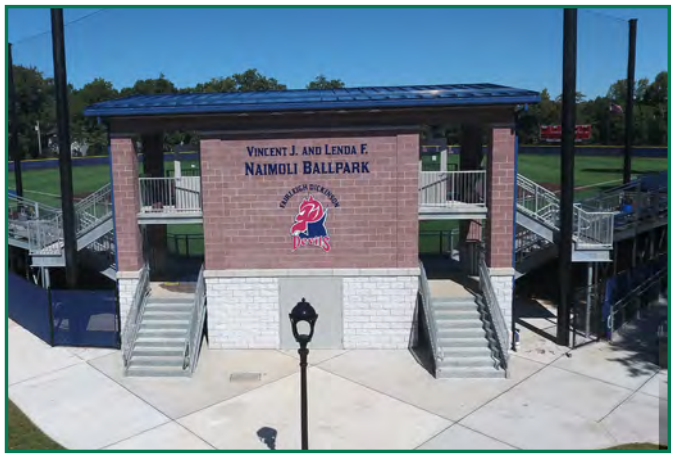
LOCATION: TEANECK, NJ

PROJECT HIGHLIGHTS

- Synthetic Turf Base Ball Stadium
- New Grandstands
- Turf Batting Cages & Bull Pen
- Concrete Walking Path

PROJECT OVERVIEW

Fairleigh Dickinson University's Vincent J. & Lenda F. Naimoli Ballpark was recently converted from natural grass to synthetic turf by The LandTek Group. The new construction included a warning track, perimeter fencing, scoreboard, and new grandstands. The LandTek group also constructed brand-new brick dugouts, synthetic turf batting cages, bullpens, press box, and a ball stop netting. Newly constructed concrete walkways connect the park along with decorative lamp posts.



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THUNDERBOLT STADIUM

LOCATION: LITTLESTOWN HS - PA

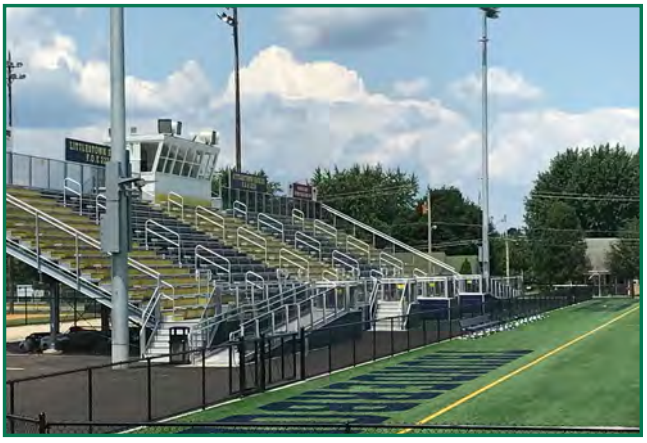
PROJECT HIGHLIGHTS

- Complete Turn Key Construction of a New Multi-Sport Stadium.
- Construction of Extensive Underground Storm Water Management System
- Paver Walkways with Decorative Lighting
- Home and Away Bleachers with Press Box

PROJECT OVERVIEW

This publicly bid project was completed in 2018 and provided the Littlestown School District and community with a much-needed state of the art high school multipurpose sports stadium.

The project involved final cleanup of the elementary school demolition and site preparation needed to allow the LandTek Group to begin the turnkey transformation into a showcase sports facility. Project consisted of a new competition multi-sport synthetic turf field, Musco sports lighting, decorative stone veneer concession/bathroom/locker room/ticket booths, home and away bleachers with press box and parking facilities. The unique entrance way is surrounded by a decorative fence with stone veneer columns and sitting walls enhanced by lighted paver walkways and an impressive, suspended Thunderbolt airplane representing the districts mascot.



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MILLERSVILLE UNIVERSITY SPORTS COMPLEX

LOCATION: MILLERSVILLE, PA

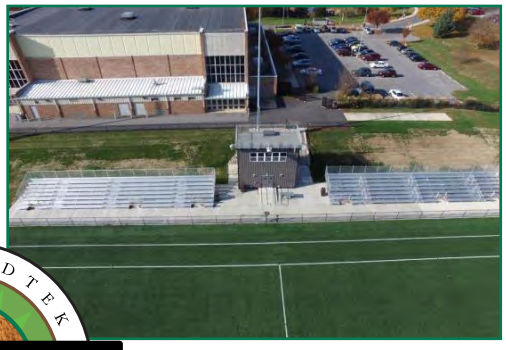
PROJECT HIGHLIGHTS

- Complete Turn Key Construction of Multi-Field Sports Complex
- Construction of Extensive Under-ground Storm Water Management System
- Two State of the Art Synthetic Turf Var-sity Soccer and Multi-Purpose Fields, Varsity Baseball Turf Infield, Sports Lighting, Large Pressbox/ Bleacher Sys-tem and Fencing

CLIENT: Millersville University
CONTACT: Ms. Ruth Sheetz
Campus Planning/Construction
ESTIMATED CONST. COST: Approximately $2.1 Million

PROJECT OVERVIEW

These projects were completed in September of 2016. Millersville University now has the much needed additional athletic facilities to support their growing programs. The new campus com-plex provides the intercollegiate and intramurals sports programs with the ability to practice and compete simultaneously while remaining on campus. The additional new facilities also support and allow for Biemsderfer Stadium to be used exclusively for varsity sporting events. The newly constructed facilities contain two new synthetic turf fields for varsity soccer, practice football and multi-purpose intramural sports use along with a varsity baseball synthetic turf infield. The com-plex is complete with sports lighting, walkways, fencing and a new large press box with spectator seating. The construction of this complex also included an extensive storm water management system designed to tie into and work in unison with the universities existing storm water system.



LANDTEK GROUP, INC.

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BENNETT J. COOPER PARK

LOCATION: MILLERSVILLE UNIVERSITY, PA

PROJECT HIGHLIGHTS

- Complete Turn Key Construction of Synthetic Turf Baseball Infield
- Construction of Extensive Underground Storm Water Management System
- State of the Art Synthetic Turf Varsity Collegiate Baseball Two-Tone Infield with Official Universities Logo

CLIENT: Millersville University
CONTACT: Ms. Ruth Sheetz
Campus Planning/Construction
ESTIMATED CONST. COST: Approximately $282,373.00

PROJECT OVERVIEW

This publicly bid project was completed in September of 2016. Millersville University now has the much needed additional athletic facilities to support their growing baseball program. The newly renovated Brent J. Cooper Varsity Baseball Complex provides the intercollegiate baseball program with unlimited ability to practice and compete with minimal maintenance in all weather conditions. The newly improved facility now contains a new state of the art two tone synthetic turf infield with custom official Millersville University logo. The construction of this complex also included an extensive storm water management system designed to tie into and work in unison with the universities existing storm water system.

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PENN STATE HARRISBURG

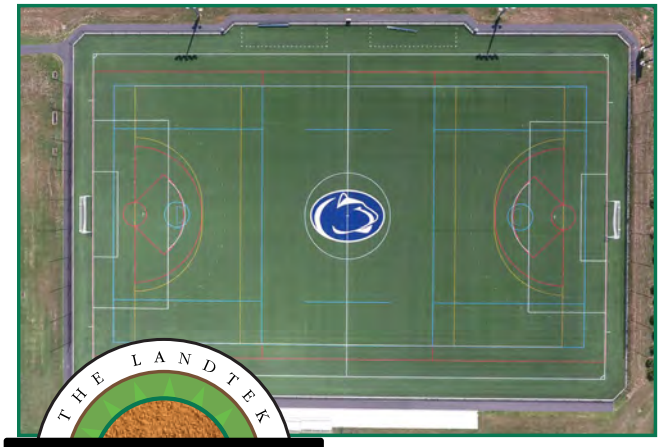
LOCATION: MIDDLETOWN, PA

PROJECT HIGHLIGHTS

- New Construction
- Multipurpose Synthetic Turf Field
- Musco Lighting System
- Concrete Walkways

PROJECT OVERVIEW

The new home of Penn State Harrisburg's mens and womans soccer team was constructed by The LandTek Group. The new construction of the multipurpose field included excavating the site and building a new drainage system and stone base. LandTek also installed perimeter fencing, a ball stop netting system, surrounding concrete walkways and a Musco lighting system.



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STONY BROOK UNIVERSITY- INDOOR FACILITY

LOCATION: STONY BROOK, NY

PROJECT HIGHLIGHTS

- Indoor Athletic Training Facility
- Tension fabric structure over a steel frame
- Musco lighting system

PROJECT OVERVIEW

The LandTek Group provided Stony Brook University with a top tier athletic training facility. This project features the construction of an indoor Legacy recreation center, including the fieldhouse and a synthetic turf field. The new athletic facility provides the Seawolves athletic teams with year-round training in all weather conditions. This Legacy facility is a tension fabric structure over a steel frame, measuring 320 ft. x 190 ft. and over 70 ft. tall. Project highlights include, year-round temperature control and indoor Musco lighting system and a full netting system. The facility includes a support building structure which houses offices, sports equipment storage, locker rooms, and MEP equipment. The construction required a high level of site logistical planning with the design team, subcontractors and the needs of the athletic department.

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UNIVERSITY OF MIAMI- FOOTBALL PRACTICE FIELDS

LOCATION: MIAMI, FL

PROJECT HIGHLIGHTS

- Synthetic Turf Installation
- Natural Grass Installation
- Turnkey Contruction
- Stone Base & Drainage

PROJECT OVERVIEW

After severe issues with flooding, UM relied on Sports Turf One to help resolve poor ground conditions that required major soil changes. The practice football fields needed to endure daily use and harsh Florida weather. Our team managed the renovation of 2 builds at UM. A synthetic grass field (synthetic turf construction) complete with stone base and drainage along with two natural grass fields made of Bermuda grass with optimized irrigation and drainage.The University of Miami can now boastfully show off impressive practice fields that are no longer pockmarked with holes and dirt patches. After an impressive fundraising initiative, the new turf fields can be used daily by athletes and students.

VERONA HIGH SCHOOL SPORTS COMPLEX

LOCATION: VERONA, NJ

PROJECT HIGHLIGHTS

- Upper Tier One Synthetic Turf MP Stadium Field with Bleachers
- Lower Tier Large Multi-Field MP Synthetic Turf Configuration for Baseball, Softball, Football, Soccer, Field Hockey and Lacrosse with Concrete Stadium Seating and Block Dug Outs
- New 5 Court Competition Tennis Facility

CLIENT: VERONA BOARD OF EDUCATION
CONTACT: MIKE PIGA
FRENCH & PARELLO ASSOCIATES
ESTIMATED CONST. COST- $5.9 Million

PROJECT OVERVIEW

This publicly bid renovation of existing sports fields consisted of a large multi-tiered and multi-phased project that broke ground in May of 2016 and was completed in the spring of 2017.

The project involved substantial earthwork along with rapid impact compaction. Contaminated soils required a full time LSRP for the construction of a multi-tiered layout to accommodate the upper tier synthetic turf stadium field and lower tier multipurpose synthetic turf field. The facility also required a very detailed and intricate transition utilizing large retaining wall systems, Musco sports lighting and custom aluminum and renovated concrete bleacher systems accompany both fields.

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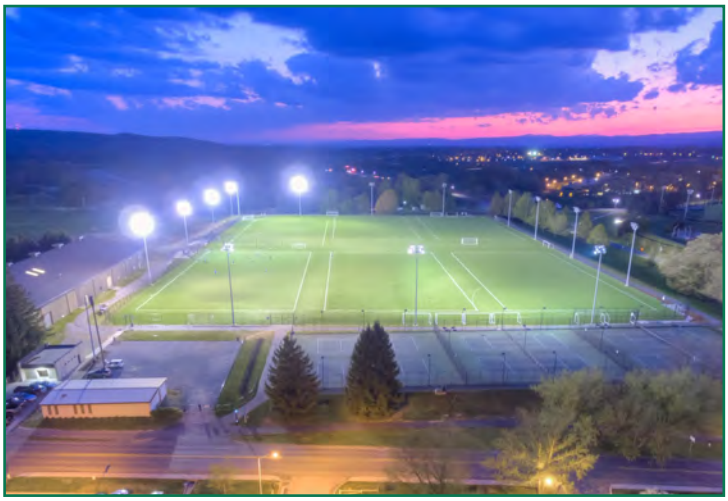
VIRGINIA TECH SOUTH RECREATION FIELDS

LOCATION: BLACKSBURG, VA



PROJECT HIGHLIGHTS

- Synthetic turf and base installation
- Fence Improvements
- Concrete Bleacher Pads
- Asphalt Walkway
- Multiple Field Configurations

PROJECT OVERVIEW

The LandTek Group and Virginia Tech Recreational Sports collaborated to upgrade the South Recreation Fields in Blacksburg, Virginia. The project included the installation of six synthetic turf multipurpose recreational fields with inlaid lines for soccer and softball.

Taking advantage of an airport runway improvement and expansion project, The LandTek Group was able to reconfigure the fields and convert to synthetic turf at the same time. This reconfiguration allows Virginia Tech Recreational Sports to maximize land space for field use.

The state-of-the-art upgrades also included excavation, drainage, subgrade, curbing, fencing, a new asphalt walkway, and concrete bleacher pads. Nearly 10 acres of turf were installed and are now being used by Virginia Tech students, local soccer clubs, and various other sports groups.

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INSTALLATIONS

IRONTURF
A TENCATE COMPANY

STANFORD UNIVERSITY
Location: Standford, CA

EMPOWER FIELD HOUSE
Team: New England Patriots (NFL) and New England Revolution (MLS)
Location: Foxborough, MA

CHARLOTTE MOTOR SPEEDWAY
NASCAR
Location: Concord, NC

REFERENCES

IRONTURF
A TENCATE COMPANY

ARKANSAS

Simmons Bank Stadium - UAPB
Pine Bluff, AR

Cabot High School Stadium
Cabot, AR

Mt. Herbon
Rodgers, AR

CALIFORNIA

Calaveras High School San Andreas, CA

University of San Francisco Nogoesco Stadium
San Francisco, CA

Argonaut High School
Jackson, CA

Grant High School
Sacramento, CA

Thacher High School
Ojai, CA

Amador High School
Sutter Creek, CA

St. Francis High School
Mountain View, CA

COLORADO

Arvada High School
Arvada, CO

CU Boulder - Kittredge Fields Multi-field Project
Boulder, CO

Mountain Vista High School
Highlands Ranch, CO

Rangeview High School
Aurora, CO

Douglas County Fairgrounds
2 Soccer Fields/1 Football Field Castle Rock, CO

Metzler Ranch Park
Multi-field Baseball Complex Castle Rock, CO

Timnath High School
Timnath, CO

Steamboat Springs High School Steamboat Springs, CO

World Compass Academy
Castle Rock, CO

Legend High School
Parker, CO

Severance High School
Severance, CO

COLORADO CONT.

Heritage High School
Littleton, CO

Fossil Ridge High School
Fort Collins, CO

Lakewood High School
Lakewood, CO

Fort Collins High School
Fort Collins, CO

Goddard Middle School
Littleton, CO

Powell Middle School
Littleton, CO

Whitman Alternative High School Littleton, CO

Aspen High School
Aspen, CO

Evergreen High School
Evergreen, CO

Conifer High School
Conifer, CO

Dakota Ridge High School
Littleton, CO

College View Early College
Denver, CO

Arvada West High School
Arvada, CO

Columbine High School
Littleton, CO

Pomona High School
Arvada, CO

Douglas County High School
Castle Rock, CO

Addenbrooke Classic Academy
Lakewood, CO

Bayou Gulch Regional Park Baseball/Softball/ LAX/Football
Parker, CO

Cherry Creek High School
Denver, CO

Clear Creek High School
Evergreen, CO

Denver North High School
Denver, CO

Chatfield High School
Littleton, CO

COLORADO CONT.

Euclid Middle School
Littleton, CO

Golden High School
Golden, CO

Grandview High School
Aurora, CO

Green Mountain High School
Lakewood, CO

Hugo Santana
Parker, CO

John F. Kennedy High School
Denver, CO

Poudre High School
Fort Collins, CO

Rocky Mountain Deaf School
Denver, CO

Soccer City
Aurora, CO

Standley Lake High School
Westminster, CO

The Classical Academy Main Campus
Colorado Springs, CO

Echo Park - District Stadium
Parker, CO

Eaglecrest High School
Centennial, CO

CONNETICUT

Convent of the Sacred Heart
Greenwich, CT

ILLINOIS

Bloom High School
Chicago Heights, IL

The Adventure Church
Bradley, IL

Rockford Indoor
Rockford, IL

Wedgebury Stadium
Rockford, IL

Lane Tech
Chicago, IL

Lasalle Peru
La Salle, IL

REFERENCES

IRONTURF
A TENCATE COMPANY

KANSAS

US Soccer National Training and Coaching Development Center
Teams: Sporting KC, USMNT, USWNT
Kansas City, KC

Children's Mercy Park
Kansas City, KS

Seaman Soccer Field
Topeka, KS

Louisburg High School
Louisburg, KS

Friends Campus
Wichita, KS

Purcell High School
Kansas City, KS

LOUISIANA

Geismar Soccer
St. Gabriel, LA

St. Julien Park
Broussard, LA

MAINE

St. Joseph's College
Standish, ME

Lewiston High School
Lewiston, ME

MAINE CONT.

Waterhouse Field
Biddeford, ME

Deering High School
Portland, ME

Fuller Field
Augusta, ME

MASSACHUSETTS

Empower Field House
Teams: New England Patriots and New England Revolution
Foxborough, MA

Winchester Community Park
Winchester, MA

Cushing Academy
Ashburnham, MA

Tower School
Marblehead, MA

Kennedy Middle School
Natick, MA

Harvard University
Jordan Field
Boston, MA

Boston University
Nickerson Field
Boston, MA

MINNESOTA

Burnsville
Burnsville, MN

MISSISSIPPI

Pearl River Community College
Poplarville, MS

MISSOURI

Boonville Soccer Complex
Boonville, MO

Toyota Stadium
Team: Saint Louis FC
Fenton, MO

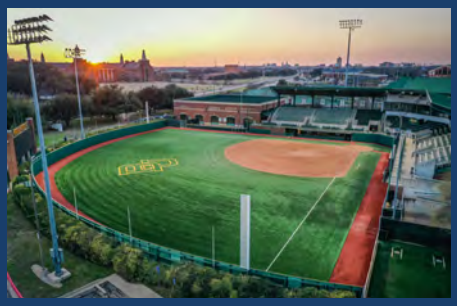
Spartan Stadium
Moberly, MO

St. Louis University
St. Louis, MO

Washington University
St. Louis, MO

Lindbergh High School
St. Louis, MO

Cardinal Ritter
St. Louis, MO



BAYLOR UNIVERSITY
Location: Waco, TX

HARVARD UNIVERSITY
(Jordan Field)
Location: Boston, MA

LAFRENIERE PARK
Location: Jefferson Parish, LA

REFERENCES

IRONTURF
A TENCATE COMPANY

NEVADA

The University of Nevada
Reno, NV

NEW HAMPSHIRE

Phanzone Sports Center
Hampstead, NH

NEW JERSEY

Red Bull Arena
Team: New York Red Bulls (MLS)
Harrison, NJ

NEW MEXICO

Reiner Steinhoff Soccer Center
Alamogordo, NM

NEW YORK

Asphalt Green
New York, New York

NORTH CAROLINA

Charlotte Motor Speedway
Concord, NC

Watauga High School
Boone, NC

Hickory High School
Hickory, NC

Gardner Webb University
Hickory, NC

Barton College
Wilson, NC

Mitchell High School
Bakersville, NC

Madison County
Marshall, NC

Hooker Fields
UNC Chapel Hill
Chapel Hill, NC

Kings Mountain High School
Kings Mountain, NC

Western Carolina University
Cullowhee, NC

Mars Hill University
Mars Hill, NC

Henry Fork River
Park Hickory, NC

NORTH CAROLINA CONT.

Mountain Heritage High School
Burnsville, NC

Avery High School
Newland, NC

North Iredell High School
Olin, NC

Lincoln High School
Licolnton, NC

North Lincoln High School
Licolnton, NC

East Lincoln High School
Licolnton, NC

West Lincoln High School
Licolnton, NC

Reidsville High School
Reidsville, NC

Combine Academy
Lincolnton, NC

Parish Womble Soccer Fields
Holly Springs, NC

Pawhuska High School
Pawhuska, NC

RHODE ISLAND

Moses Brown School
Providence, RI

Campanella Field
Providence, RI

East Providence High School
Providence, RI

SOUTH CAROLINA

Benedict College
Columbia, SC

Spring Valley (Richland County)
Columbia, SC

Blythewood (Richland County)
Blythewood, SC

Westwood (Richland County)
Blythewood, SC

Richland NE High School
Columbia, SC

SOUTH CAROLINA CONT.

Northeast High School
Columbia, SC

Hammond School
Columbia, SC

Georgetown High School,
Georgetown, SC

Wacammaw High School
Georgetown, SC

Foxcreek High School
North Augusta, SC

North Greenville University
Greenville, SC

TENNESSEE

Cleveland High School
Cleveland, TN

Clinton Indoor
Clinton, TN

Rhea County High School
Evensville, TN

Crocket Park,
Brentwood, TN

TEXAS

Getterman Stadium-Baylor University
Waco, TX

UTAH

Zions Bank Stadium
Team: Real Monarchs
Herriman, UT

REFERENCES

IRONTURF
A TENCATE COMPANY

WISCONSIN

University of Wisconsin
Madison, WI

Whitefish Bay High School
Whitefish Bay, WI

Menomonee Falls High School
Menomonee Falls, WI

New Richmond High School
New Richmond, WI

Shorewood High School
Shorewood, WI

Midwest Orthopedic Sports Complex Brookefield, WI

Plymouth High School
Plymouth, WI

WISCONSIN CONT.

Cedarburgh
Cedarburgh, WI

Deforest
Deforest, WI

Ripon
Ripon, WI

CANADA

College Reine-Marie
Montreal (Quebec)

University of Guelph
Guelph, Ontario

YOUR TEAM. YOUR FIELD. YOUR WAY.

SCAN ME

METZLER RANCH PARK
Location: Castle Rock, CO

GRANT HIGH SCHOOL
Location: Sacramento, CA

COVENT OF THE SACRED HEART
Location: Greenwich, CT

ZIONS BANK STADIUM
Team: Real Monarchs
Location: Herriman, UT

SOCCER CITY
Location: Aurora, CO

SECTION 3.4.1
Bonding Capabilities

TENCATE

"Creating healthier more beautiful communities."

Response to Equalis Group
RFP COG-2164
Sports Surfacing and Related Solutions

March 25, 2025

Equalis Group
6001 Cochran Road, Suite 333
Cleveland, OH 44139

RE: Polyloom Corporation of America
Surety Prequalification

To Whom It May Concern,

Liberty Mutual Insurance Company is the Surety for Polyloom Corporation of America, and we consider them a highly valued Surety client. Our experience to date has been most satisfactory. We have the ability to accommodate Polyloom Corporation of America with Performance and Payment Bonds on single projects up to $30,000,000 with an aggregate limit of $100,000,000. In our opinion, Polyloom Corporation of America remains properly financed, well equipped and capably managed.

Such prequalification and approval would be conditioned upon applicable underwriting considerations such as acceptable contract terms and bond forms, confirmation of satisfactory financing, and a favorable review of current underwriting information at the time of the request for the bonds.

This letter is not an assumption of liability, nor is it a Bid Bond or a Performance bond. It is issued only as a bonding reference requested from us by our client. Our consideration and issuance of bonds is a matter between Polyloom Corporation of America and Liberty Mutual Insurance Company, and we assume no liability to any third party by issuance of this letter.

Liberty Mutual Insurance Company is listed on the U.S. Treasury Department's Listing of Approved Sureties (Department Circular 570) and is rated A by A.M. Best Rating Services with a financial size category of XV.

Sincerely,

J. Erik McMichael
Executive Vice President, Marsh McLennan Agency
Attorney-in-Fact, Liberty Mutual Insurance Company

47 Postal Parkway ● Newnan, Georgia 30263
P.O. Box 71429 ● Newnan, Georgia 30271-1429
770.683.1034 ● Fax 770.683.1035

TENCATE

SECTION 3.5.1
Sustainability,
Reclamation &
Recycling Initiatives

"Creating healthier more beautiful communities."

Response to Equalis Group
RFP COG-2164
Sports Surfacing and Related Solutions

TENCATE
TURF RECYCLING SOLUTIONS

cyclyx ExxonMobil

SOLVING FOR TURF CIRCULARITY

Turning end-of-life turf into raw materials for new, high-quality products.

Learn more at
turfrecycling.us

THE INDUSTRY'S FIRST-EVER, TOTAL TURF PRODUCT-TO-PRODUCT RECYCLING SOLUTION

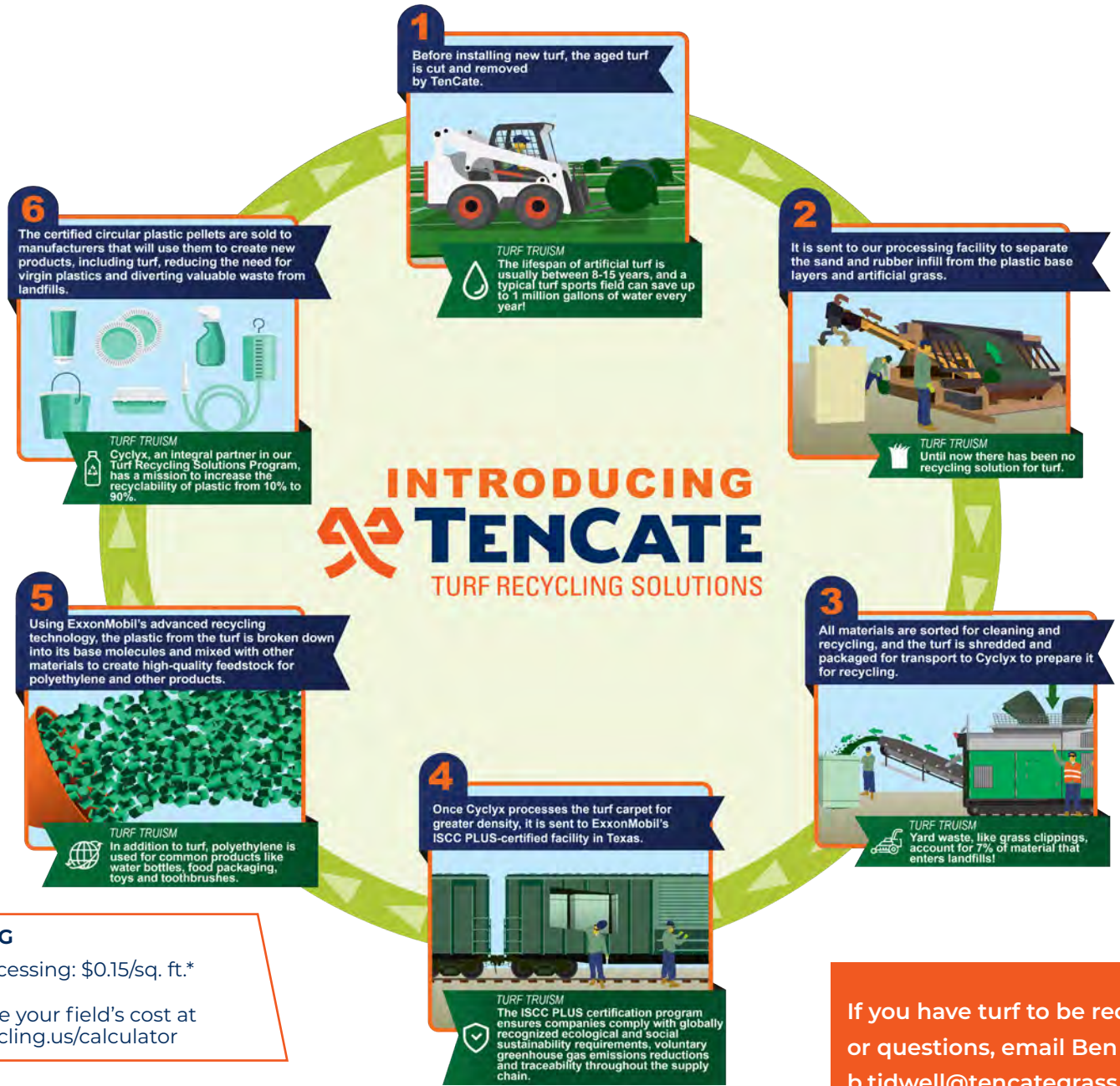
NO WASTE. NO LANDFILL. NO QUESTIONABLE DOWNCYCLING OR REPURPOSING.

TenCate offers the first truly circular solution for artificial grass.

- Employ a first-of-its-kind zero-waste field solution
- Divert thousands of square feet of materials from the landfill or incinerator
- Provide tons of material to the circular economy
- Ensure turf never contributes to a school or community's waste footprint

CHAIN OF CUSTODY

Each field is assigned a reference number which follows it throughout the entire processing cycle. The turf is initially processed at the TenCate Turf Recycling Solutions facility; once this processing is complete, a certificate is issued for the customer. The processed turf is then assigned a lot number and transported to the Advanced Recycling facility. Once the turf has gone through the advanced recycling process, confirmation is sent to TenCate Turf Recycling Solutions and shared with the customer.



PRICING

Turf processing: $0.15/sq. ft.*

Calculate your field's cost at turfrecycling.us/calculator

*Customer is responsible for freight charges and freight is not included in the processing price.

If you have turf to be recycled or questions, email Ben Tidwell: b.tidwell@tencategrass.com

TENCATE

PROPOSAL FORM 2
COST PROPOSAL

"Creating healthier more beautiful communities."

Response to Equalis Group
RFP COG-2164
Sports Surfacing and Related Solutions

PROPOSAL FORM 2: COST PROPOSAL

A template for the Cost Proposal has been included as **Attachment B** and must be uploaded as a separate attachment to a Respondent's proposal submission. Respondents are permitted to revise any part of the spreadsheet to the Cost Proposal to accurately reflect the column titles, details, discounts, pricing categories of products, services, and solutions being offered to Equalis Group Members.

Respondent's Cost Proposal must include the information requested in **Section 5 – Cost Proposal & Pricing**.

NOTE: Cost Proposals will remain sealed and will only be opened and reviewed for those Respondents that meet the minimum Technical Proposal score threshold as described in **Section 6.2 - Evaluation and Scoring of Proposals**.

Please see Excel Cost Proposal provided.

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TENCATE

PROPOSAL FORMS 3-20

"Creating healthier more beautiful communities."

Response to Equalis Group
RFP COG-2164
Sports Surfacing and Related Solutions

PROPOSAL FORM 3: DIVERSITY VENDOR CERTIFICATION PARTICIPATION

Diversity Vendor Certification Participation - It is the policy of some Members participating in Equalis Group to involve minority and women business enterprises (M/WBE), small and/or disadvantaged business enterprises, disable veterans' business enterprises, historically utilized businesses (HUB) and other diversity recognized businesses in the purchase of goods and services. Respondents shall indicate below whether or not they hold certification in any of the classified areas and include proof of such certification with their response.

a. Minority Women Business Enterprise
Respondent certifies that this firm is an MWBE: ☐Yes ☒No
List certifying agency: Click or tap here to enter text.

b. Small Business Enterprise (SBE) or Disadvantaged Business Enterprise ("DBE")
Respondent certifies that this firm is a SBE or DBE: ☐Yes ☒No
List certifying agency: Click or tap here to enter text.

c. Disabled Veterans Business Enterprise (DVBE)
Respondent certifies that this firm is an DVBE: ☐Yes ☒No
List certifying agency: Click or tap here to enter text.

d. Historically Underutilized Businesses (HUB)
Respondent certifies that this firm is an HUB: ☐Yes ☒No
List certifying agency: Click or tap here to enter text.

e. Historically Underutilized Business Zone Enterprise (HUBZone)
Respondent certifies that this firm is an HUBZone: ☐Yes ☒No
List certifying agency: Click or tap here to enter text.

f. Other
Respondent certifies that this firm is a recognized diversity certificate holder: ☐Yes ☒No
List certifying agency: Click or tap here to enter text.

(The rest of this page is intentionally left blank)

PROPOSAL FORM 4: CERTIFICATIONS AND LICENSES

Provide a copy of all current licenses, registrations and certifications issued by federal, state and local agencies, and any other licenses, registrations or certifications from any other governmental entity with jurisdiction, allowing Respondent to provide the products and services included in their proposal which can include, but not limited to licenses, registrations or certifications. M/WBE, HUB, DVBE, small and disadvantaged business certifications and other diverse business certifications, as well as manufacturer certifications for sales and service must be included if applicable

Please also list and include copies of any certificates you hold that would show value for your response not already included above.

Please refer to response for 1.3.8 Certifications and Licenses and ISO Certifications provided under Supplemental Information. Copies are not required per Q&A response of 3/24/25.

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PROPOSAL FORM 5: UNRESOLVED FINDINGS FOR RECOVERY

O.R.C. Chapter 9.24 prohibits CCOG from awarding a contract to any entity against whom the Auditor of State has issued a finding for recovery, if such finding for recovery is "unresolved" at the time of award. By submitting a proposal, a Respondent warrants that it is not now, and will not become, subject to an "unresolved" finding for recovery under **O.R.C. Chapter 9.24** prior to the award of any contract arising out of this RFP, without notifying CCOG of such finding. The Proposal Review Team will not evaluate a proposal from any Respondent whose name, or the name of any of the subcontractors proposed by the Respondent, appears on the website of the Auditor of the State of Ohio as having an "unresolved" finding for recovery.

Is your company the subject of any unresolved findings for recoveries?

☐ Yes

☒ No

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PROPOSAL FORM 6: MANDATORY DISCLOSURES

1. ***Mandatory Contract Performance Disclosure.***

Disclose whether your company's performance and/or the performance of any of the proposed subcontractor(s) under contracts for the provision of products and services that are the same or similar to those to be provided for the Program which is the subject of this RFP has resulted in any formal claims for breach of those contracts. For purposes of this disclosure, "**formal claims**" means any claims for breach that have been filed as a lawsuit in any court, submitted for arbitration (whether voluntary or involuntary, binding or not), or assigned to mediation. For any such claims disclosed, fully explain the details of those claims, including the allegations regarding all alleged breaches, any written or legal action resulting from those allegations, and the results of any litigation, arbitration, or mediation regarding those claims, including terms of any settlement. While disclosure of any formal claims will not automatically disqualify a Respondent from consideration, at the sole discretion of Equalis Group, such claims and a review of the background details may result in a rejection of a Respondent's proposal. Equalis Group will make this decision based on the Proposal Review Team's determination of the seriousness of the claims, the potential impact that the behavior that led to the claims could have on the Respondent's performance of the work, and the best interests of Members.

Provide statement here. This is confidential and privileged information. We do not have any past or present formal claims that would negatively impact our performance under any awarded contract with Equalis Group.

2. ***Mandatory Disclosure of Governmental Investigations.***

Indicate whether your company and/or any of the proposed subcontractor(s) has been the subject of any adverse regulatory or adverse administrative governmental action (federal, state, or local) with respect to your company's performance of services similar to those described in this RFP. If any such instances are disclosed, Respondents must fully explain, in detail, the nature of the governmental action, the allegations that led to the governmental action, and the results of the governmental action including any legal action that was taken against the Respondent by the governmental agency. While disclosure of any governmental action will not automatically disqualify a Respondent from consideration, such governmental action and a review of the background details may result in a rejection of the Respondent's proposal at Group's sole discretion. Equalis Group will make this decision based on the Proposal Review Team's determination of the seriousness of the claims, the potential impact that the behavior that led to the claims could have on the Respondent's performance of the work, and the best interests of Members.

Provide statement here. This is confidential and privileged information. We do not have any past or present administrative governmental action that would negatively impact our performance under any awarded Master Agreement.

(The rest of this page is intentionally left blank)

PROPOSAL FORM 7: DEALER, RESELLER, AND DISTRIBUTOR AUTHORIZATION

CCOG allows Suppliers to authorize dealers, distributors, and resellers to sell the products and services made available through, and consistent with the Terms and Conditions set forth in, the Master Agreement. If Supplier intends to authorize their dealers, distributors, or resellers access to the Master Agreement in the event of a contract award Supplier must provide a list, either in the form of a document or a weblink, to identify those organizations who are being authorized access to the Master Agreement.

Will the Supplier authorize dealers, distributors, resellers access to Master Agreement?

☒ **Yes**

☐ **No**

If yes, how will Supplier disclose which organization(s) will have access to the Master Agreement? This list can be updated from time to time upon CCOG's approval.

Respondent Response: A list is provided herein under Response to 1.3.3 and will be updated and provided to Equalis when changes occur. All TenCate Grass Sports Division subsidiary companies will have access to the Master Agreement, and it is our express intent to give each subsidiary the authority to contract directly with customers through an awarded agreement. Dealers/distributors would need to request use of the Master Agreement and receive express permission from TenCate prior to such use.

(The rest of this page is intentionally left blank)

PROPOSAL FORM 8: MANDATORY SUPPLIER & PROPOSAL CERTIFICATIONS

CCOG may not enter into contracts with any suppliers who have been found to be ineligible for state contracts under specific federal or Ohio statutes or regulations. Companies responding to any CCOG RFP MUST certify that they are NOT ineligible by signing each of the statements below. **Failure to provide proper affirming signature on any of these statements will result in a Respondent's proposal being deemed nonresponsive to this RFP.**

I, Martin Olinger, hereby certify and affirm that *Polyloom Corporation of America dba TenCate Grass N.A.*, has not been debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in transactions by the Unites States Department of Labor, the United States Department of Health and Human Services, or any other federal department or agency as set forth in 29 CFR Part 98, or 45 CFR Part 76, or other applicable statutes.

AND

I, Martin Olinger, hereby certify and affirm that *Polyloom Corporation of America dba TenCate Grass N.A.*, is in compliance with all federal, state, and local laws, rules, and regulations, including but not limited to the Occupational Safety and Health Act and the Ohio Bureau of Employment Services and the following:

- Not penalized or debarred from any public contracts or falsified certified payroll records or any other violation of the Fair Labor Standards Act in the last three (3) years;
- Not found to have violated any worker's compensation law within the last three (3) years;
- Not violated any employee discrimination law within the last three (3) years;
- Not have been found to have committed more than one (1) willful or repeated OSHA violation of a safety standard *(as opposed to a record keeping or administrative standard)* in the last three (3) years;
- Not have an Experience Modification Rating of greater than 1.5 (a penalty-rated employer) with respect to the Bureau of Workers' Compensation risk assessment rating; and
- Not have failed to file any required tax returns or failed to pay any required taxes to any governmental entity within the past three (3) years.

AND

I, Martin Olinger, hereby certify and affirm that *Polyloom Corporation of America dba TenCate Grass N.A.*, is not on the list established by the Ohio Secretary of State, pursuant to **ORC Section 121.23**, which identifies persons and businesses with more than one unfair labor practice contempt of court finding against them.

AND

I, Martin Olinger, hereby certify and affirm that *Polyloom Corporation of America dba TenCate Grass N.A.* either is not subject to a finding for recovery under **ORC Section 9.24**, or has taken appropriate remedial steps required under that statute to resolve any findings for recovery, or otherwise qualifies under that section to enter into contracts with CCOG.

I, Martin Olinger, hereby affirm that this proposal accurately represents the capabilities and qualifications of *Polyloom Corporation of America dba TenCate Grass N.A.*, and I hereby affirm that the cost(s) proposed to CCOG for the performance of services and/or provision of goods covered in this proposal in response to this CCOG RFP is a firm fixed price structure as described in the Cost Proposal, inclusive of all incidental as well as primary costs. *(Failure to provide the proper affirming signature on this item may result in the disqualification of your proposal.)*

PROPOSAL FORM 9: CLEAN AIR ACT & CLEAN WATER ACT

The Respondent is in compliance with all applicable standards, orders or regulations issued pursuant to the Clean Air Act of 1970, as Amended (42 U.S. C. 1857 (h), Section 508 of the Clean Water Act, as amended (33 U.S.C. 1368), Executive Order 117389 and Environmental Protection Agency Regulation, 40 CFR Part 15 as required under OMB Circular A-102, Attachment O, Paragraph 14 (1) regarding reporting violations to the grantor agency and to the United States Environment Protection Agency Assistant Administrator for the Enforcement.

Authorized signature: 

Printed Name: Martin Olinger

Company Name: Polyloom Corporation of America

Mailing Address: 736 Market Street, Ste 1700, Chattanooga, TN 37402

Email Address: r.hawley@tencategrass.com

Job Title: President, TenCate Grass Sports Division

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PROPOSAL FORM 10: DEBARMENT NOTICE

I, the Respondent, certify that my company has not been debarred, suspended or otherwise ineligible for participation in Federal Assistance programs under Executive Order 12549, "Debarment and Suspension", as described in the Federal Register and Rules and Regulations.

Respondents Name: Martin Olinger

Mailing Address: 736 Market Street, Ste 1700, Chattanooga, TN 37402

Signature

Title of Signatory: President, TenCate Grass Sports Division

(The rest of this page is intentionally left blank)

PROPOSAL FORM 11: LOBBYING CERTIFICATIONS

Submission of this certification is a prerequisite for making or entering into this transaction and is imposed by **Section 1352, Title 31, U.S. Code**. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Any person who fails to file the required certification shall be subject to civil penalty of not less than ten thousand dollars ($10,000) and not more than one hundred thousand dollars ($100,000) for each such failure.

The undersigned certifies, to the best of his/her knowledge and belief, on behalf of Respondent that:

1. No Federal appropriated funds have been paid or will be paid on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of a Federal contract, the making of a Federal grant, the making of a Federal loan, the entering into a cooperative agreement, and the extension, continuation, renewal, amendment, or modification of a Federal contract, grant, loan, or cooperative agreement.

2. If any funds other than Federal appropriated funds have been or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract or cooperative agreement, the undersigned shall complete and submit Standard Form LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.

3. The undersigned shall require that the language of this certification be included in the award documents for all covered sub-awards exceeding one hundred thousand dollars ($100,000) in Federal funds at all appropriate tiers and that all sub-recipients shall certify and disclose accordingly.

Signature: _____

Date: 4/1/2025

(The rest of this page is intentionally left blank)

PROPOSAL FORM 12: CONTRACTOR CERTIFICATION REQUIREMENTS

1. *Contractor's Employment Eligibility*

By entering the contract, Contractor warrants compliance with the Federal Immigration and Nationality Act (FINA), and all other federal and state immigration laws and regulations. The Contractor further warrants that it is in compliance with the various state statutes of the states it will operate this contract in.

Participating Government Entities including School Districts may request verification of compliance from any Contractor or subcontractor performing work under this Contract. These Entities reserve the right to confirm compliance in accordance with applicable laws.

Should the Participating Entities suspect or find that the Contractor or any of its subcontractors are not in compliance, they may pursue any and all remedies allowed by law, including, but not limited to: suspension of work, termination of the Contract for default, and suspension and/or debarment of the Contractor. All costs necessary to verify compliance are the responsibility of the Contractor.

The Respondent complies and maintains compliance with the appropriate statutes which requires compliance with federal immigration laws by State employers, State contractors and State subcontractors in accordance with the E-Verify Employee Eligibility Verification Program.

Contractor shall comply with governing board policy of the CCOG Participating entities in which work is being performed.

2. *Fingerprint & Criminal Background Checks*

If required to provide services on school district property at least five (5) times during a month, contractor shall submit a full set of fingerprints to the school district if requested of each person or employee who may provide such service. Alternately, the school district may fingerprint those persons or employees. An exception to this requirement may be made as authorized in Governing Board policy. The district shall conduct a fingerprint check in accordance with the appropriate state and federal laws of all contractors, subcontractors or vendors and their employees for which fingerprints are submitted to the district. Contractor, subcontractors, vendors and their employees shall not provide services on school district properties until authorized by the District.

The Respondent shall comply with fingerprinting requirements in accordance with appropriate statutes in the state in which the work is being performed unless otherwise exempted.

Contractor shall comply with governing board policy in the school district or Participating Entity in which work is being performed.

Signature: _____

Date: 4/1/2025

(The rest of this page is intentionally left blank)

PROPOSAL FORM 13: BOYCOTT CERTIFICATION

Respondent must certify that during the term of any Agreement, it does not boycott Israel and will not boycott Israel. "Boycott" means refusing to deal with, terminating business activities with, or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations specifically with Israel, or with a person or entity doing business in Israel or in an Israeli-controlled territory, but does not include an action made for ordinary business purposes.

Does Respondent agree? Y - MDB -
(Initials of Authorized Representative)

(The rest of this page is intentionally left blank)

MDB

PROPOSAL FORM 14: FEDERAL FUNDS CERTIFICATION FORMS

When a participating 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 (sometimes referred to as the "Uniform Guidance" or "EDGAR" requirements).

All Respondents submitting proposals must complete this Federal Funds Certification Form regarding Respondent's willingness and ability to comply with certain requirements which may be applicable to specific participating agency purchases using federal grant funds. This completed form will be made available to Members for their use while considering their purchasing options when using federal grant funds. Members may also require Supplier Partners to enter into ancillary agreements, in addition to the contract's general terms and conditions, to address the member's specific contractual needs, including contract requirements for a procurement using federal grants or contracts.

For each of the items below, respondent should certify their agreement and ability to comply, where applicable, by having respondents authorized representative complete and initial the applicable lines after each section and sign the acknowledgment at the end of this form. If a Respondent fails to complete any item in this form, CCOG will consider the Respondent's response to be that they are unable or unwilling to comply. A negative response to any of the items may, if applicable, impact the ability of a participating agency to purchase from the Supplier Partner using federal funds.

1. *Supplier Partner Violation or Breach of Contract Terms*

Contracts for more than the simplified acquisition threshold currently set at one hundred fifty thousand dollars ($150,000), which is the inflation adjusted amount determined by the Civilian Agency Acquisition Council and the Defense Acquisition Regulations Council (Councils) as authorized by 41 USC 1908, must address administrative, contractual, or legal remedies in instances where Supplier Partners violate or breach contract terms, and provide for such sanctions and penalties as appropriate.

Any contract award will be subject to Terms and Conditions of the Master Agreement, as well as any additional terms and conditions in any purchase order, participating agency ancillary contract, or Member construction contract agreed upon by Supplier Partner and the participating agency which mut be consistent with and protect the participating agency at least to the same extent as the CCOG Terms and Conditions.

The remedies under the contract are in addition to any other remedies that may be available under law or in equity. By submitting a proposal, you agree to these Supplier Partner violation and breach of contract terms.

Does Respondent agree? Y - MJD
Click or tap here to enter text.
(Initials of Authorized Representative)

2. *Termination for Cause or Convenience*

When a participating agency expends federal funds, the participating agency reserves the right to immediately terminate any agreement in excess of ten thousand dollars ($10,000) resulting from this procurement process in the event of a breach or default of the agreement by Offeror in the event Offeror fails to: (1) meet schedules, deadlines, and/or delivery dates within the time specified in the procurement solicitation, contract, and/or a purchase order; (2) make any payments owed; or (3) otherwise perform in accordance with the contract and/or the procurement solicitation. Participating agency also reserves the right to terminate the contract immediately, with written notice to offeror, for convenience, if participating agency believes, in its sole discretion that it is in the best interest of participating agency to do so. Respondent will be compensated for work performed and accepted and goods accepted by participating agency as of the termination date if the contract is terminated for convenience of participating agency. Any award under this procurement process is not exclusive and participating agency reserves the right to purchase goods and services from other offerors when it is in participating agency's best interest.

MJD

Does Respondent agree? Click or tap here to enter text.
(Initials of Authorized Representative)

3. *Equal Employment Opportunity*

Except as otherwise provided under 41 CFR Part 60, all participating agency purchases or contracts 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. Supplier Partner 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 Supplier Partner agrees that it shall comply with such provision.

Does Respondent agree? Click or tap here to enter text.
(Initials of Authorized Representative)

4. *Davis-Bacon Act*

When required by Federal program legislation, Supplier Partner agrees that, for all participating agency prime construction contracts/purchases in excess of two thousand dollars ($2,000), Supplier Partner shall comply with the Davis-Bacon Act (40 USC 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, Supplier Partner is required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determinate made by the Secretary of Labor. In addition, Supplier Partner 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. Supplier Partner agrees that, for any purchase to which this requirement applies, the award of the purchase to the Supplier Partner is conditioned upon Supplier Partner's acceptance of the wage determination.

Supplier Partner further agrees that it shall also comply with the Copeland "Anti-Kickback" Act (40 USC 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 Supplier Partner or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled.

Does Respondent agree? Click or tap here to enter text.
(Initials of Authorized Representative)

5. ***Contract Work Hours and Safety Standards Act***

Where applicable, for all participating agency contracts or purchases in excess of one hundred thousand dollars ($100,000) that involve the employment of mechanics or laborers, Supplier Partner agrees to comply with 40 USC 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 USC 3702 of the Act, Supplier Partner is required to compute the wages of every mechanic and laborer on the basis of a standard work week of forty (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 forty (40) hours in the work week. The requirements of 40 USC 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

Does Respondent agree? Y- MDO
(Initials of Authorized Representative)

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 subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance or experimental, developmental, or research work under that "funding agreement," the recipient or subrecipient 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.

Supplier Partner agrees to comply with the above requirements when applicable.

Does Respondent agree? Y- MDO
(Initials of Authorized Representative)

7. ***Clean Air Act and Federal Water Pollution Control Act***

Clean Air Act (42 USC 7401-7671q.) and the Federal Water Pollution Control Act (33 USC 1251-1387), as amended – Contracts and subgrants of amounts in excess of one hundred fifty thousand dollars ($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 USC 7401-7671q.) and the Federal Water Pollution Control Act, as amended (33 USC 1251-1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

When required, Supplier Partner agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Clean Air Act and the Federal Water Pollution Control Act.

Does Respondent agree? Y- MDO
(Initials of Authorized Representative)

8. ***Debarment and Suspension***

Debarment and Suspension (Executive Orders 12549 and 12689) – A contract award (see 2 CFR 180.220) must not be made to parties listed on the government-wide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR Part 1966 Comp. p. 189) and 12689

MDO

(3CFR Part 1989 Comp. p. 235), "Debarment and Suspension." SAM Exclusions contains 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.

Supplier Partner certifies that Supplier Partner is not currently listed on the government-wide exclusions in SAM, is not debarred, suspended, or otherwise excluded by agencies or declared ineligible under statutory or regulatory authority other than Executive Order 12549. Supplier Partner further agrees to immediately notify the Cooperative and all Members with pending purchases or seeking to purchase from Supplier Partner if Supplier Partner 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.

Does Respondent agree? Y - MWD
(Initials of Authorized Representative)

9. *Byrd Anti-Lobbying Amendment*

Byrd Anti-Lobbying Amendment (31 USC 1352) – Supplier Partners that apply or bid for an award exceeding one hundred thousand dollars ($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 USC 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award. As applicable, Supplier Partner agrees to file all certifications and disclosures required by, and otherwise comply with, the Byrd Anti-Lobbying Amendment (31 USC 1352).

Does Respondent agree? Y - MWD
(Initials of Authorized Representative)

10. *Procurement of Recovered Materials*

For participating agency purchases utilizing Federal funds, Supplier Partner 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 maybe required to confirm estimates and otherwise comply. The requirements of Section 6002 includes 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 ten thousand dollars ($10,000) or the value of the quantity acquired during the preceding fiscal year exceeded ten thousand dollars ($10,000); procuring solid waste management services in a manner that maximizes energy and resource recovery, and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

Does Respondent agree? Y - MWD
(Initials of Authorized Representative)

11. *Profit as a Separate Element of Price*

For purchases using federal funds in excess of one hundred fifty thousand dollars ($150,000), a participating agency may be required to negotiate profit as a separate element of the price. See, 2 CFR 200.324(b). When required by a participating agency, Supplier Partner agrees to provide information and negotiate with the participating agency regarding profit as a separate element of the price for a particular purchase. However, Supplier Partner agrees that the total price, including

MWD

profit, charged by Supplier Partner to the participating agency shall not exceed the awarded pricing, including any applicable discount, under Supplier Partner's Group Purchasing Agreement.

Does Respondent agree? Y - MRD
(Initials of Authorized Representative)

12. *Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment*

Vendor agrees that recipients and subrecipients are prohibited from obligating or expending loan or grant funds to procure or obtain, extend or renew a contract to procure or obtain, or enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system from companies described in Public Law 115-232, section 889. Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country are also prohibited.

Does Respondent agree? Y - MRD
(Initials of Authorized Representative)

13. *Domestic preferences for procurements*

For participating agency purchases utilizing Federal funds, Respondent agrees to provide proof, where applicable, that the materials, including but not limited to, iron, aluminum, steel, cement, and other manufactured products are produced in the United States.

"Produced in the United States" means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.

"Manufactured products" means items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

Does Respondent agree? Y - MRD
(Initials of Authorized Representative)

14. *General Compliance and Cooperation with Members*

In addition to the foregoing specific requirements, Vendor agrees, in accepting any purchase order from a Member, it shall make a good faith effort to work with Members to provide such information and to satisfy such requirements as may apply to a particular participating agency purchase or purchases including, but not limited to, applicable recordkeeping and record retention requirements.

Does Respondent agree? Y - MRD
(Initials of Authorized Representative)

MRD

15. *Applicability to Subcontractors*

Offeror agrees that all contracts it awards pursuant to the Contract shall be bound by the foregoing terms and conditions.

Does Respondent agree? Click or tap here to enter text. MO
(Initials of Authorized Representative)

By signature below, I certify that the information in this form is true, complete, and accurate and that I am authorized by my company to make this certification and all consents and agreements contained herein.

Authorized signature: _____

Printed Name: Martin Olinger
Company Name: Polyloom Corporation of America dba TenCate Grass N.A.
Mailing Address: 736 Market Street, Ste. 1700, Chattanooga, TN 37402
Job Title: President, TenCate Grass Sports Division

(The rest of this page is intentionally left blank)

PROPOSAL FORM 15: FEMA FUNDING REQUIREMENTS CERTIFICATION FORMS

Please answer the following question. If yes, complete this Proposal Form.

In the event of a contract award, does the Respondent intend to make their products and services available to public agencies utilizing FEMA funds or seeking reimbursement from FEMA?	☒	Yes
	☐	No

When a participating 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 (sometimes referred to as the "Uniform Guidance" or "EDGAR" requirements). Additionally, Appendix II to Part 200 authorizes FEMA to require or recommend additional provisions for contracts.

All Respondents submitting proposals who desire to work with Members utilizing FEMA funds must complete this FEMA Recommended Contract Provisions Form regarding Respondent's willingness and ability to comply with certain requirements which may be applicable to specific participating agency purchases using FEMA funds. This completed form will be made available to Members for their use while considering their purchasing options when using FEMA grant funds. Members may also require Supplier Partners to enter into ancillary agreements, in addition to the contract's general terms and conditions, to address the member's specific contractual needs, including contract requirements for a procurement using federal grants or contracts.

For each of the items below, Respondent should certify Respondent's agreement and ability to comply, where applicable, by having respondents authorized representative complete and initial the applicable lines after each section and sign the acknowledgment at the end of this form. If a Respondent fails to complete any item in this form, CCOG will consider the respondent's response to be that they are unable or unwilling to comply. A negative response to any of the items may, if applicable, impact the ability of a participating agency to purchase from the Supplier Partner using federal funds.

1. ***Access to Records***

For All Procurements

The Winning Supplier agrees to provide the participating agency, the pass-through entity (if applicable), the FEMA Administrator, the Comptroller General of the United States, or any of their authorized representatives access to any books, documents, papers, and records of the Contractor which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts, and transcriptions.

The Winning Supplier agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.

The Winning Supplier agrees to provide the FEMA Administrator or his authorized representatives access to construction or other work sites pertaining to the work being completed under the contract.

Does Respondent agree? Y- MP Click or tap here to enter text.
(Initials of Authorized Representative)

For Contracts Entered into After August 1, 2017, Under a Major Disaster or Emergency Declaration

In compliance with section 1225 of the Disaster Recovery Reform Act of 2018, the participating agency, and the Winning Supplier acknowledge and agree that no language in this contract is intended to prohibit audits or internal reviews by the FEMA Administrator or the Comptroller General of the United States."

Does Respondent agree? Y. MDD Click or tap here to enter text.
(Initials of Authorized Representative)

2. *Changes*

FEMA recommends that all contracts include a changes clause that describes how, if at all, changes can be made by either party to alter the method, price, or schedule of the work without breaching the contract. The language of the clause may depend on the nature of the contract and the procured item(s) or service(s). The participating agency should also consult their servicing legal counsel to determine whether and how contract changes are permissible under applicable state, local, or tribal laws or regulations.

Does Respondent agree? Y. MDD Click or tap here to enter text.
(Initials of Authorized Representative)

3. *Use of DHS Seal, Logo, and Flags*

The Winning Supplier shall not use the DHS seal(s), logos, crests, or reproductions of flags or likenesses of DHS agency officials without specific FEMA pre-approval. The contractor shall include this provision in any subcontracts.

Does Respondent agree? Y. MDD Click or tap here to enter text.
(Initials of Authorized Representative)

4. *Compliance with Federal Law, Regulations, And Executive Orders and Acknowledgement of Federal Funding*

This is an acknowledgement that when FEMA financial assistance is used to fund all or a portion of the participating agency's contract with the Winning Supplier, the Winning Supplier will comply with all applicable federal law, regulations, executive orders, FEMA policies, procedures, and directives.

Does Respondent agree? Y. MDD Click or tap here to enter text.
(Initials of Authorized Representative)

5. *No Obligation by Federal Government*

The federal government is not a party to this or any contract resulting from this or future procurements with the participating agencies and is not subject to any obligations or liabilities to the non-federal entity, contractor, or any other party pertaining to any matter resulting from the contract.

Does Respondent agree? Y. MDD Click or tap here to enter text.
(Initials of Authorized Representative)

6. *Program Fraud and False or Fraudulent Statements or Related Acts*

The Winning Supplier acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to the contractor's actions pertaining to this contract.

Does Respondent agree? Y. MDD Click or tap here to enter text.
(Initials of Authorized Representative)

MDD

7. ***Affirmative Socioeconomic Steps***

If subcontracts are to be let, the Winning Supplier is required to take all necessary steps identified in 2 C.F.R. § 200.321(b)(1)-(5) to ensure that small and minority businesses, women's business enterprises, and labor surplus area firms are used when possible.

Does Respondent agree? Y - MO Click or tap here to enter text.
(Initials of Authorized Representative)

8. ***License and Delivery of Works Subject to Copyright and Data Rights***

The Winning Supplier grants to the participating agency, a paid-up, royalty-free, nonexclusive, irrevocable, worldwide license in data first produced in the performance of this contract to reproduce, publish, or otherwise use, including prepare derivative works, distribute copies to the public, and perform publicly and display publicly such data. For data required by the contract but not first produced in the performance of this contract, the Winning Supplier will identify such data and grant to the participating agency or acquires on its behalf a license of the same scope as for data first produced in the performance of this contract. Data, as used herein, shall include any work subject to copyright under 17 U.S.C. § 102, for example, any written reports or literary works, software and/or source code, music, choreography, pictures or images, graphics, sculptures, videos, motion pictures or other audiovisual works, sound and/or video recordings, and architectural works. Upon or before the completion of this contract, the Winning Supplier will deliver to the participating agency data first produced in the performance of this contract and data required by the contract but not first produced in the performance of this contract in formats acceptable by the (insert name of the non-federal entity).

Does Respondent agree? Y - MO Click or tap here to enter text.
(Initials of Authorized Representative)

By signature below, I certify that the information in this form is true, complete, and accurate and that I am authorized by my company to make this certification and all consents and agreements contained herein.

Authorized signature: Y - MO

Printed Name: Martin Olinger
Company Name: Polyloom Corporation of America dba TenCate Grass N.A.
Mailing Address: 736 Market Street, Ste 1700, Chattanooga, TN 37402
Job Title: President, TenCate Grass Sports Division

PROPOSAL FORM 16: ARIZONA CONTRACTOR REQUIREMENTS

Please answer the following question. If yes, please complete this Proposal Form.

In the event of a contract award, does the Respondent intend to make their products and services available to public agencies in the State of Arizona?	☒	Yes
	☐	No

In the event the Awarded Supplier desires to pursue public sector opportunities in the State of Arizona, it is important to understand the requirements for working with those public agencies. The documentation and information contained in this proposal form are intended to provide the Respondent with documentation that could be relevant to the providing products & services to public agencies in the State of Arizona. It is the responsibility of the public agency to ensure they are in compliance with local requirements.

AZ Compliance with Federal and State Requirements
Contractor agrees when working on any federally assisted projects with more than $2,000.00 in labor costs, to comply with all federal and state requirements, as well as Equal Opportunity Employment requirements and all other federal and state laws, statutes, etc. Contractor agrees to post wage rates at the work site and submit a copy of their payroll to the member for their files. Contractor must retain records for three years to allow the federal grantor agency access to these records, upon demand. Contractor also agrees to comply with the Arizona Executive Order 75-5, as amended by Executive Order 99-4.

When working on contracts funded with Federal Grant monies, contractor additionally agrees to comply with the administrative requirements for grants, and cooperative agreements to state, local and federally recognized Indian Tribal Governments.

AZ compliance with workforce requirements
Pursuant to ARS 41-4401, Contractor and subcontractor(s) warrant their compliance with all federal and state immigration laws and regulations that relate to their employees, and compliance with ARS 23-214 subsection A, which states, ..." every employer, after hiring an employee, shall verify the employment eligibility of the employee through the E-Verify program"

CCOG reserves the right to cancel or suspend the use of any contract for violations of immigration laws and regulations. CCOG and its members reserve the right to inspect the papers of any contractor or subcontract employee who works under this contract to ensure compliance with the warranty above.

AZ Contractor Employee Work Eligibility
By entering into this contract, contractor agrees and warrants compliance with A.R.S. 41-4401, A.R.S. 23-214, the Federal Immigration and Nationality Act (FINA), and all other Federal immigration laws and regulations. CCOG and/or CCOG members may request verification of compliance from any contractor or sub-contractor performing work under this contract. CCOG and CCOG members reserve the right to confirm compliance. In the event that CCOG or CCOG members suspect or find that any contractor or subcontractor is not in compliance, CCOG may pursue any and all remedies allowed by law, including but not limited to suspension of work, termination of contract, suspension and/or debarment of the contractor. All cost associated with any legal action will be the responsibility of the contractor.

AZ Non-Compliance
All federally assisted contracts to members that exceed $10,000.00 may be terminated by the federal grantee for noncompliance by contractor. In projects that are not federally funded, Respondent must agree to meet any federal, state or local requirements as necessary. In addition, if compliance with the federal regulations increases the contract costs

beyond the agreed upon costs in this solicitation, the additional costs may only apply to the portion of the work paid by the federal grantee.

Registered Sex Offender Restrictions (Arizona)
For work to be performed at an Arizona school, contractor agrees that no employee or employee of a subcontractor who has been adjudicated to be a registered sex offender will perform work at any time when students are present, or reasonably expected to be present. Contractor agrees that a violation of this condition shall be considered a material breach and may result in the cancellation of the purchase order at the CCOG member's discretion. Contractor must identify any additional costs associated with compliance to this term. If no costs are specified, compliance with this term will be provided at no additional charge.

Offshore Performance of Work Prohibited
Due to security and identity protection concerns, direct services under this contract shall be performed within the borders of the United States.

Terrorism Country Divestments: In accordance with A.R.S. 35-392, CCOG and CCOG members are prohibited from purchasing from a company that is in violation of the Export Administration Act. By entering into the contract, contractor warrants compliance with the Export Administration Act.

The undersigned hereby accepts and agrees to comply with all statutory compliance and notice requirements listed in this document.

Does Respondent agree? Y - [illegible]
(Initials of Authorized Representative)

Date: 4/1/2025

(The rest of this page is intentionally left blank)

Proposal Form 17: New Jersey Requirements

Please answer the following question. If yes, complete this Proposal Form.

Does the awarded supplier intend to make their products and services available to public agencies in the State of New Jersey?	☒ Yes ☐ No

In the event the Awarded Supplier desires to pursue public sector opportunities in the State of New Jersey, it is important to understand the requirements for working with those public agencies. The documentation and information contained in this proposal form are intended to provide the Respondent with documentation that could be relevant to the providing products & services to public agencies in the State of New Jersey. It is the responsibility of the public agency to ensure they are in compliance with local requirements.

New Jersey vendors are also required to comply with the following New Jersey statutes when applicable:

- All anti-discrimination laws, including those contained in N.J.S.A. 10:2-1 through N.J.S.A. 10:2-14, N.J.S.A. 10:5-1, and N.J.S.A. 10:5-31 through 10:5-38.
- Compliance with Prevailing Wage Act, N.J.S.A. 34:11-56.26, for all contracts within the contemplation of the Act.
- Compliance with Public Works Contractor Registration Act, N.J.S.A. 34:11-56.26
- Bid and Performance Security, as required by the applicable municipal or state statutes.

A. Ownership Disclosure Form (N.J.S. 52:25-24.2)

Pursuant to the requirements of P.L. 1999, Chapter 440 effective April 17, 2000 (Local Public Contracts Law), the Respondent shall complete the form attached to these specifications listing the persons owning 10 percent (10%) or more of the firm presenting the proposal.

Company Name: **Polyloom Corporation of America dba TenCate Grass N.A.**

Street: **736 Market Street, Ste 1700**

City, State, Zip Code: **Chattanooga, TN 37402**

Complete as appropriate:

I, Click or tap here to enter text. *, certify that I am the sole owner of* Click or tap here to enter text.*, that there are no partners and the business is not incorporated, and the provisions of N.J.S. 52:25-24.2 do not apply.*

OR:

I, Click or tap here to enter text.*, a partner in* Click or tap here to enter text.*, do hereby certify that the following is a list of all individual partners who own a 10% or greater interest therein. I further certify that if one (1) or more of the partners is itself a corporation or partnership, there is also set forth the names and addresses of the stockholders holding 10% or more of that corporation's stock or the individual partners owning 10% or greater interest in that partnership.*

OR:

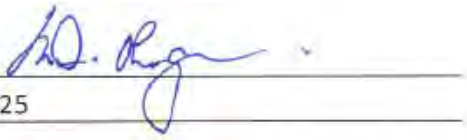
I, Martin Olinger, an authorized representative Polyloom Corporation of America dba TenCate Grass N.A, a corporation, do hereby certify that the following is a list of the names and addresses of all stockholders in the corporation who own 10% or more of its stock of any class. I further certify that if one (1) or more of such stockholders is itself a corporation or partnership, that there is also set forth the names and addresses of the stockholders holding 10% or more of the corporation's stock or the individual partners owning a 10% or greater interest in that partnership.

(Note: If there are no partners or stockholders owning 10% or more interest, indicate none.)

Name	Address	Interest

TCG US AcquisitionCo LLC	**100%**

I further certify that the statements and information contained herein, are complete and correct to the best of my knowledge and belief.

Signature: 

Date: 4/1/2025

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PROPOSAL FORM 18: GENERAL TERMS AND CONDITIONS ACCEPTANCE FORM

Check one of the following responses to the General Terms and Conditions in this solicitation, including the Master Agreement:

☒ We take no exceptions/deviations to the general terms and conditions. *(**Note**: If none are listed below, it is understood that no exceptions/deviations are taken.)*

☐ We take the following exceptions/deviations to the general terms and conditions. All exceptions/deviations must be clearly explained. Reference the corresponding general terms and conditions that you are taking exceptions/deviations to. Clearly state if you are adding additions terms and conditions to the general terms and conditions. Provide details on your exceptions/deviations below:

Click or tap here to enter text.

*(**Note**: Unacceptable exceptions shall remove your proposal from consideration for award. CCOG shall be the sole judge on the acceptance of exceptions/deviations and the decision shall be final.)*

PROPOSAL FORM 19: EQUALIS GROUP ADMINISTRATION AGREEMENT DECLARATION

Attachment A - Sample Administration Agreement of this solicitation is for reference only. Contracting with Equalis Group and the Winning Supplier will occur after contract award.

Execution of the Administration Agreement is required for the Master Agreement to be administered by Equalis Group. **Attachment A - Sample Administration Agreement** defines i) the roles and responsibilities of both parties relating to marketing and selling the Program to current and prospective Members, and ii) the financial terms between Equalis Group and Winning Supplier.

Redlined copies of this agreement should not be submitted with the response. Should a Respondent be recommended for award, this agreement will be negotiated and executed between Equalis Group and the Respondent. Respondents must select one of the following options for submitting their response.

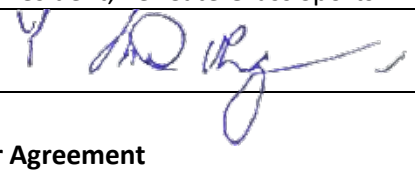
☐ Respondent agrees to all terms and conditions in **Attachment A - Sample Administration Agreement**.

☒ Respondent wishes to negotiate directly with Equalis Group on terms and conditions in the Sample Administration Agreement. Negotiations will commence with Equalis Group after CCOG has completed the contract award.

PROPOSAL FORM 20: MASTER AGREEMENT SIGNATURE FORM

RESPONDENTS MUST SUBMIT THIS FORM COMPLETED AND SIGNED WITH THEIR RESPONSE TO BE CONSIDERED FOR AWARD. RESPONDENTS WHO FAIL TO DO SO WILL BE DETERMINED UNRESPONSIVE AND WILL NO LONGER BE CONSIDERED FOR AWARD.

The undersigned hereby proposes and agrees to furnish Products & Services in strict compliance with the terms, specifications, and conditions contained within this RFP and the Master Agreement at the prices proposed within the submitted proposal unless noted in writing. The undersigned further certifies that he/she is an officer of the company and has authority to negotiate and bind the company named below and has not prepared this proposal in collusion with any other Respondent and that the contents of this proposal as to prices, terms or conditions of said proposal have not been communicated by the undersigned nor by any employee or agent to any person engaged in this type of business prior to the official opening of this proposal.

Company Name	Polyloom Corporation of America dba TenCate Grass N.A.
Address	736 Market St. Suite 1700
City/State/Zip	Chattanooga, TN 37402
Phone Number	404-229-4135
Email Address	r.hawley@tencategrass.com
Printed Name	Martin Olinger
Job Title	President, TenCate Grass Sports Division
Authorized Signature	

Initial Term of the Master Agreement

Contract Effective Date:	July 1, 2025
Contract Expiration Date:	June 30, 2029
Contract Number:	

*(**Note**: Contract Number will be applied prior to CCOG and Equalis Group countersigning.)*

The Cooperative Council of Governments, Inc.
6001 Cochran Road, Suite 333
Cleveland, Ohio 44139

Equalis Group, LLC.
5540 Granite Parkway, Suite 200
Plano, Texas 75024

By:		By:	
Name:	Franklyn A. Corlett	Name:	Eric Merkle
As:	CCOG Board President	As:	EVP, Procurement & Operations
Date:		Date:	

TenCate

Supplemental Proposal Information

"Creating healthier more beautiful communities."

Response to Equalis Group
RFP COG-2164
Sports Surfacing and Related Solutions

The TENCATE FAMILY

PRODUCT INFORMATION

STANDARD COLORS

ALL COLORS SHOWN ARE FOR REPRESENTATION ONLY. ACTUAL COLOR MAY VARY.

FIELD GREEN
Pantone: 575C

LIME GREEN
Pantone: 7496C

FIELD GREEN/
LIME GREEN*

GRAY
Pantone: 422+429

BLACK
Pantone: 000C

RED
Pantone: 185C

BRIGHT YELLOW
Pantone: 136C

WHITE
Pantone: 000

VEGAS GOLD
Pantone: 466C

BROWN
Pantone: 1545C

NAVY BLUE
Pantone: 282C

FLORIDA BLUE
Pantone: 281C

ORANGE
Pantone: 166C

BLUE LAGOON
Pantone: 2925C

RED CLAY
Pantone: 7526C

CRIMSON
Pantone: 202C

BLUPLE
Pantone: 268C

TAN
Pantone: 728C

STANDARD THATCH COLORS*

FIELD GREEN
Pantone: 575C

WHITE
Pantone: 000

BASEBALL & SOFTBALL**

BROWN
Pantone: 1545C

TAN
Pantone: 728C

RED CLAY
Pantone: 7526C

---

*Standard Thatch Colors: White turf will have white XP+ with white texturized yarn and green semi-texturized yarn. Other colors will have the applicable color in the face fiber and green texturized fibers (ex – navy blue will be navy blue XP+ with green semi-texturized and texturized yarns).

**Brown turf will have brown XP+ with brown texturized yarn and green semi-texturized yarn; tan turf will have tan XP+ with tan texturized yarn and green semi-texturized yarn; and red clay turf will have red clay XP+ with red clay texturized yarn and green semi-texturized yarn.

STANDARD COLORS
Normally in stock; no minimums apply; non-green colors will result in $0.25/sf upcharge.

NON STANDARD COLORS
Minimums and lead times apply. Please contact us to review lead times for color formulation, production, and minimums. Minimum charge of $35,000 fee for three fiber product per color requested.

SET-UP FEES
A project having less than a thousand linear feet of turf produced will have a minimum charge of a $1,000 fee per full creel change.

ROLL LENGTH

Face Weight	Pile Height	Max Panel Length (LF)
120 oz/yd^2	1.5"	165
100 oz/yd^2	1.25"	190
90 oz/yd^2	1.125"	205

ADDITIONAL INFORMATION

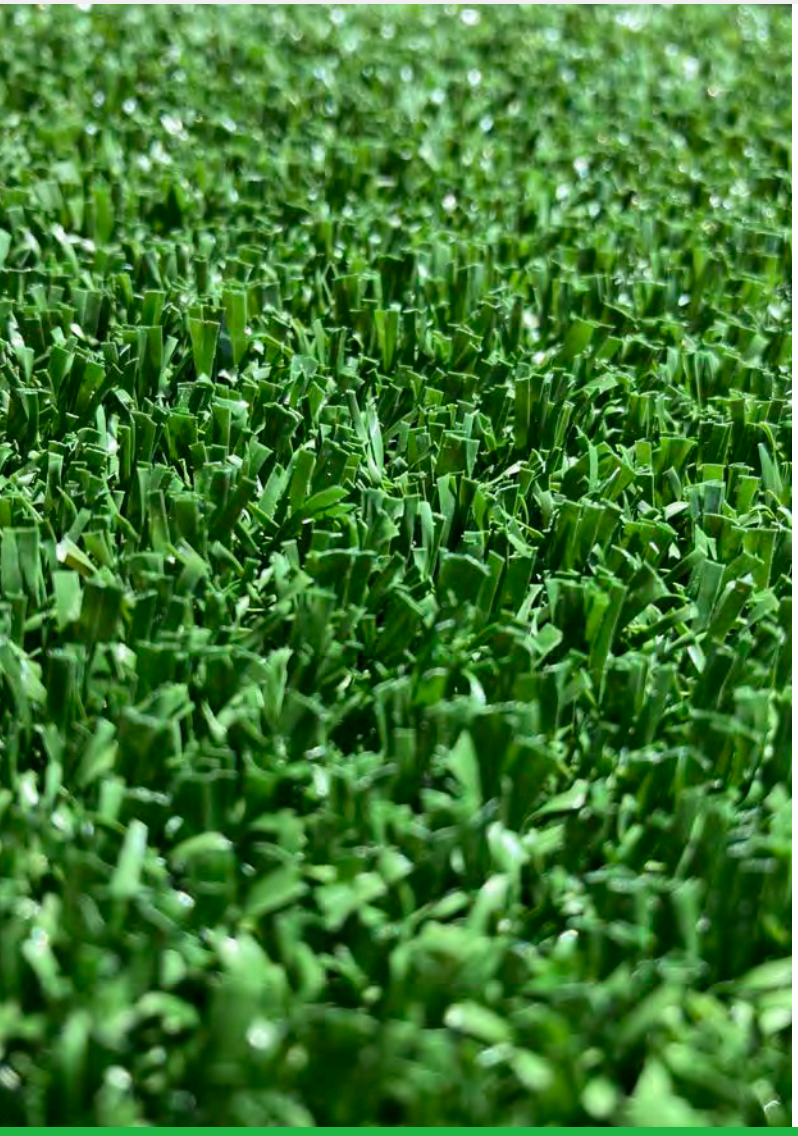
To order or for product questions, please reach out to your account representative or product manager.

Standard Lead Time: 45 – 60 days

Warranty: 12 year (Non-Prorated)

TIME TO PIVOT®

Designed without the need for performance infill, Pivot provides the precise amount of feedback and support, give and grip and won't be outperformed—with the exception of the incredible athletes that play on it.



IT'S NOT TURF. IT'S PIVOT.

Developed at the Center for Turf Innovation (CTI) with college and professional athletes, Pivot combines traditional sports fibers with newer thinner fibers that look and feel more like natural grass.

200%
more fiber than competitive turf systems

50+
iterations rapidly prototyped in response to testing data

12
year warranty

100%
recyclable at TenCate's regional recycling centers

MULTI-SPORT & ALL-WEATHER, PIVOT IS READY TO PLAY 24/7/365.

PIVOT® BY TENCATE 1.25” SPECS

YARN

DENSITY (DENIER)	5,040/1 (XP+); 5,400/6 (semi-TXT); 7,200/10 (TXT)
THICKNESS (MICRONS)	100 (XP+); 152 (semi-TXT); 145 (TXT)
MELTING POINT	128° C | 260° F
BREAKING STRENGTH	11 lbs/force (XP+); 20 lbs/force (semi-TXT); 20 lbs/force (TXT)
LEAD CONTENT (PPM)	‹ 100

PILE CONTENT (100% POLYETHYLENE YARN, BLEND OF DURABLE BI-AXIAL FIBER AND SEMI-TEXTURIZED AND TEXTURIZED MONOFILAMENT FIBERS)	TenCate XP+ U.V. resistant bi-axial fiber, combined with TenCate semi-TXT and TXT monofilament flex yarns.
PRIMARY BACKING	7.5 oz/yd^2; TenCate K29 Backing (Double Layer Thiobac, black, U.V. stabilized, Layer 1: 100% PP, Layer 2: PET/PP blend)
SECONDARY BACKING	20 oz/yd^2 Polyurethane coating with drainage holes
TOTAL WEIGHT	127.5 oz/yd^2
PILE HEIGHT	1 1/4 inch
FACE WEIGHT*	100 oz/yd^2
MACHINE GAUGE	3/8 inch
SET UP	3 ends/needle
ROLL WIDTH	182 inch
WATER PERMEABILITY	64 inches/hour (unfilled)
TUFT BIND (ASTM D1335)	> 9 lbs
GRAB TEAR (ASTM D5034)	274 lbs length, 395 lbs width
PILL FLAMMABILITY (ASTM D2859)	Pass

WARRANTY 12 YEAR WARRANTY

BEST FOR FOOTBALL, SOCCER, BASEBALL, INDOOR AND MULTI-PURPOSE FIELDS

MADE IN USA with US and European Components

Pile Height, Max Thickness, Face Weight, Primary & Secondary Backing, and Total Weight can differ by ±10%. The Stitch Rate will change according to the exact specifications and can differ by ±1. Roll Width can differ by ±$0.8 inch.

TenCate has the right to alter each product specification in order to improve the system according to the latest standards. TenCate is not legally liable in case of noncompliance with the above mentioned specifications.

*Face Weight reflects entire length of yarn, including portion woven into backing, which is consistent with standard ASTM method of measuring tuft including back stitch.

PIVOT®
PERFORMANCE TURF

TIME TO PIVOT®

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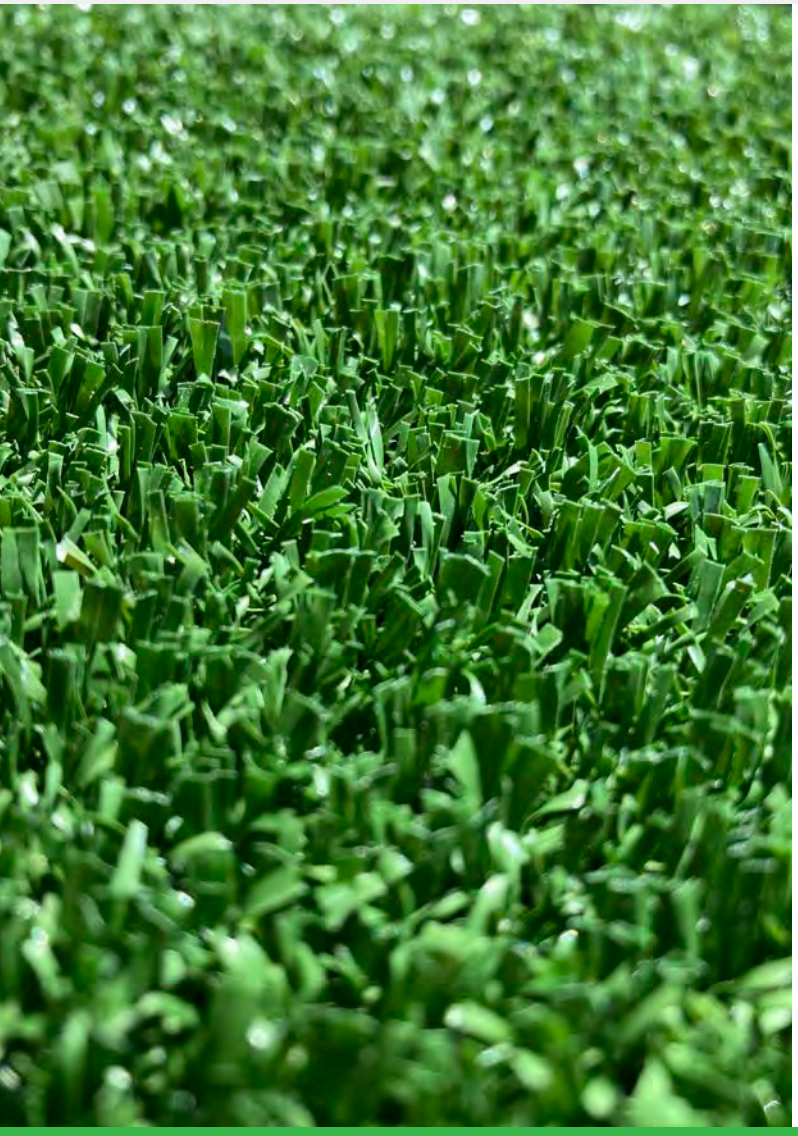

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iterations rapidly prototyped in response to testing data

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MULTI-SPORT & ALL-WEATHER, PIVOT IS READY TO PLAY 24/7/365.

PIVOT® BY TENCATE 1.5" SPECS

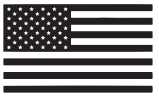
TENCATE

YARN

DENSITY (DENIER)	5,040/1 (XP+); 5,400/6 (semi-TXT); 7,200/10 (TXT)
THICKNESS (MICRONS)	100 (XP+); 152 (semi-TXT); 145 (TXT)
MELTING POINT	128° C | 260° F
BREAKING STRENGTH	11 lbs/force (XP+); 20 lbs/force (semi-TXT); 20 lbs/force (TXT)
LEAD CONTENT (PPM)	‹ 100

PILE CONTENT (100% POLYETHYLENE YARN, BLEND OF DURABLE BI-AXIAL FIBER AND SEMI-TEXTURIZED AND TEXTURIZED MONOFILAMENT FIBERS)	TenCate XP+ U.V. resistant bi-axial fiber, combined with TenCate semi-TXT and TXT monofilament flex yarns.
PRIMARY BACKING	7.5 oz/yd^2; TenCate K29 Backing (Double Layer Thiobac, black, U.V. stabilized, Layer 1: 100% PP, Layer 2: PET/PP blend)
SECONDARY BACKING	20 oz/yd^2 Polyurethane coating with drainage holes
TOTAL WEIGHT	147.5 oz/yd^2
PILE HEIGHT	1 1/2 inch
FACE WEIGHT*	120 oz/yd^2
MACHINE GAUGE	3/8 inch
SET UP	3 ends/needle
ROLL WIDTH	182 inch
WATER PERMEABILITY	64 inches/hour (unfilled)
TUFT BIND (ASTM D1335)	> 9 lbs
GRAB TEAR (ASTM D5034)	274 lbs length, 395 lbs width
PILL FLAMMABILITY (ASTM D2859)	Pass

BEST FOR FOOTBALL, SOCCER, BASEBALL, INDOOR AND MULTI-PURPOSE FIELDS



MADE IN USA
with US and European Components

Pile Height, Max Thickness, Face Weight, Primary & Secondary Backing, and Total Weight can differ by ±10%. The Stitch Rate will change according to the exact specifications and can differ by ±1. Roll Width can differ by ±$0.8 inch.

TenCate has the right to alter each product specification in order to improve the system according to the latest standards. TenCate is not legally liable in case of noncompliance with the above mentioned specifications.

*Face Weight reflects entire length of yarn, including portion woven into backing, which is consistent with standard ASTM method of measuring tuft including back stitch.

PIVOT®
PERFORMANCE TURF

TIME TO PIVOT®

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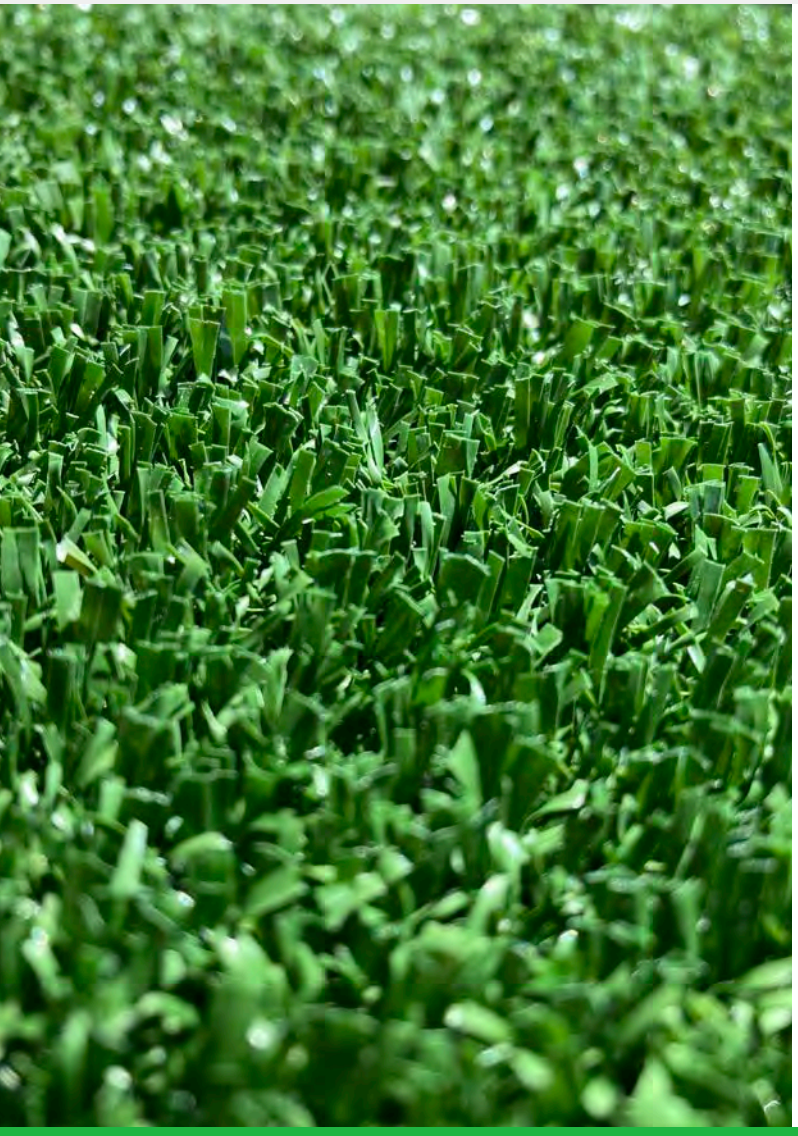

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12
year warranty

100%
recyclable at TenCate's regional recycling centers

MULTI-SPORT & ALL-WEATHER, PIVOT IS READY TO PLAY 24/7/365.

PIVOT® BY TENCATE 1.125” SPECS

YARN

DENSITY (DENIER)	5,040/1 (XP+); 5,400/6 (semi-TXT); 7,200/10 (TXT)
THICKNESS (MICRONS)	100 (XP+); 152 (semi-TXT); 145 (TXT)
MELTING POINT	128° C | 260° F
BREAKING STRENGTH	11 lbs/force (XP+); 20 lbs/force (semi-TXT); 20 lbs/force (TXT)
LEAD CONTENT (PPM)	‹ 100

PILE CONTENT (100% POLYETHYLENE YARN, BLEND OF DURABLE BI-AXIAL FIBER AND SEMI-TEXTURIZED AND TEXTURIZED MONOFILAMENT FIBERS)	TenCate XP+ U.V. resistant bi-axial fiber, combined with TenCate semi-TXT and TXT monofilament flex yarns.
PRIMARY BACKING	7.5 oz/yd^2; TenCate K29 Backing (Double Layer Thiobac, black, U.V. stabilized, Layer 1: 100% PP, Layer 2: PET/PP blend)
SECONDARY BACKING	20 oz/yd^2 Polyurethane coating with drainage holes
TOTAL WEIGHT	117.5 oz/yd^2
PILE HEIGHT	1 1/8 inch
FACE WEIGHT*	90 oz/yd^2
MACHINE GAUGE	3/8 inch
SET UP	3 ends/needle
ROLL WIDTH	182 inch
WATER PERMEABILITY	64 inches/hour (unfilled)
TUFT BIND (ASTM D1335)	> 9 lbs
GRAB TEAR (ASTM D5034)	274 lbs length, 395 lbs width
PILL FLAMMABILITY (ASTM D2859)	Pass

12 YEAR WARRANTY

BEST FOR SOFTBALL, BASEBALL AND WARNING TRACKS

MADE IN USA
with US and European Components

Pile Height, Max Thickness, Face Weight, Primary & Secondary Backing, and Total Weight can differ by ±10%. The Stitch Rate will change according to the exact specifications and can differ by ±1. Roll Width can differ by ±$0.8 inch.

TenCate has the right to alter each product specification in order to improve the system according to the latest standards. TenCate is not legally liable in case of noncompliance with the above mentioned specifications.

*Face Weight reflects entire length of yarn, including portion woven into backing, which is consistent with standard ASTM method of measuring tuft including back stitch.

TUFTED TURF

TENCATE

ALLSPORT DIAMOND

FIFA QUALITY Preferred Producer

ALLSPORT DIAMOND is the best performing, most durable tufted monofilament turf in the world.

Teams can always count on a natural ball roll with ALLSPORT DIAMOND fields. Our unique diamond design helps fibers stand up straighter and resist splitting, and the ribbed surface reduces glare and keeps these fields looking great.

ALLSPORT DIAMOND SPECS

TENCATE

YARN

DENSITY (DENIER)	12,000/6
THICKNESS (MICRONS)	365
MELTING POINT	128° C | 260°F
BREAKING STRENGTH	24 lbs/force
LEAD CONTENT (PPM)	<100

STANDARD COLORS

FIELD GREEN Pantone: 575C	**LIME GREEN**** Pantone: 7496C	**FIELD GREEN/ LIME GREEN**
BROWN Pantone: 1545C	**NAVY BLUE** Pantone: 282C	**FLORIDA BLUE** Pantone: 281C
GRAY Pantone: 422+429	**BLACK** Pantone: 000C	**RED** Pantone: 185C
ORANGE Pantone: 166C	**BLUE LAGOON** Pantone: 2925C	**RED CLAY** Pantone: 7526C
CRIMSON Pantone: 202C	**BLUPLE** Pantone: 268C	**TAN** Pantone: 728C
BRIGHT YELLOW Pantone: 136C	**WHITE** Pantone: 000	**VEGAS GOLD** Pantone: 466C

TURF

PILE CONTENT

DIAMOND FIBERS STAND STRAIGHTER FOR LONGER

TenCate U.V. resistant 12,000/6 XWRD monofilament

PRIMARY BACKING	7.5 oz/yd^2; TenCate K29 Backing (Double Layer Thiobac, black, U.V. stabilized, Layer 1: 100% PP, Layer 2: PET/PP blend)
SECONDARY BACKING	20 oz/yd^2 Polyurethane coating with drainage holes
TOTAL WEIGHT	71.5 oz/yd^2
PILE HEIGHT	1 3/4 inch
FACE WEIGHT*	44 oz/yd^2
MACHINE GAUGE	1/2 inch
SET UP	1 end/needle
ROLL WIDTH	182 inch
WATER PERMEABILITY	13.2 gal/yd^2/min (unfilled)
TUFT BIND (ASTM D1335)	> 9 lbs
GRAB TEAR (ASTM D5034)	274 lbs length, 395 lbs width
PILL FLAMMABILITY (ASTM D2859)	Pass

BEST FOR SOCCER

MADE IN THE USA

GreenFields A TENCATE COMPANY

Pile Height, Max Thickness, Face Weight, Primary & Secondary Backing, and Total Weight can differ by ±10%. The Stitch Rate will change according to the exact specifications and can differ by ±1. Roll Width can differ by ±0.8 inch.

GreenFields has the right to alter each product specification in order to improve the system according to the latest standards. GreenFields is not legally liable in case of noncompliance with the above mentioned specifications.

*Face Weight reflects entire length of yarn, including portion woven into backing, which is consistent with standard ASTM method of measuring tuft including back stitch.

**Lime Green is shown for color reference only. Lime-only turf is not available.

TUFTED TURF

TENCATE

ALLSPORT ULTRA

With a blend of durable XP and playable Diamond fibers, teams can count on enhanced performance and durability from our premier tufted product.

Durability doesn't just come from the unique fiber blend. We also added a higher face weight to this tufted product for enhanced durability. With varied diamond and slit film fibers, ALLSPORT ULTRA fields have a more natural look and feel than other tufted products.

ALLSPORT ULTRA SPECS

TENCATE

YARN

DENSITY (DENIER)	5,000/1 (XP); 8,000/4 (XWRD)
THICKNESS (MICRONS)	100 (XP); 365 (XWRD)
MELTING POINT	128° C | 260° F
BREAKING STRENGTH	11 lbs/force (XP); 15.9 lbs/force (XWRD)
LEAD CONTENT (PPM)	<100

STANDARD COLORS

FIELD GREEN
Pantone: 575C

LIME GREEN***
Pantone: 7496C

FIELD GREEN/ LIME GREEN**

BROWN
Pantone: 1545C

NAVY BLUE
Pantone: 282C

FLORIDA BLUE
Pantone: 281C

GRAY
Pantone: 422+429

BLACK
Pantone: 000C

RED
Pantone: 185C

ORANGE
Pantone: 166C

BLUE LAGOON
Pantone: 2925C

RED CLAY
Pantone: 7526C

CRIMSON
Pantone: 202C

BLUPLE
Pantone: 268C

TAN
Pantone: 728C

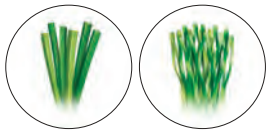
BRIGHT YELLOW
Pantone: 136C

WHITE
Pantone: 000

VEGAS GOLD
Pantone: 466C

TURF

PILE CONTENT



UNIQUE DIAMOND MONOFILAMENT AND XP FIBER BLEND

TenCate U.V. resistant XWRD monofilament and TenCate U.V. resistant XP Blade Plus slit film

PRIMARY BACKING	7.5 oz/yd^2; TenCate K29 Backing (Double Layer Thiobac, black, U.V. stabilized, Layer 1: 100% PP, Layer 2: PET/PP blend)
SECONDARY BACKING	20 oz/yd^2 Polyurethane coating with drainage holes
TOTAL WEIGHT	72.5 oz/yd^2
PILE HEIGHT	2 inch
FACE WEIGHT*	45 oz/yd^2
MACHINE GAUGE	1/2 inch
SET UP	2 ends/needle
ROLL WIDTH	182 inch
WATER PERMEABILITY	13.2 gal/yd^2/min (unfilled)
TUFT BIND (ASTM D1335)	≥ 9 lbs
GRAB TEAR (ASTM D5034)	274 lbs length, 395 lbs width
PILL FLAMMABILITY (ASTM D2859)	Pass

BEST FOR FOOTBALL, SOCCER, LACROSSE, AND MULTI-PURPOSE FIELDS

MADE IN THE USA

GreenFields
A TENCATE COMPANY

Pile Height, Max Thickness, Face Weight, Primary & Secondary Backing, and Total Weight can differ by ±10%. The Stitch Rate will change according to the exact specifications and can differ by ±1. Roll Width can differ by ±0.8 inch.

GreenFields has the right to alter each product specification in order to improve the system according to the latest standards. GreenFields is not legally liable in case of noncompliance with the above mentioned specifications.

*Face Weight reflects entire length of yarn, including portion woven into backing, which is consistent with standard ASTM method of measuring tuft including back stitch.

**High contrast (Lime XP & FG/L XWRD) and low contrast (FG XP & FG/L XWRD) available. ***Lime Green is shown for color reference only. Lime-only turf is not available.

TUFTED TURF

TenCate

ALLSPORT XPS

With highly durable slit film fibers, ALLSPORT XPS is engineered for robust gameplay.

Crafted with the athlete in mind, ALLSPORT XPS is artfully tufted in a dynamic curvilinear pattern, designed for enhanced stability and resilience. XPS fibers are more resistant to splitting for better retention of appearance and performance. Combining these world-class fibers with high-performance K29 backing ensures the playing surface remains impeccable game after game.

ALLSPORT XPS SPECS

TENCATE

YARN

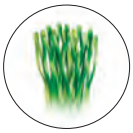
DENSITY (DENIER)	10,050/1 [XPS]
THICKNESS (MICRONS)	100
MELTING POINT	128° C | 260°F
BREAKING STRENGTH	11 lbs/force
LEAD CONTENT (PPM)	<100

STANDARD COLORS

FIELD GREEN Pantone: 575C	**LIME GREEN** Pantone: 7496C	**FIELD GREEN/ LIME GREEN**
BROWN Pantone: 1545C	**NAVY BLUE** Pantone: 282C	**FLORIDA BLUE** Pantone: 281C
GRAY Pantone: 422+429	**BLACK** Pantone: 000C	**RED** Pantone: 185C
ORANGE Pantone: 166C	**BLUE LAGOON** Pantone: 2925C	**RED CLAY** Pantone: 7526C
CRIMSON Pantone: 202C	**BLUPLE** Pantone: 268C	**TAN** Pantone: 728C
BRIGHT YELLOW Pantone: 136C	**WHITE** Pantone: 000	**VEGAS GOLD** Pantone: 466C

TURF

PILE CONTENT



TenCate U.V. resistant XP Blade Plus slit film

HIGH SPLIT RESISTANCE FROM UNIQUELY ENGINEERED 100% SLIT FILM DESIGN

PRIMARY BACKING	7.5 oz/yd^2; TenCate K29 Backing (Double Layer Thiobac, black, U.V. stabilized, Layer 1 - 100% PP, Layer 2 PET/PP blend
SECONDARY BACKING	20 oz/yd^2 Polyurethane coating with drainage holes
TOTAL WEIGHT	72.5 oz/yd^2
PILE HEIGHT	2 inch
FACE WEIGHT*	45 oz/yd^2
MACHINE GAUGE	3/8 inch
SET UP	1 end/needle
ROLL WIDTH	182 inch
WATER PERMEABILITY	13.2 gal/yd^2/min (unfilled)
TUFT BIND (ASTM D1335)	> 9 lbs
GRAB TEAR (ASTM D5034)	274 lbs length, 395 lbs width

COST-EFFECTIVE SOLUTION

BEST FOR FOOTBALL AND MULTI-PURPOSE FIELDS

MADE IN THE USA

GreenFields A TENCATE COMPANY

Pile Height, Max Thickness, Face Weight, Primary & Secondary Backing, and Total Weight can differ by ±10%. The Stitch Rate will change according to the exact specifications and can differ by ±1. Roll Width can differ by ±0.8 inch.

GreenFields has the right to alter each product specification in order to improve the system according to the latest standards. GreenFields is not legally liable in case of noncompliance with the above mentioned specifications.

*Face Weight reflects entire length of yarn, including portion woven into backing, which is consistent with standardASTM method of measuring tuft including back stitch.

WOVEN TURF

TENCATE

IRONTURF™

FIFA QUALITY
Preferred Producer

Engineered specifically for high-impact sports, IRONTURF™ is the world's most durable synthetic turf.

We combine our patented MatriX woven technology with resilient TenCate XPS and Diamond fibers to create a playable, durable and safe turf. Made with American sports like football in mind, we've designed denser turf bundles to offer greater resilience. The unique woven pattern of IRONTURF™ reduces infill splash, decreases rotational resistance and lessens lower leg stress, improving safety through consistent GMAX.

IRONTURF™ SPECS

TENCATE

YARN

DENSITY (DENIER)	10,000/1 (XPS); 12,000/6 (XWRD)
THICKNESS (MICRONS)	125 (XPS); 365 (XWRD)
MELTING POINT	128° C | 260°F
BREAKING STRENGTH	24 lbs/force (XPS/XWRD)
LEAD CONTENT (PPM)	<100

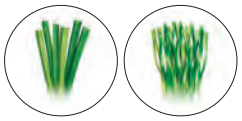
STANDARD COLORS

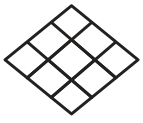
- **FIELD GREEN** Pantone: 575C
- **LIME GREEN*** ** Pantone: 7496C
- **FIELD GREEN/ LIME GREEN**
- **BROWN** Pantone: 1545C
- **NAVY BLUE** Pantone: 282C
- **FLORIDA BLUE** Pantone: 281C
- **GRAY** Pantone: 422+429
- **BLACK** Pantone: 000C
- **RED** Pantone: 185C
- **ORANGE** Pantone: 166C
- **BLUE LAGOON** Pantone: 2925C
- **RED CLAY** Pantone: 7526C
- **CRIMSON** Pantone: 202C
- **BLUPLE** Pantone: 268C
- **TAN** Pantone: 728C
- **BRIGHT YELLOW** Pantone: 136C
- **WHITE** Pantone: 000
- **VEGAS GOLD** Pantone: 466C

MADE IN THE USA

GreenFields A TENCATE COMPANY

TURF

TURF CONTENT*  WOVEN BLEND OF DURABLE XPS FIBERS AND PLAYABLE DIAMOND FIBERS	TenCate U.V. resistant XWRD monofilament and Tencate U.V. resistant XPS Plus woven with a unique blend of 13 oz/yd² of U.V. stable PP and PE weft/warp fibers for the base structure
STABILITY COATING**	16.0 oz/yd² Polyurethane coating with drainage holes or permeable acrylic coating
TOTAL WEIGHT	88 oz/yd²
PILE HEIGHT	2 inch
FACE WEIGHT†	59 oz/yd²
ROLL WIDTH	15 feet
WATER PERMEABILITY	≥ 13.2 gal/yd²/min
TUFT BIND††	≥ 18 lbs
STITCHING	12 pic



59 OZ. FACE WEIGHT CREATES DENSER CONSTRUCTION

12-PIC STITCHING FOR CLEAN TURF GRAPHICS

FOOTBALL, SOCCER AND MULTISPORT FIELDS

Pile Height, Max Thickness, Face Weight, Primary & Secondary Backing, and Total Weight can differ by ±10%. Roll Width can differ by ±0.8 inch.

GreenFields has the right to alter each product specification in order to improve the system according to the latest standards.

GreenFields is not legally liable in case of noncompliance with the above mentioned specifications.

*In woven turf, face yarn and base yarns are woven together into one structure simultaneously - there is no separate backing.

**Conventional coating is not required on woven turf to keep fibers into backing. Woven turf is coated for stability purposes during the installation process.

***Lime Green is shown for color reference only. Lime-only turf is not available.

†Face Weight reflects entire length of yarn, including portion woven into backing, which is consistent with standard ASTM method of measuring tuft including back stitch.

††Our woven technology eliminates the need for backing and makes the term "Tuft Bind" irrelevant. We have included this measure here in order to meet the requirements of certain RFPs.

MAXFLO® SHOCK PAD

TENCATE GRASS

MAXFLO DYNAMIC SHOCK PAD

MaxFlo is a patented high compressive strength, moisture conducting, non-absorbent, geo-composite shock pad made from recycled materials. MaxFlo is a pre-fabricated system that consists of a formed polystyrene or polypropylene core. The core provides a high compressive strength structure that allows water to flow to designated outflows. The use of MaxFlo greatly reduces risk factors associated with poor subsurface soils. Installation provides an uninterrupted vertical-to-horizontal flow path for superior rainfall evacuation and enhanced G-max performance without changing the ball-action or feel under-foot. The integrity of the system moisture-seal is maintained by use of an impervious bonding tape, which also expands and contracts, thus maintaining the function of the integral expansion joints.

TYPICAL PROPERTIES	SI	US	TEST METHOD
FABRIC PROPERTIES			
Material	**Polypropylene**	**Polypropylene**	
Grab tensile strength	110 lbs	485 N	ASTM D4632
Puncture strength	65 lbs	285 N	ASTM D3787
Trapezoidal tear	50 lbs	220 N	ASTM D4533
Mullen burst strength	215 psi	1430 kPa	ASTM D3786
Elongation	60%	60%	ASTM D4632
EOS (AOS)	70 sieve	212 micron	ASTM D4751
Permittivity	1.6 sec –1	1.6 sec-1	ASTM D4491
Permeability	0.01 ft/sec	0.3 cm/sec	ASTM D4491
Flow rate	150 gpm/ft2	6110 lpm/m2	ASTM D4491
CORE PROPERTIES			
Material	**Polypropylene**	**Polypropylene**	
Thickness	1/2 in	15 mm	
Comp. Strength	20,000 lbs/ft2	1464 kN/m2	ASTM D1621(Mod)
Flow capacity per unit width	16 gpm/ft	200 lpm/m	ASTM D4716
Expansion Coefficient	4.42 x10-5 in/in Per°C		
Product Weight	30 oz/yd2		

WHEN INSTALLED PROPERLY, MAXFLO LOWERS G-MAX BY 15 TO 20 UNITS. All information, drawings and specifications are based on the latest product information available at the time of printing. Constant improvement and engineering progress make it necessary that we reserve the right to make changes without notice. All physical properties are typical values. Standard variations in mechanical properties of 10% and in hydraulic properties of 20% are normal.

MAXFLO® SHOCK PAD

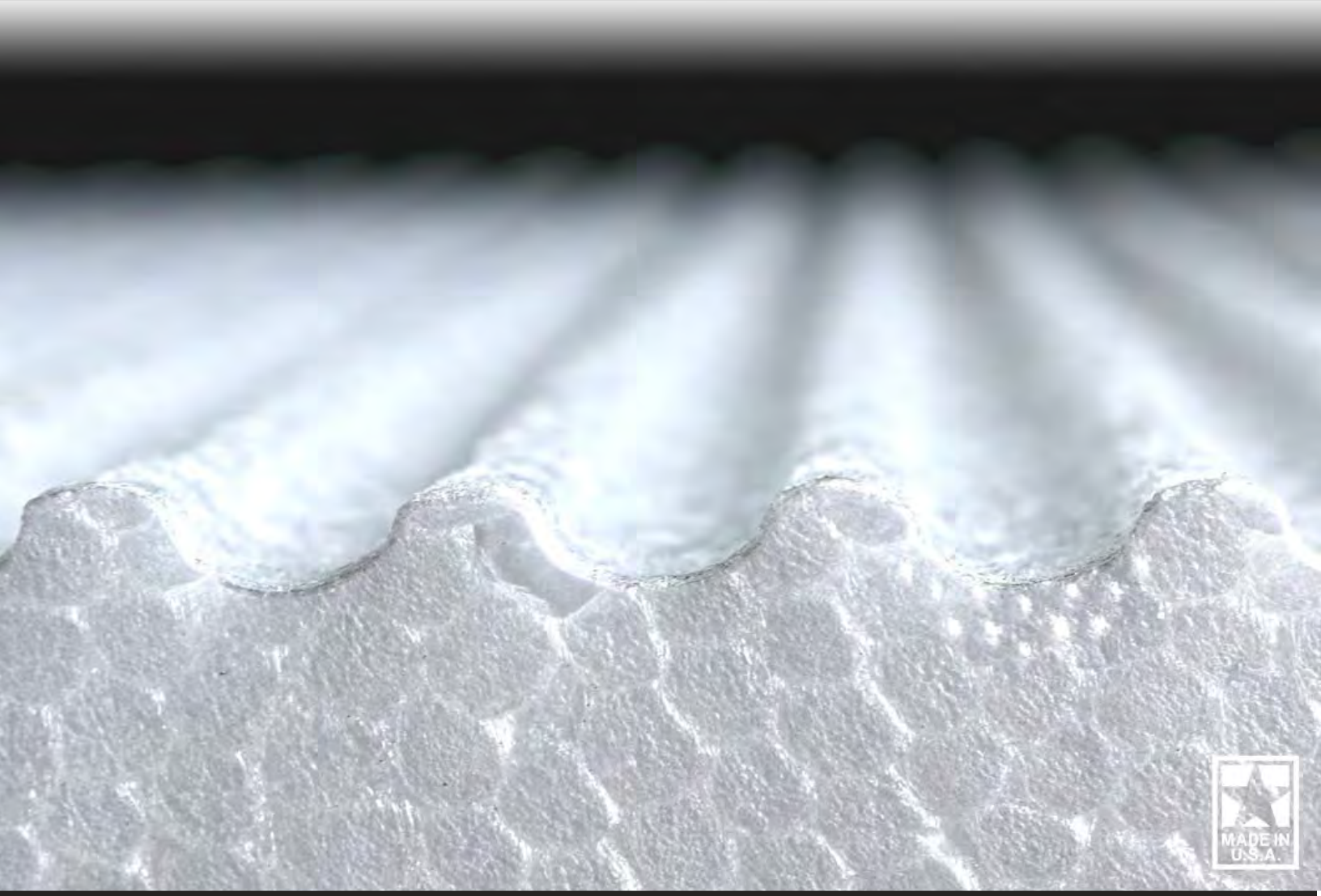
MAXFLO® + SHOCK PAD

MADE IN USA

PATENTED

15mm/20mm/25mm

TENCATE GRASS



DYNAMIC SHOCK PAD & DRAINAGE BLANKET

MaxFlo+ is a patented moisture conducting, non-absorbent, geo-composite shock pad made from polyolefin materials. MaxFlo+, available in both solid core and perforated core, is a pre-fabricated system that consists of a formed expanded polypropylene core. It is a highly resilient closed-cell expanded bead product, and is an ideal energy absorbing material for sport surfaces that requires impact protection and shock absorption. The use of MaxFlo+ greatly reduces risk factors associated with poor subsurface soils.

Installation provides an uninterrupted vertical-to-horizontal flow path for superior rainfall evacuation and enhanced G-MAX performance without changing the ball-action or feel under-foot. The integrity of the systems expansion and contraction capabilities is maintained by the use of the GeoClip™ system which holds the MaxFlo+ in place during the installation of the turf system. The GeoClip also decreases the risk of wind negatively impacting the installation process. The GeoClip allows each individual pad to naturally react to changing temperature and humidity conditions while assuring the turf installation team is able to perform on a secure monolithic work surface. The proper installation of the MaxFlo+ system reduces G-MAX by up to 50 points.

TENCATEGRASS.COM | SPORTS@TENCATEGRASS.COM | 1131 BROADWAY STREET, DAYTON, TN 37321

MAXFLO+ SPECS

PHYSICAL PROPERTIES	TEST METHOD	SAE	DATA
Tensile Strength	ASTM-D3575	psi	55.5
Tensile Elongation	ASTM-D3575	%	18
Tear Strength	ASTM-D3575	lbs/ft	13
Thermal Conductivity (K)	ASTM-C177	BTU-in/ft²-hr-ºF	0.25
Thermal Resistance (R)	ASTM-C177	@70ºF	3.9
Coeff. of Lin. Therman Expansion	ASTM-D696	in/in/ºF x 10^{-5}	5.7
Service Temperature	ASTM-D3575	ºF (Max)	212
Water Absoption	ASTM-D3575/C272	%	<5.0
Compressive Creep	ASTM-D3575	% (psi)	1.2(2.0)
Flammability	FMVSS-302	<4.0in/min	Pass

PLEASE NOTE: For standard Tencate Products, the values shown are typical and could have a manufacturing variance of +/- 10%. This product data should not be construed as specification limits.

PROPERTIES

MaxFlo+ is multi-directional (isotropic) in nature, so unlike traditional extruded products, which yield different properties along the extrusion, vertical and horizontal axis, the properties of the MaxFlo+ products are the same for a given density along all 3 axis, regardless of orientation.

RESILIENT POLYPROPYLENE SHOCK PAD

Nominal Size: 4' x 6' / Thickness Options: 15 mm,20 mm, 25 mm
Horizontal Drainage: 50" per Hour Minimum
Vertical Drainage: 100" per Hour Minimum (On Perforated Core)
Maximum Initial G-MAX Less than 135

SAFETY FEATURES

Guaranteed Maximum G-Max of field of 135 during 8-year warranty period of turf (ASTM F355 or ASTM 1936) as a system test with infill.

Guaranteed 1.3 HIC rating during 8-year warranty period of turf (ASTM F355-16e1) as a system test with infill.

RESISTANCE

Flammability Resistance TEST FMVSS-302: Pass
Fuel Immersion Test Coast Guard (Fuel B): Pass
Chemical Resistance (1 Hour Exposure to Solvents): Pass

TUFTED TURF

TENCATE

PROSPORT XPS

Adding texturized monofilament thatch to durable XPS slit film fibers provides a robust, durable playing surface.

Infill migration and infill splash are both minimized with the addition of a thatch layer. XPS fibers are the most durable in the world, so teams will have a great playing surface for years to come.

PROSPORT XPS SPECS

TENCATE

YARN

DENSITY (DENIER)	10,000/1 (XPS); 5,000/8 (thatch)
THICKNESS (MICRONS)	125 (XPS); 100 (thatch)
MELTING POINT	128° C | 260° F
BREAKING STRENGTH	24 lbs/force (XPS); 17 lbs/force (thatch)
LEAD CONTENT (PPM)	<100

STANDARD COLORS*

- **FIELD GREEN** Pantone: 575C
- **LIME GREEN** Pantone: 7496C
- **FIELD GREEN/ LIME GREEN**
- **BROWN** Pantone: 1545C
- **NAVY BLUE** Pantone: 282C
- **FLORIDA BLUE** Pantone: 281C
- **GRAY** Pantone: 422+429
- **BLACK** Pantone: 000C
- **RED** Pantone: 185C
- **ORANGE** Pantone: 166C
- **BLUE LAGOON** Pantone: 2925C
- **RED CLAY** Pantone: 7526C
- **CRIMSON** Pantone: 202C
- **BLUPLE** Pantone: 268C
- **TAN** Pantone: 728C
- **BRIGHT YELLOW** Pantone: 136C
- **WHITE** Pantone: 000
- **VEGAS GOLD** Pantone: 466C

TURF

PILE CONTENT	TenCate XPS Plus slit film, U.V. resistant, combined with TenCate TXT monofilament root zone
PRIMARY BACKING	7.5 oz/yd^2; TenCate K29 Backing (Double Layer Thiobac, black, U.V. stabilized, Layer 1: 100% PP, Layer 2: PET/PP blend)
SECONDARY BACKING	20 oz/yd^2 Polyurethane coating with drainage holes
TOTAL WEIGHT	89.5 oz/yd^2
PILE HEIGHT	2 inch
FACE WEIGHT**	62 oz/yd^2
MACHINE GAUGE	1/2 inch
SET UP	2 ends/needle
ROLL WIDTH	182 inch
WATER PERMEABILITY	13.2 gal/yd^2/min (unfilled)
TUFT BIND (ASTM D1335)	≥ 9 lbs
GRAB TEAR (ASTM D5034)	274 lbs length, 395 lbs width
PILL FLAMMABILITY (ASTM D2859)	Pass

BEST FOR BASEBALL, SOFTBALL, INDOOR AND MULTI-PURPOSE FIELDS

MADE IN THE USA

GreenFields A TENCATE COMPANY

Pile Height, Max Thickness, Face Weight, Primary & Secondary Backing, and Total Weight can differ by ±10%. The Stitch Rate will change according to the exact specifications and can differ by ±1. Roll Width can differ by ±0.8 inch.

GreenFields has the right to alter each product specification in order to improve the system according to the latest standards. GreenFields is not legally liable in case of noncompliance with the above mentioned specifications.

*For details on thatch color, refer to the GreenFields Standard Color Sheet.

**Face Weight reflects entire length of yarn, including portion woven into backing, which is consistent with standard ASTM method of measuring tuft including back stitch.

STANDARD COLOR SHEET (TUFTED)
YARN COLORS

TENCATE

ALL COLORS SHOWN ARE FOR REPRESENTATION ONLY. ACTUAL COLOR MAY VARY.

 FIELD GREEN Pantone: 575C	 LIME GREEN Pantone: 7496C	 FIELD GREEN/ LIME GREEN*	 GRAY Pantone: 422+429	 BLACK Pantone: 000C	 RED Pantone: 185C
 BRIGHT YELLOW Pantone: 136C	 WHITE Pantone: 000	 VEGAS GOLD Pantone: 466C	 BROWN Pantone: 1545C	 NAVY BLUE Pantone: 282C	 FLORIDA BLUE Pantone: 281C
 ORANGE Pantone: 166C	 BLUE LAGOON Pantone: 2925C	 RED CLAY Pantone: 7526C	 CRIMSON Pantone: 202C	 BLUPLE Pantone: 268C	 TAN Pantone: 728C

STANDARD THATCH COLORS**

			OPTIONAL THATCH***		
 FIELD GREEN Pantone: 575C	 WHITE Pantone: 000	 BLACK Pantone: 000C	 BROWN Pantone: 1545C	 TAN Pantone: 728C	 RED CLAY Pantone: 7526C

*For ALLSPORT Ultra: High contrast (Lime XP & FG/L XWRD) and low contrast (FG XP & FG/L XWRD) available.

**Standard Thatch Colors: FG for all green turf; white for white turf. Black for all other standard colors shown.

***Optional Thatch For Baseball & Softball: Brown with brown turf; tan with tan turf; and red clay with red clay turf.

STANDARD COLORS
Normally in stock; no minimums apply; non-green colors will result in $0.15/sf upcharge.

NON STANDARD COLORS
Minimums and lead times apply. Please contact us to review lead times for color formulation, production, and minimums. Minimum charge of $15,000 fee for single fiber product, $25,000 fee for a dual fiber product, and $35,000 fee for three fiber product per color requested.

SET-UP FEES
A project having less than a thousand linear feet of turf produced will have a minimum charge of a $1,000 fee per full creel change.

GEOGREEN COLOR CHART

POLYETHYLENE YARN COLORS

All colors shown are representative only. Actual colors may vary.

GEOGREEN STANDARD COLORS

White, Lime Green, and Field Green

OTHER AVAILABLE COLORS

Minimums and lead times apply. Black, Red, Orange, Blue Lagoon, Florida Blue, Navy Blue, Clay, Sand (Tan), Brown, Safety Yellow, Vegas Gold, Bluple, Crimson, and Gray.
Color formulas and samples are available.

FIELDS WITH ALTERNATING PANELS

For fields with alternating colors, one panel will be Field Greenwith the alternating panel being Lime Green.

OTHER AVAILABLE COLORS

Non-standard colors: Minimum charge of $10,000 fee for single fiber product and $15,000 fee for a dual fiber product. Creel fee of $850 for project less than a thousand linear feet.

**Any other colors would be considered custom

GEOSURFACES.COM | INFO@GEOSURFACES.COM | 1-877-663-5968 | 7080 ST. GABRIEL AVE. - STE A, ST. GABRIEL, LA 70776

GEOGREEN COLOR CHART

POLYETHYLENE YARN COLORS

All colors shown are representative only. Actual colors may vary.

FIELD GREEN
Pantone 575C

LIME GREEN
Pantone 7496C

BLACK
Pantone 000C

RED
Pantone 185C

ORANGE
Pantone 166C

BLUE LAGOON
Pantone: 2925C

FLORIDA BLUE
Pantone 281C

NAVY BLUE
Pantone 282C

CLAY
Pantone 7526C

SAND (TAN)
Pantone 728C

BROWN
Pantone 1545C

BLUPLE
Pantone 268C

SAFETY YELLOW
Pantone 136C

GRAY
Pantone 422

VEGAS GOLD
Pantone 466C

WHITE
Pantone 000

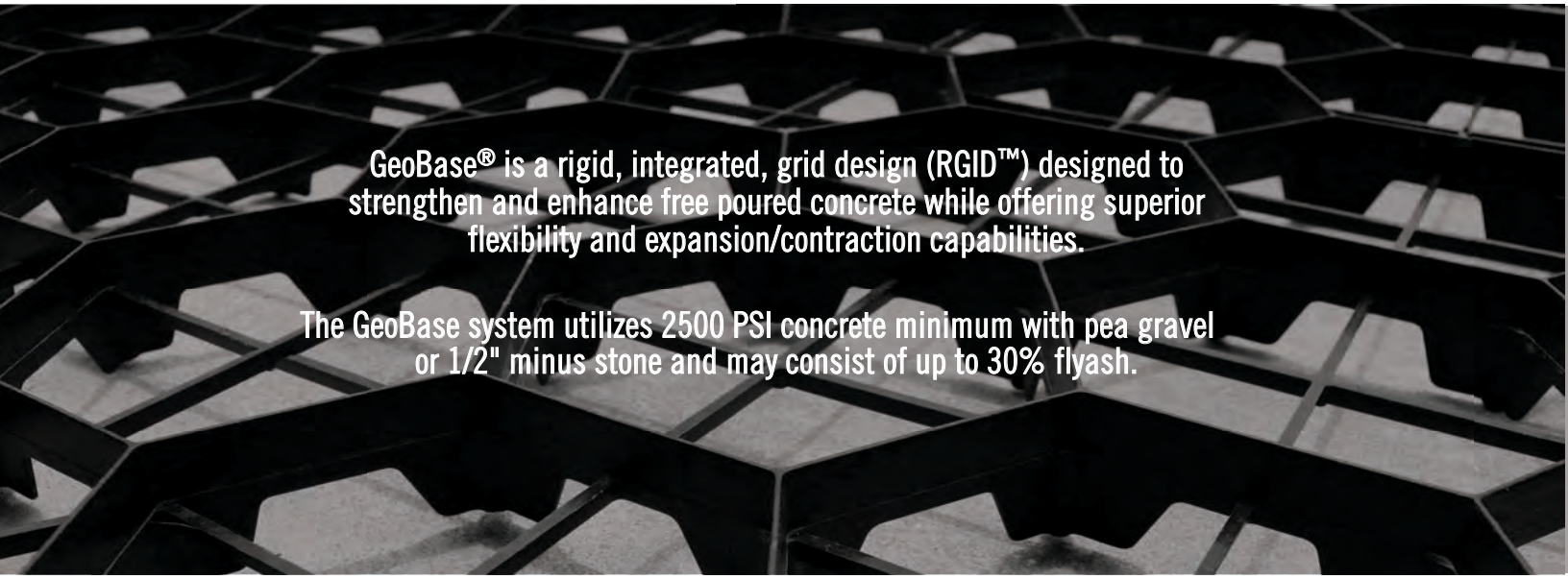
CRIMSON
Pantone 202

A TENCATE COMPANY

TURN KEY" SPORTS SURFACING

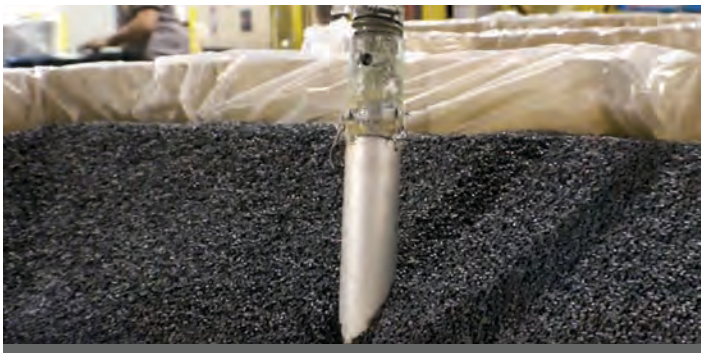
GeoSurfaces is one of the few companies in the USA that offers in-house "turn key" sports lighting and sports surfacing. We are a licensed Professional Construction Firm, Electrical Firm, and Construction Manager that can offer complete construction and installation of World Athletics, FIH and ITF Approved Surfaces

GeoBase® RIGD™ System

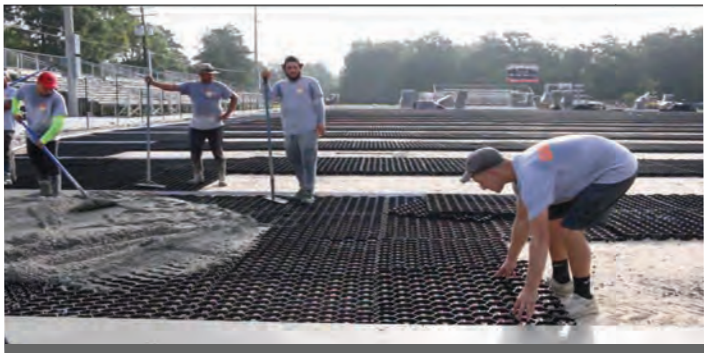


GeoBase® is a rigid, integrated, grid design (RGID™) designed to strengthen and enhance free poured concrete while offering superior flexibility and expansion/contraction capabilities.

The GeoBase system utilizes 2500 PSI concrete minimum with pea gravel or 1/2" minus stone and may consist of up to 30% flyash.



MADE FROM RECYCLED MATERIALS



MANUFACTURED IN THE UNITED STATES

NORMAL SIZE: 3’ X 4’

THICKNESS: 40mm

GEOSURFACES.COM | INFO@GEOSURFACES.COM | 1-877-663-5968 | 7080 ST. GABRIEL AVE., STE. A, ST. GABRIEL, LA 70776

GEOBASE METHODOLOGY:

GeoBase is a structural base construction method that installs a Rigid Integrated Grid Design (RIGD™) to protect underlying soils and provides a stable platform for the installed turf system.

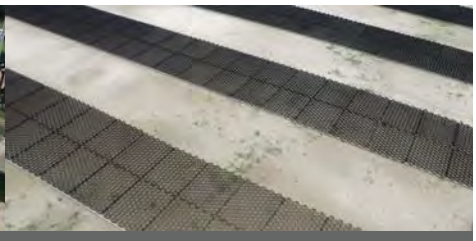
When compared to GeoBase structural base methodology, stone has limitations. Large amounts are needed to obtain support and planarity that turf systems rely on for high level competition. Stone is non-structural, meaning if the underlying materials are inadequate, have changing moisture content, or lack the strength to support the field, the stone cannot guarantee the consistency or uniformity of the playing surface and will move with the materials that support it. Many stone substrates rely on additional costly construction methods such as chemical stabilization or cut and fill to be completed before the stone can be imported and graded to final elevation.

GeoBase, conversely, relies upon on its own structural characteristics to bridge over the imperfections found in unsuitable soils or sites with high water content without the need to chemically stabilize, cut, or fill.

Site conditions when considering use of the GeoBase RIGD system should include materials that can reach a minimum proctor density of 90% and do not contain “classified clays” or materials that may expand or contract based on moisture content.

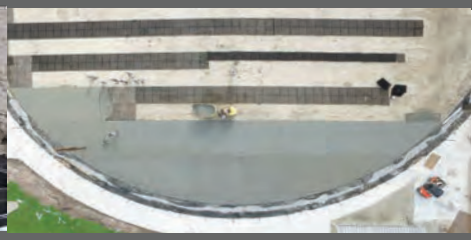
How effective is the GeoBase structural technology? So effective, it comes with a 25-year warranty covering planarity issues that are caused by known unsuitable soils, water tables or moisture contents. This base technology is the most efficient, effective, and least risky option when installing a base system for your artificial turf surface.

PLACEMENT OF STRUCTURAL GRID



PERFECT FIT BETWEEN PANELS

CONCRETE POURING OVER GRID



LESS OVERALL CONCRETE REQUIRED

SMOOTHING OF SURFACE

READY TO INSTALL TURF AFTER DRYING

CONCRETE vs. STONE

The easiest way to understand the effectiveness of the GeoBase system is to compare a concrete driveway to a stone driveway or even a concrete road to a gravel road. Stone/gravel moves under stress and can be greatly impacted by rains, storms, and water content. Concrete maintains planarity through intense storms or high water events. The GeoBase works under the same premise. Once the GeoBase structure is in place, the field base is locked in and cannot move. It will offer a working, stable platform for multiple turf systems and comes with the warranty to back up the science.

THE SCIENCE:

In the U.S, a Light Weight Deflectometer (LWD) test is utilized to measure the “surface modulus’, commonly known as the stiffness of the material tested. This surface modulus quantifies how the foundation beneath reacts in terms of deflection when a dynamic stress is applied using a circular plate.

The deflection observed is a combined result from the foundation within the test's impact area (often termed the zone of significant stress). The size of the plate, the dynamic load applied, and the properties of the foundation materials determine this impact area.

The load, deflection and stress of the impacts are measured. Smaller deflection for a similar load/stress means the surface has a great modulus or strength.

In the U.S., the LWD and its procedures can be found in various state Department of Transportation (DOT) guidelines. The American Association of State Highway and Transportation Officials (AASHTO) and ASTM International have standards regarding LWD and pavement testing. Specifically, you may refer to:

- ASTM D6758 - Standard Test Method for Measuring Stiffness and Apparent Modulus of Soil and Soil-Aggregate In-Place by an Electro-Mechanical Method.
- Various state DOTs have specific procedures or guidelines for LWD use. For example, the California Department of Transportation (Caltrans) and the Texas Department of Transportation (TxDOT) have provided guidelines and specifications that include the use of LWD in pavement testing

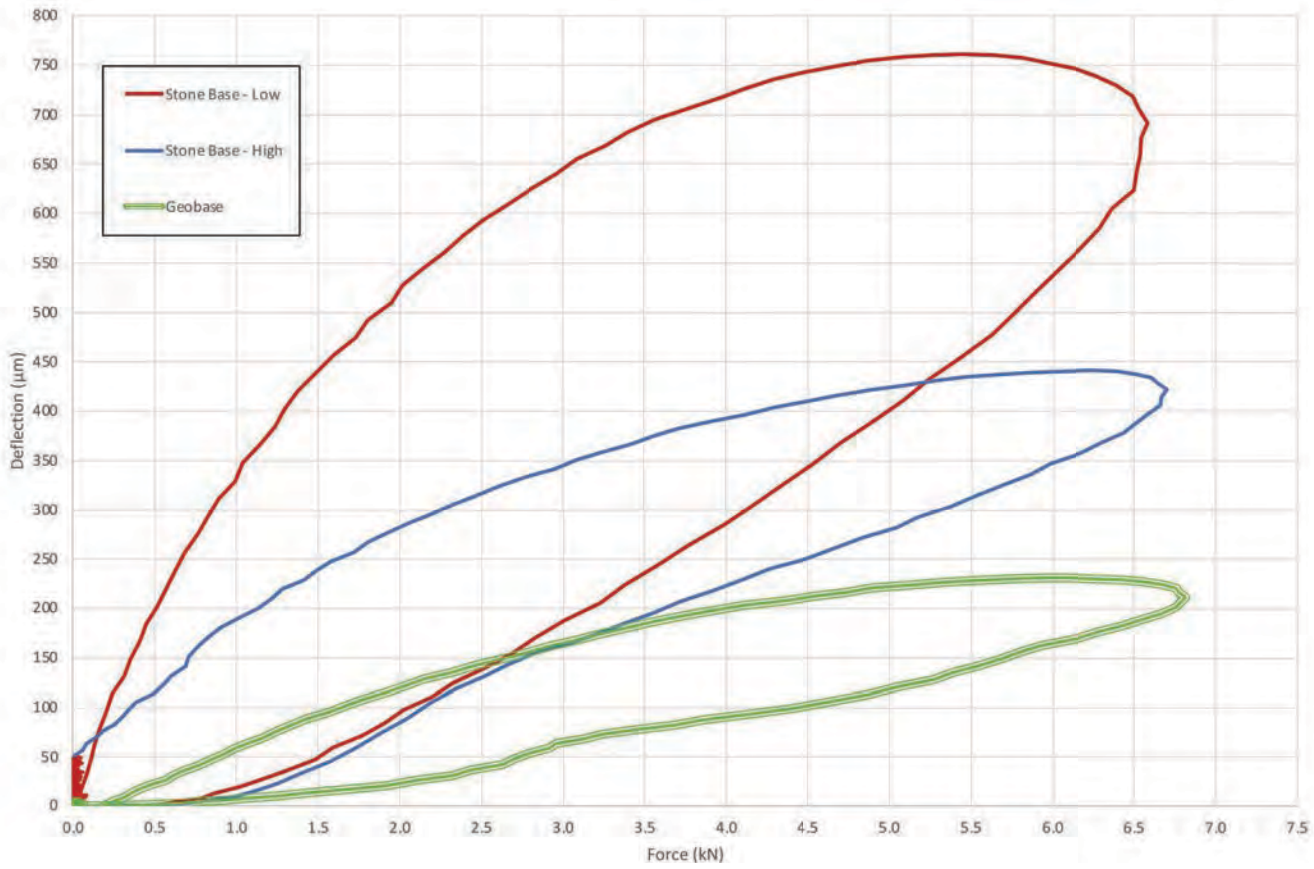
Note: These standards are based on pavement engineering for road construction which are relevant to turf bases but require a slight modification to make them more applicable. In other words, turf fields don’t need to support loads from 18-wheeler trucks.

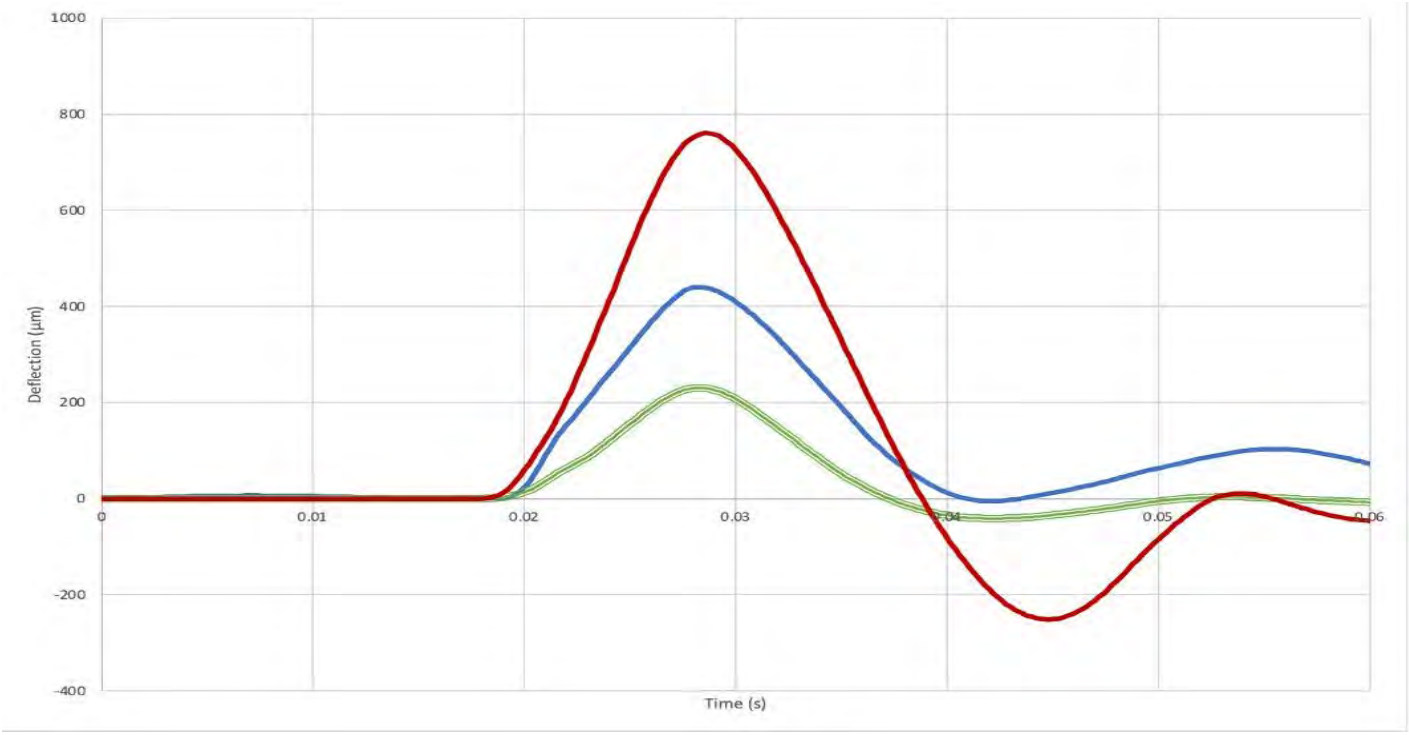
THREE PARAMETERS ARE USUALLY EVAULUATED AS PART OF THE LWD METHOD:

Deflection (δ): The primary value measured directly from LWD is the deflection (usually in millimeters or micrometers) of the surface when subjected to a dynamic load. This deflection indicates how much the material compresses under the applied stress.

Modulus of Elasticity (Ev or E): Often termed the "stiffness" or "resilient modulus," this value (usually in MPa or psi) is derived from the measured deflection. It represents the material's ability to recover after being subjected to a temporary load, indicating its elasticity. The modulus of elasticity can be equated to the California Bearing Ratio (CBR) or even the R-value in certain contexts.

Load (P): Some LWD units will also display the applied load (usually in kN), which can be useful for correlation purposes.





See attached test results of porous stone, dense stone and GeoBase when tested using these methods. Note the Test 2 results show "rutting" when the identification line is below the impact "0". Only the GeoBase deflects back to its original position when tested under high stress conditions.

CONCLUSION:

- The LWD is a commonly used test device for assessment of pavement and roads. It has been used extensively for sports base constructions in several parts of the world.
- The LWD is an excellent device to understand the load bearing capacity and suitability of a base using a range of measurements including deflection and surface modulus.
- The results on the same formation (sub-soil) with two different layer thicknesses of stone in contrast to the GeoBase show the large structural benefits of the GeoBase systems in terms of modulus and deflection.
- Additional testing using a bridge span for basic concrete and GeoBase also demonstrate the impact of failure avoidance and recovery of the GeoBase system vs traditional concrete (note this is different test conditions to the LWD testing) See attached video.

GEO SURFACES

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TURN KEY" SPORTS SURFACING

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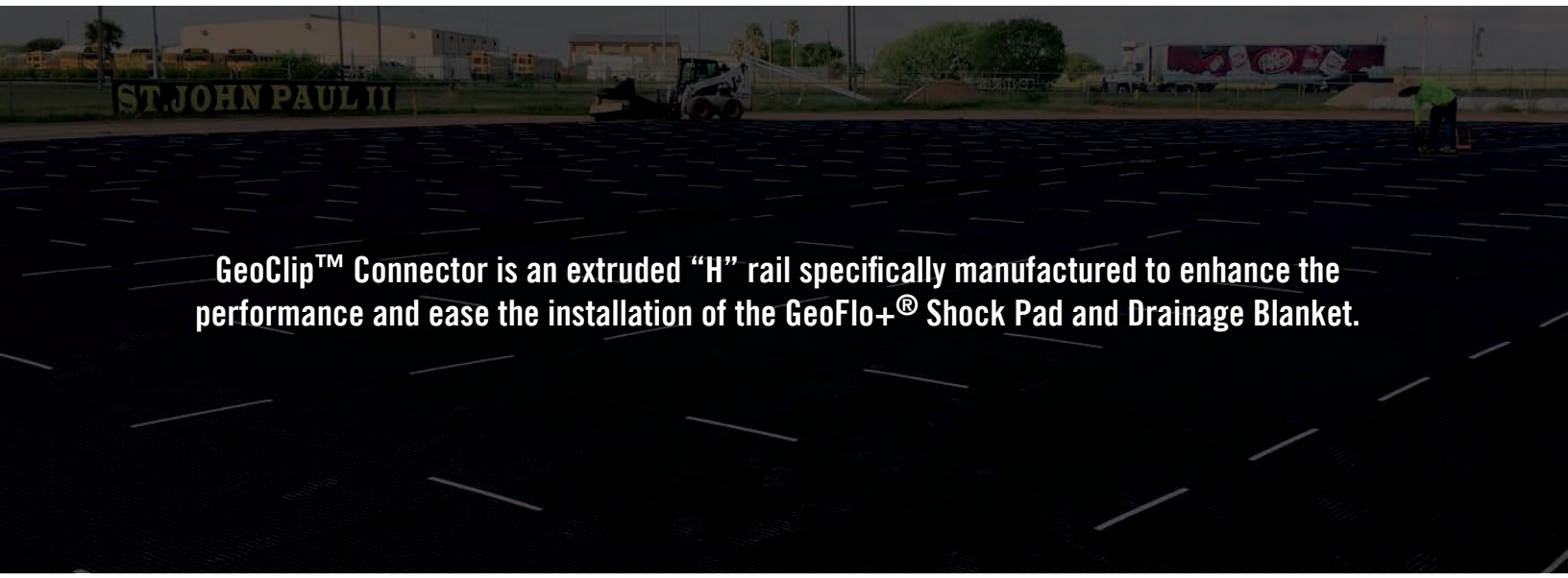
GeoClip™ Connector

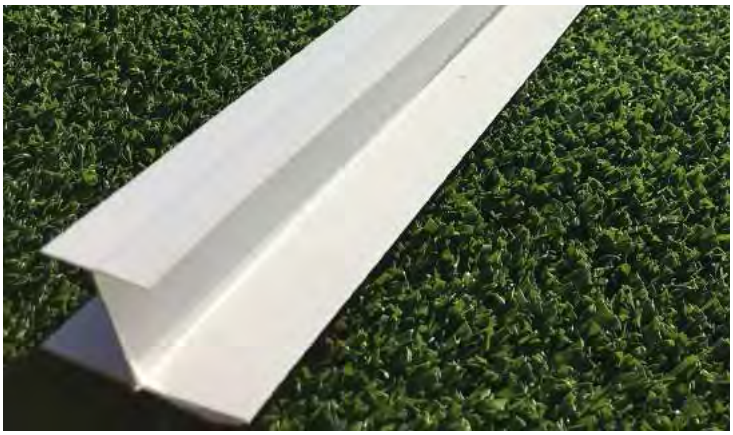
MADE IN USA

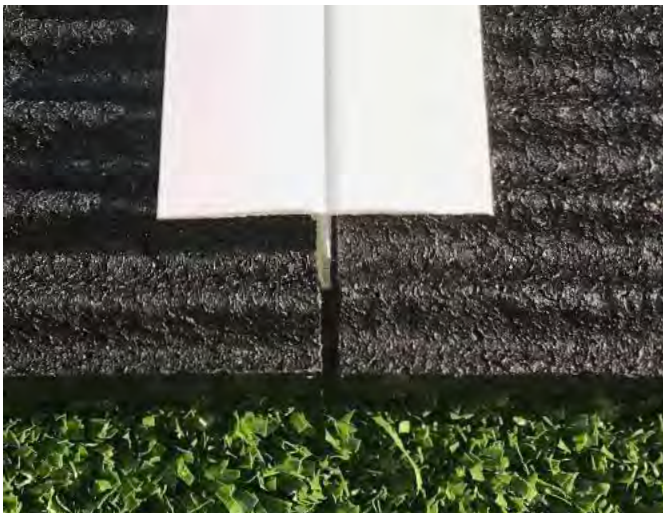


GeoClip™ Connector is an extruded "H" rail specifically manufactured to enhance the performance and ease the installation of the GeoFlo+® Shock Pad and Drainage Blanket.

PERFORMANCE

GeoClip™ Connector uses extruded high density polyethylene beads that allows a snap together process. GeoClip™ decreases the risk associated with GeoFlo+® movement that may occur during installation due to wind gust or turf placement.



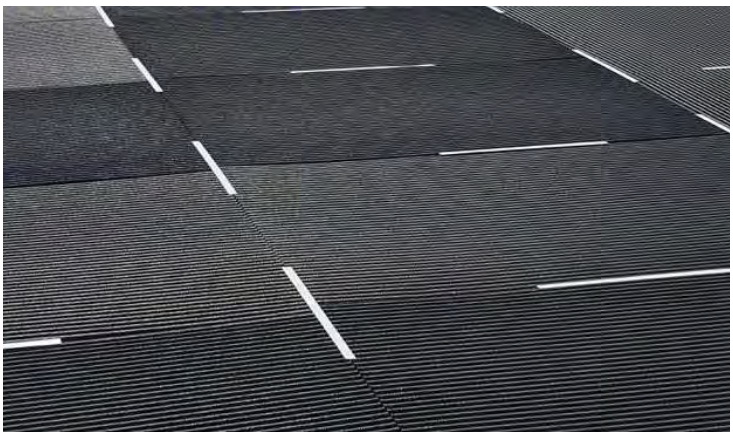


DESIGN

Unlike "puzzle piece" designs utilized by other systems, the GeoClip™ Connector design and use of the railing also allows the GeoFlo+® to freely expand and contract to eliminate buckling or floating of the shock pad system under the installed artificial turf surface.

INNOVATION

GeoClip™ Connector is another innovation invented and produced by Geo-Surfaces to increase playability and decrease risks associated with the installation of high performing artificial sports surfaces.



A PROFESSIONAL ENGINEERING FIRM

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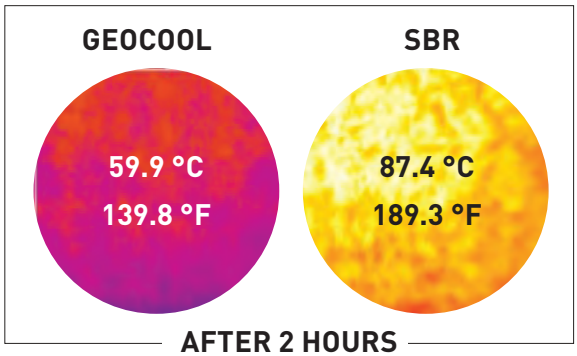
GeoCool™ Infill
Alternative Cooling System

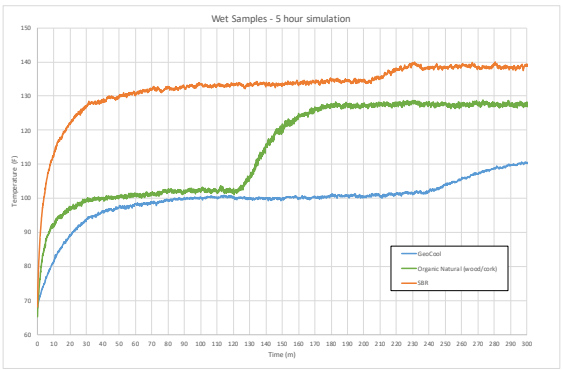
High-Performance Infill with Ultimate Temperature Reduction

GeoCool™ is an innovative infill alternative that provides superior athletic performance while reducing surface temperature through slow evaporative cooling. GeoCool can replace SBR rubber granules and silica sand infills while eliminating problems associated with other alternatives—decay, flotation, dust, migration (due to wind, rainfall and foot traffic) and the need for constant watering of the turf to maintain efficacy.

GeoCool is an inorganic oolitic ("egg-shaped") calcium carbonite mineral ("aragonite") created—and constantly renewed—in shallow sea beds. It is 100% recyclable, neutralizes odors, and is virtually dust-free. It is non-toxic—in fact, calcium carbonite has been ingested by humans for eons.



After two hours of exposure to a heat source, turf infilled with GeoCool was measured to be 50° F COOLER than turf infilled with SBR granules.



GeoSurfaces

TenCate

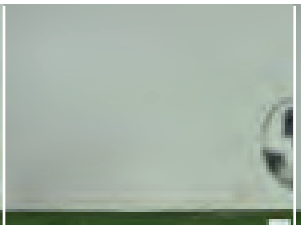
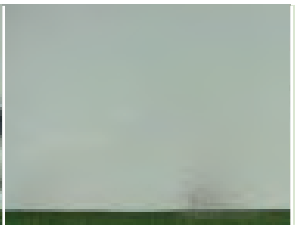
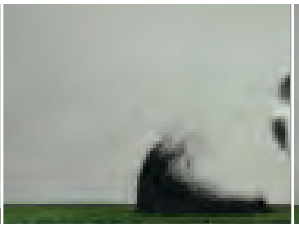
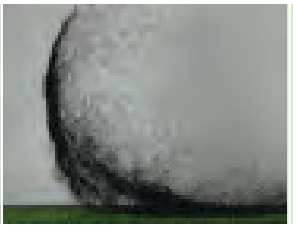
TECHNICAL SPECS:

PHYSICAL PROPERTIES		HEALTH & ENVIRONMENTAL PROPERTIES	
SHAPE (EN 14955)	Round C2	DIN 18035-7	PASS
SIZE (EN 933-1)	0.1 to 0.6 mm	EN 71-3	PASS
BULK DENSITY (EN 1097-3)	1.65 g/cm3	AFPS GS 2014:01 PAK/PAH (REACH)	PASS
DENSITY (EN 1183-1)	1.75 g/cm3		
HARDNESS (ISO 7619-1)	80 Shore A		
INHALABLE DUST (EN 15051)	Very Low		

PERFORMANCE CHARACTERISTICS*	
BALL REBOUND (FIFA TM03)	0.8 m (dry); 0.85 m (wet)
SHOCK ABSORPTION (FIFA TM04A)	63% (dry); 64% (wet)
DEFORMATION (FIFA TM05A)	8.6 mm (dry); 8.8 mm (wet)
ENERGY RESTITUTION (FIFA TM13)	33% (dry); 35% (wet)
ROTATIONAL RESISTANCE (FIFA TM06)	38 Nm (dry); 36 Nm (wet)
HIC CRITICAL FALL HEIGHT (EN 1177)	1.4 m (dry); 1.4 m (wet)
G-MAX (ASTM F355)	115 G (dry)
WATER PERMEABILITY (DIN 18-035)	224 inches/hour

* 1.75" turf with 1" GeoCool on 14mm GeoFlo+ shockpad

INFILL SPLASH (MODIFIED FIFA TM16)

SYSTEM	IMPACT	@ 0.2 S POST IMPACT	MAX SPLASH	FIFA RANK / COMMENT
GeoCool 1.5" turf 0.75" infill depth				< 1.5 % Very Low Estimated 1.61 ounces splash mass
SBR 1.5" turf and 0.75" infill depth				> 1.5 % Very High Estimated 53.1 ounces splash mass

GeoFlo® Shock Pad

GEOFLO DYNAMIC SHOCK PAD

GeoFlo is a patented high compressive strength, moisture conducting, non-absorbent, geo-composite shock pad made from recycled materials. GeoFlo is a pre-fabricated system that consists of a formed polystyrene or polypropylene core. The core provides a high compressive strength structure that allows water to flow to designated outflows. The use of GeoFlo greatly reduces risk factors associated with poor subsurface soils. Installation provides an uninterrupted vertical-to-horizontal flow path for superior rainfall evacuation and enhanced G-max performance without changing the ball-action or feel under-foot. The integrity of the system moisture-seal is maintained by use of an impervious bonding tape, which also expands and contracts, thus maintaining the function of the integral expansion joints.

TYPICAL PROPERTIES	SI	US	TEST METHOD
FABRIC PROPERTIES			
Material	**Polypropylene**	**Polypropylene**	
Grab tensile strength	110 lbs	485 N	ASTM D4632
Puncture strength	65 lbs	285 N	ASTM D3787
Trapezoidal tear	50 lbs	220 N	ASTM D4533
Mullen burst strength	215 psi	1430 kPa	ASTM D3786
Elongation	60%	60%	ASTM D4632
EOS (AOS)	70 sieve	212 micron	ASTM D4751
Permittivity	1.6 sec –1	1.6 sec-1	ASTM D4491
Permeability	0.01 ft/sec	0.3 cm/sec	ASTM D4491
Flow rate	150 gpm/ft2	6110 lpm/m2	ASTM D4491
CORE PROPERTIES			
Material	**Polypropylene**	**Polypropylene**	
Thickness	1/2 in	15 mm	
Comp. Strength	20,000 lbs/ft2	1464 kN/m2	ASTM D1621(Mod)
Flow capacity per unit width	16 gpm/ft	200 lpm/m	ASTM D4716
Expansion Coefficient	4.42 x10-5 in/in Per°C		
Product Weight	30 oz/yd2		

WHEN INSTALLED PROPERLY, GEOFLO LOWERS G-MAX BY 15 TO 20 UNITS. All information, drawings and specifications are based on the latest product information available at the time of printing. Constant improvement and engineering progress make it necessary that we reserve the right to make changes without notice. All physical properties are typical values. Standard variations in mechanical properties of 10% and in hydraulic properties of 20% are normal.

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GeoFlo® + SHOCK PAD

MADE IN USA

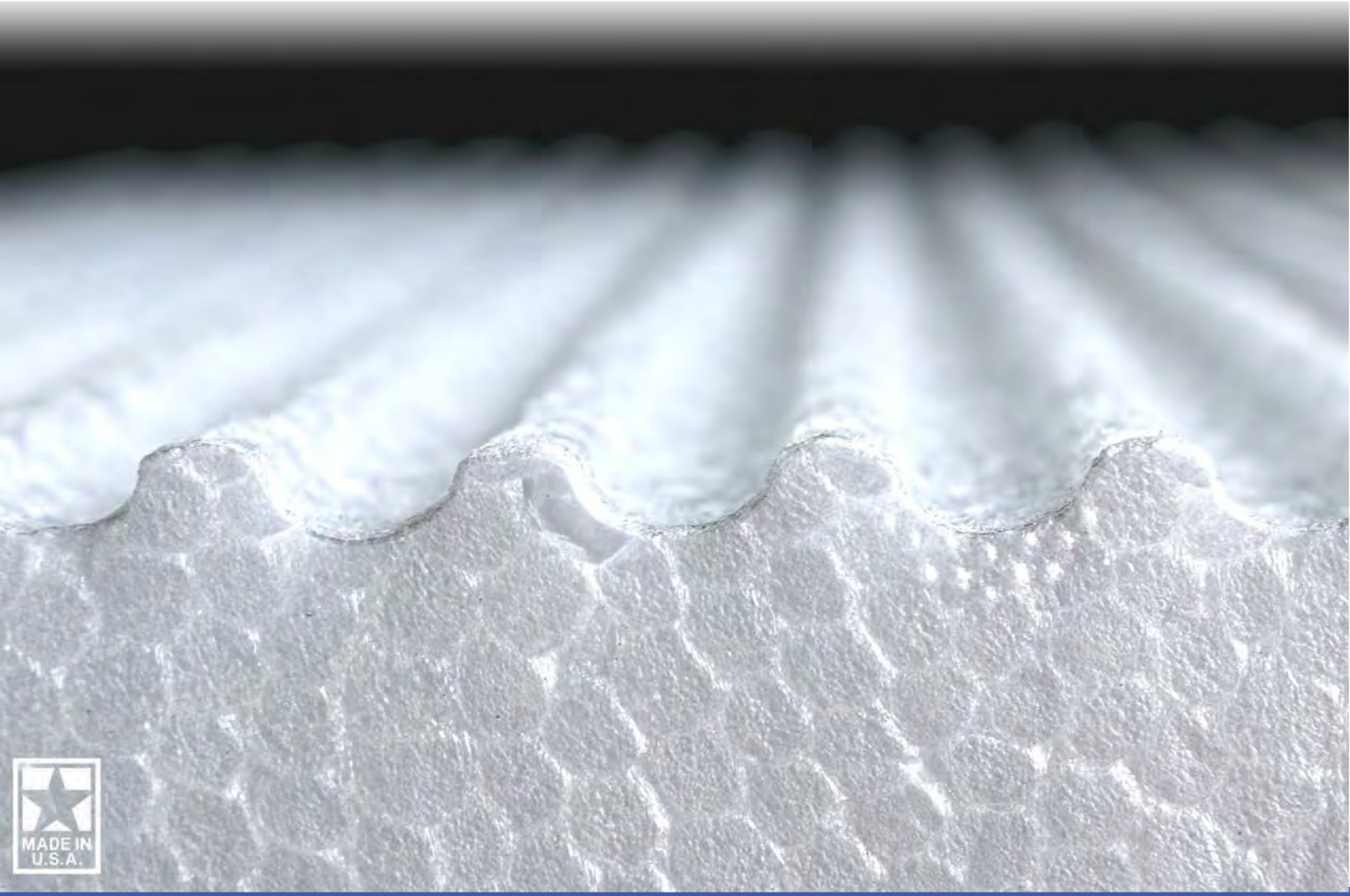
PATENTED

15mm/20mm/25mm

DYNAMIC SHOCK PAD & DRAINAGE BLANKET

GeoFlo®+ is a patented moisture conducting, non-absorbent, geo-composite shock pad made from polyolefin materials. GeoFlo+, available in both solid core and perforated core, is a pre-fabricated system that consists of a formed expanded polypropylene core. It is a highly resilient closed-cell expanded bead product, and is an ideal energy absorbing material for sport surfaces that requires impact protection and shock absorption. The use of GeoFlo+ greatly reduces risk factors associated with poor subsurface soils.

Installation provides an uninterrupted vertical-to-horizontal flow path for superior rainfall evacuation and enhanced G-MAX performance without changing the ball-action or feel under-foot. The integrity of the systems expansion and contraction capabilities is maintained by the use of the GeoClip™ system which holds the GeoFlo+ in place during the installation of the turf system. The GeoClip also decreases the risk of wind negatively impacting the installation process. The GeoClip allows each individual pad to naturally react to changing temperature and humidity conditions while assuring the turf installation team is able to perform on a secure monolithic work surface. The proper installation of the GeoFlo+ system reduces G-MAX by up to 50 points.



PHYSICAL PROPERTIES	TEST METHOD	SAE	DATA
Tensile Strength	ASTM-D3575	psi	55.5
Tensile Elongation	ASTM-D3575	%	18
Tear Strength	ASTM-D3575	lbs/ft	13
Thermal Conductivity (K)	ASTM-C177	BTU-in/ft²-hr-ºF	0.25
Thermal Resistance (R)	ASTM-C177	@70ºF	3.9
Coeff. of Lin. Therman Expansion	ASTM-D696	in/in/ºF x 10^{-5}	5.7
Service Temperature	ASTM-D3575	ºF (Max)	212
Water Absoption	ASTM-D3575/C272	%	<5.0
Compressive Creep	ASTM-D3575	% (psi)	1.2(2.0)
Flammability	FMVSS-302	<4.0in/min	Pass

PLEASE NOTE: For standard GeoSurfaces Products. Values shown are typical of the product and should not be construed as specification limits.

PROPERTIES

GeoFlo+ is multi-directional (isotropic) in nature, so unlike traditional extruded products, which yield different properties along the extrusion, vertical and horizontal axis, the properties of the GeoFlo+ products are the same for a given density along all 3 axis, regardless of orientation.

RESILIENT POLYPROPYLENE SHOCK PAD

Nominal Size: 4' x 6' / Thickness Options: 15 mm,20 mm, 25 mm
Horizontal Drainage: 50" per Hour Minimum
Vertical Drainage: 100" per Hour Minimum (On Perforated Core)
Maximum Initial G-MAX Less than 135

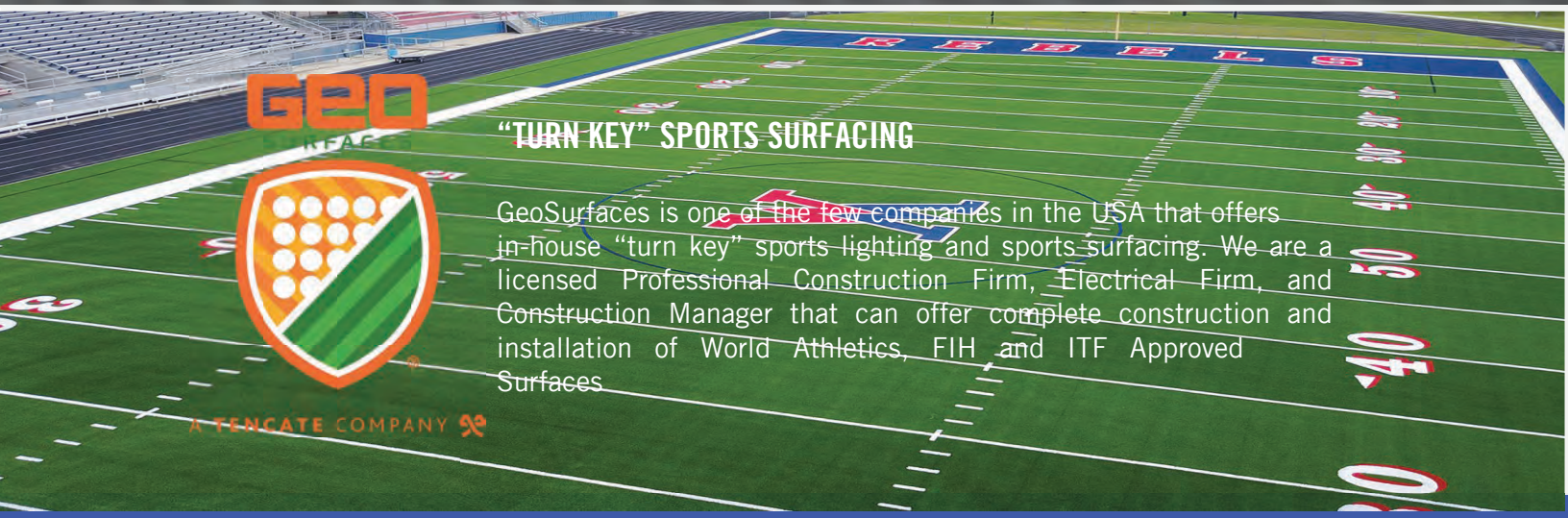
SAFETY FEATURES

Guaranteed Maximum G-Max of field of 135 during 8-year warranty period of turf (ASTM F355 or ASTM 1936) as a system test with infill.

Guaranteed 1.3 HIC rating during 8-year warranty period of turf (ASTM F355-16e1) as a system test with infill.

RESISTANCE

Flammability Resistance TEST FMVSS-302: Pass
Fuel Immersion Test Coast Guard (Fuel B): Pass
Chemical Resistance (1 Hour Exposure to Solvents): Pass



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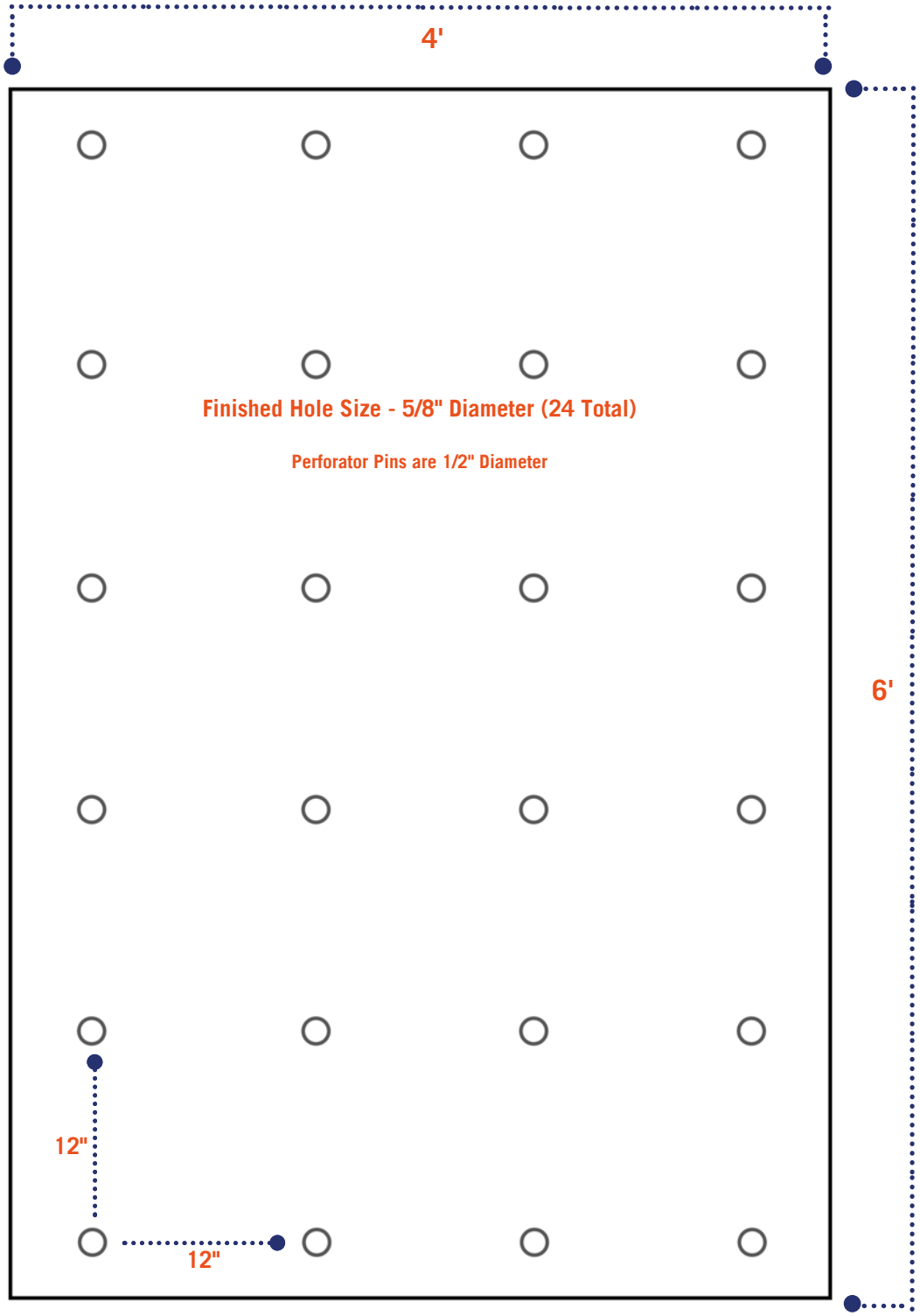
GEO FLO® + SHOCK PAD

Perforation Pattern



GR EN

GEOGREEN® 'REPLICATED GRASS'

GeoGreen® is a dimensionally stable 'Replicated Grass' consisting of a Tencate XPS yarn and K29 backing, with a urethane secondary coating which is heat activated to permanently lock fiber tufts in place. GeoGreen is tufted with a 100% Tencate polyethylene yarn utilizing a curvilinear yarn configuration. The yarn is tufted with a maximum 1/2" gauge (stitch separation) and a maximum filament height of 2". GeoGreen is in-filled with resilient particles above a 1/4" ballast layer.

The system is enhanced with a dynamic shock pad and drainage blanket, GeoFlo® or GeoFlo®+, to maximize G-Max performance and to provide full area vertical-to-horizontal drainage while minimizing risks associated with aggregate base materials and sub-surface soils. This is accomplished without changing ball-action or the natural feel-under-foot.

TYPICAL PROPERTIES	U.S.	TEST METHOD
Yarn Face Weight (oz per square yard)	Minimum 45 ounces	ASTM D5848
Yarn Thickness	120 Micron	ASTM D5848
Tufting Gauge	Maximum 1/2 inch	Empirical
Wear Resistance	100,000 cycles (no loss of weight or length)	Stud Roller
Tuft Bind	8 pounds	ASTM D1335
Grab Tear Strength	250/250 (X & Y)	ASTM D5034
Primary Backing	Tencate K29	Empirical
Secondary Backing	20 oz urethane	ASTM D5848
Total Weight (oz per square yard)	72 ounce (without infill)	ASTM D5848
In-fill Depth	1.5 inch	Empirical
Relief (length of yarn above the infill)	.5 inch	Empirical
Initial G-Max	>135 using GeoFlo Shock Pad	ASTM F355A
Ultimate G-Max (highest attainable)	>165 using GeoFlo Shock Pad	TSI 128
Infill material	7-14 Ambient Ground SBR over sand ballast layer	Empirical
Permeability	64.5 inches per hour	ASTM D4716
Flammability (PILL) Test	Pass	ASTM D2859

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TUFTED TURF

GEO GREEN®+

BLEND ARTIFICIAL TURF

Combining durable XPS slit film and playable Diamond monofilament fibers with thatch at the base, players get a heavier, more consistent playing surface.

The texturized monofilament thatch helps to reduce infill splash, decrease infill migration and provide additional shock absorption. Teams will enjoy a field that not only looks great, but feels and plays great, as well.

GEOGREEN BLEND+ SPECS

YARN

DENSITY (DENIER)	10,000/1 (XPS), 12,000/6 (XWRD), 5,000/8 (thatch)
THICKNESS (MICONS)	125 (XPS); 365 (XWRD), 100 (thatch)
MELTING POINT	128° C | 260° F
BREAKING STRENGTH	24 lbs/force (XPS/XWRD); 17.3 lbs/force (thatch)
LEAD CONTENT (PPM)	<100

STANDARD COLORS*

FIELD GREEN
Pantone: 575C

LIME GREEN
Pantone: 7496C

FIELD GREEN/ LIME GREEN

BROWN
Pantone: 1545C

NAVY BLUE
Pantone: 282C

FLORIDA BLUE
Pantone: 281C

GRAY
Pantone: 422+429

BLACK
Pantone: 000C

RED
Pantone: 185C

ORANGE
Pantone: 166C

BLUE LAGOON
Pantone: 2925C

RED CLAY
Pantone: 7526C

CRIMSON
Pantone: 202C

BLUPLE
Pantone: 268C

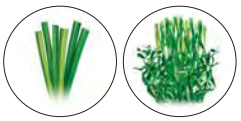
TAN
Pantone: 728C

BRIGHT YELLOW
Pantone: 136C

WHITE
Pantone: 000

VEGAS GOLD
Pantone: 466C

TURF

PILE CONTENT  BLEND OF MONOFILAMENT AND SLIT FILM FIBERS WITH TEXTURIZED MONOFILAMENT	TenCate U.V. resistant XWRD, monofilament and TenCate U.V. resistant XPS Plus slit film combined with TenCate TXT monofilament root zone
PRIMARY BACKING	7.5 oz/yd^2; TenCate K29 Backing (Double Layer Thiobac, black, U.V. stabilized, Layer 1: 100% PP, Layer 2: PET/PP blend)
SECONDARY BACKING	20 oz/yd^2 Polyurethane coating with drainage holes
TOTAL WEIGHT	83.5 oz/yd^2
PILE HEIGHT	1 5/8 inch
FACE WEIGHT**	45 oz/yd^2
MACHINE GAUGE	3/8 inch
SET UP	2 ends/needle, A/B (face fibers)
ROLL WIDTH	182 inch
WATER PERMEABILITY	13.2 gal/yd^2/min (unfilled)
TUFT BIND (ASTM D1335)	≥ 10 lbs
GRAB TEAR (ASTM D5034)	341 lbs length, 336 lbs width
PILL FLAMMABILITY (ASTM D2859)	Pass

BEST FOR BASEBALL, SOFTBALL, INDOOR AND MULTI-PURPOSE FIELDS

A TENCATE COMPANY

MADE IN THE USA

Pile Height, Max Thickness, Face Weight, Primary & Secondary Backing, and Total Weight can differ by ±10%. The Stitch Rate will change according to the exact specifications and can differ by ±1. Roll Width can differ by ±0.8 inch.

GeoSurfaces has the right to alter each product specification in order to improve the system according to the latest standards. GeoSurfaces is not legally liable in case of noncompliance with the above mentioned specifications.

*For details on thatch color, refer to the GeoSurfaces Standard Color Sheet.

**Face Weight reflects entire length of yarn, including portion woven into backing, which is consistent with standard ASTM method of measuring tuft including back stitch.

TUFTED TURF

GEOGREEN®+

BLEND ARTIFICIAL TURF

With a blend of durable XPS and playable Diamond fibers, teams can count on enhanced performance and durability from our premier tufted product.

Durability doesn't just come from the unique fiber blend. We also added a higher face weight to this tufted product for enhanced durability. With varied diamond and slit film fibers, GEOGREEN Blend fields have a more natural look and feel than other tufted products.

GEOGREEN BLEND+ SPECS

YARN

DENSITY (DENIER)	10,050/1 (XP); 12,000/6 (XWRD)
THICKNESS (MICONS)	120 (XP); 365 (XWRD)
MELTING POINT	128° C | 260° F
BREAKING STRENGTH	11 lbs/force (XP); 15.9 lbs/force (XWRD)
LEAD CONTENT (PPM)	<100

STANDARD COLORS

FIELD GREEN
Pantone: 575C

LIME GREEN
Pantone: 7496C

FIELD GREEN/ LIME GREEN**

BROWN
Pantone: 1545C

NAVY BLUE
Pantone: 282C

FLORIDA BLUE
Pantone: 281C

GRAY
Pantone: 422+429

BLACK
Pantone: 000C

RED
Pantone: 185C

ORANGE
Pantone: 166C

BLUE LAGOON
Pantone: 2925C

RED CLAY
Pantone: 7526C

CRIMSON
Pantone: 202C

BLUPLE
Pantone: 268C

TAN
Pantone: 728C

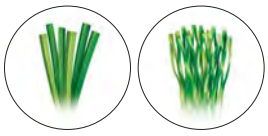
BRIGHT YELLOW
Pantone: 136C

WHITE
Pantone: 000

VEGAS GOLD
Pantone: 466C

TURF

PILE CONTENT



UNIQUE DIAMOND MONOFILAMENT AND XP FIBER BLEND

TenCate U.V. resistant XWRD monofilament and TenCate U.V. resistant XPS Blade Plus slit film

PRIMARY BACKING	7.5 oz/yd^2; TenCate K29 Backing (Double Layer Thiobac, black, U.V. stabilized, Layer 1: 100% PP, Layer 2: PET/PP blend)
SECONDARY BACKING	20 oz/yd^2 Polyurethane coating with drainage holes
TOTAL WEIGHT	72.5 oz/yd^2
PILE HEIGHT	2 inch
FACE WEIGHT*	**62** oz/yd^2
MACHINE GAUGE	1/2 inch
SET UP	A/B set-up
ROLL WIDTH	182 inch
WATER PERMEABILITY	13.2 gal/yd^2/min (unfilled)
TUFT BIND (ASTM D1335)	≥ 9 lbs
GRAB TEAR (ASTM D5034)	274 lbs length, 395 lbs width
PILL FLAMMABILITY (ASTM D2859)	Pass

BEST FOR FOOTBALL, SOCCER, LACROSSE, AND MULTI-PURPOSE FIELDS

A TENCATE COMPANY

MADE IN THE USA

Pile Height, Max Thickness, Face Weight, Primary & Secondary Backing, and Total Weight can differ by ±10%. The Stitch Rate will change according to the exact specifications and can differ by ±1. Roll Width can differ by ±0.8 inch.

GreenFields has the right to alter each product specification in order to improve the system according to the latest standards. GreenFields is not legally liable in case of noncompliance with the above mentioned specifications.

*Face Weight reflects entire length of yarn, including portion woven into backing, which is consistent with standard ASTM method of measuring tuft including back stitch.

**High contrast (Lime XP & FG/L XWRD) and low contrast (FG XP & FG/L XWRD) available.

Adding texturized monofilament thatch to durable XPS slit film fibers provides a robust, durable playing surface.

Infill migration and infill splash are both minimized with the addition of a thatch layer. XPS fibers are the most durable in the world, so teams will have a great playing surface for years to come.

GEOGREEN + SPECS

YARN

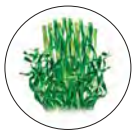
DENSITY (DENIER)	10,000/1 (XPS); 5,000/8 (thatch)
THICKNESS (MICRONS)	125 (XPS); 100 (thatch)
MELTING POINT	128° C | 260° F
BREAKING STRENGTH	24 lbs/force (XPS); 17 lbs/force (thatch)
LEAD CONTENT (PPM)	<100

STANDARD COLORS*

- **FIELD GREEN** Pantone: 575C
- **LIME GREEN** Pantone: 7496C
- **FIELD GREEN/ LIME GREEN**
- **BROWN** Pantone: 1545C
- **NAVY BLUE** Pantone: 282C
- **FLORIDA BLUE** Pantone: 281C
- **GRAY** Pantone: 422+429
- **BLACK** Pantone: 000C
- **RED** Pantone: 185C
- **ORANGE** Pantone: 166C
- **BLUE LAGOON** Pantone: 2925C
- **RED CLAY** Pantone: 7526C
- **CRIMSON** Pantone: 202C
- **BLUPLE** Pantone: 268C
- **TAN** Pantone: 728C
- **BRIGHT YELLOW** Pantone: 136C
- **WHITE** Pantone: 000
- **VEGAS GOLD** Pantone: 466C

TURF

PILE CONTENT	TenCate XPS Plus slit film, U.V. resistant, combined with TenCate TXT monofilament root zone



BLEND OF DURABLE SLIT FILM AND TEXTURIZED MONOFILAMENT FIBERS

PRIMARY BACKING	7.5 oz/yd^2; TenCate K29 Backing (Double Layer Thiobac, black, U.V. stabilized, Layer 1: 100% PP, Layer 2: PET/PP blend)
SECONDARY BACKING	20 oz/yd^2 Polyurethane coating with drainage holes
TOTAL WEIGHT	83.5 oz/yd^2
PILE HEIGHT	1 5/8 inch
FACE WEIGHT**	56 oz/yd^2
MACHINE GAUGE	1/2 inch
SET UP	2 ends/needle
ROLL WIDTH	182 inch
WATER PERMEABILITY	13.2 gal/yd^2/min (unfilled)
TUFT BIND (ASTM D1335)	≥ 9 lbs
GRAB TEAR (ASTM D5034)	274 lbs length, 395 lbs width
PILL FLAMMABILITY (ASTM D2859)	Pass

BEST FOR BASEBALL, SOFTBALL, INDOOR AND MULTI-PURPOSE FIELDS

A TENCATE COMPANY

MADE IN THE USA

Pile Height, Max Thickness, Face Weight, Primary & Secondary Backing, and Total Weight can differ by ±10%. The Stitch Rate will change according to the exact specifications and can differ by ±1. Roll Width can differ by ±0.8 inch.

GeoSurfaces has the right to alter each product specification in order to improve the system according to the latest standards. GeoSurfaces is not legally liable in case of noncompliance with the above mentioned specifications.

*For details on thatch color, refer to the GeoSurfaces Standard Color Sheet.

**Face Weight reflects entire length of yarn, including portion woven into backing, which is consistent with standard ASTM method of measuring tuft including back stitch.

GeoTrax® Warning Track

SUPERIOR FUNCTIONALITY

GeoTrax® is the first synthetic filament warning track surface that meets all criteria for NCAA and High School play.

The GeoTrax Warning Track technology allows for superior functionality and significantly decreases maintenance. It also eliminates the mold and mildew problem associated with some rubberized warning track surfaces.

The surface is spike and cleat friendly and does not create a slip or fall hazard that are common to pour-in-place systems.

TYPICAL PROPERTIES	U.S.	TEST METHOD
Yarn Face Weight (oz per square yard)	Minimum 44 ounces	ASTM D5848
Yarn Thickness	XPS 120 Micron	ASTM D5848
Tufting Gauge	Maximum 1/4 inch	Empirical
Tuft Density (tufts per square inch)	19.5	Empirical
Wear Resistance	100,000 cycles (no loss of weight or length)	Stud Roller
Tuft Bind	8 pounds	ASTM D1335
Grab Tear Strength	250/250 (X & Y)	ASTM D5034
Primary Backing (two layer)	Tencate K29	Empirical
Secondary Backing	20 oz urethane	ASTM D5848
Total Weight (oz per square yard) In-fill Depth	77 ounce (without infill)	ASTM D5848
	.75 inch	Empirical
Relief (length of yarn above the infill)	.5 inch	Empirical
Infill material	sportsfield sand	Sieve Analysis
Permeability	64.5 inches per hour	ASTM D4716
Flammability (PILL) Test	Pass	ASTM D2859

GEO SURFACES

A TENCATE COMPANY

"TURN KEY" SPORTS SURFACING

GeoSurfaces is one of the few companies in the USA that offers in-house "turn key" sports lighting and sports surfacing. We are a licensed Professional Construction Firm, Electrical Firm, and Construction Manager that can offer complete construction and installation of World Athletics, FIH and ITF Approved Surfaces

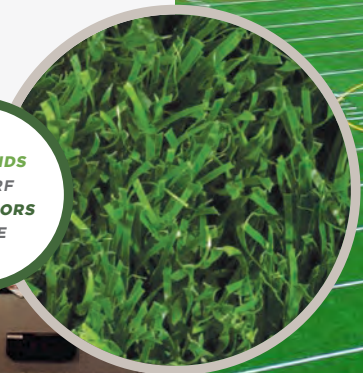
matrix H® BLEND

Hellas®
A TENCATE COMPANY

MATRIX H BLEND TURF

Matrix H® Blend turf combines the extremely durable and resilient Helix monofilament fibers with ultra durable XPS parallel fibrillated tape fiber by TenCate. The Helix fibers feature Shape Memory Technology, which twists the monofilament fibers into a Helix shape so that they spring back with use and secure the infill in place.

LAKE TRAVIS ISD INDOOR FIELD
AUSTIN, TX



TWO KINDS OF TURF TWO COLORS IN ONE

STEAMBOAT SPRINGS MIDDLE SCHOOL
STEAMBOAT SPRINGS, CO

BUILDING FOR SPORTS FROM START TO FINISH

1-800-233-5714 | hellas.com

matrix H® BLEND

PILE WEIGHT	45 – 52 oz./sq. yd.
PILE HEIGHT	1.75" – 2.5" (+/- 1/8")
TURF FIBERS	8 monofilament, 1 parallel fibrillated tape
RESIN	Polymer LLDP
BLADE SHAPE	2 blade shapes, 1 twisted in 2 sizes and 2 colors

HELIX SHAPE MEMORY TECHNOLOGY

MATRIX H® BLEND TURF FIBERS

Matrix H Blend uses a combination of ultra durable XPS parallel fibrillated tape fibers and coiled monofilament Helix fibers – providing a soft and strong surface.

INFILL & PEA GRAVEL

Hellas offers a variety of infill options including **Realfill**® infill made of dust-free SBR granules, and **Ecotherm**® infill made with cellulose fibers.

The **pea gravel** holds the system in place while assisting with shock absorption and drainage.

K29 BACKING

The fibers are tufted into a multi-layer warp-knitted durable backing.

SEAM LOCK

A durable adhesive for exceptionally strong system seams.

CUSHDRAIN®

The recommended **Cushdrain** pad is a monolithic, paved-in-place elastic layer which enhances shock absorption, extends turf longevity, and may be utilized for multiple field life cycles.

DRAINSTONE

The foundation is a free-draining stone base, which allows for superior water migration, stability, and field planarity.

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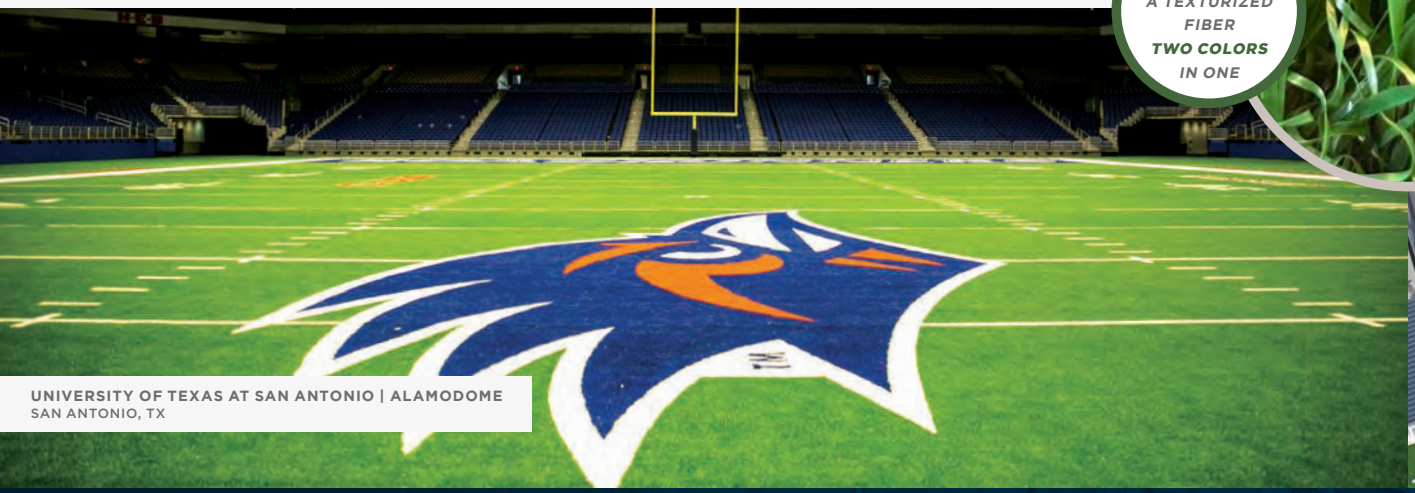
1.6.25

matrix H® BLEND PLUS

Hellas®
A TENCATE COMPANY

MATRIX H BLEND PLUS TURF

Matrix H® Blend Plus turf combines the extremely durable and resilient Helix monofilament fibers with ultra durable XPS parallel fibrillated tape fiber by TenCate and texturized monofilament fibers. The Helix fibers feature Shape Memory Technology, which twists the monofilament fibers into a Helix shape so that they spring back with use and secure the infill in place.



UNIVERSITY OF TEXAS AT SAN ANTONIO | ALAMODOME
SAN ANTONIO, TX

TWO KINDS OF TURF + A TEXTURIZED FIBER TWO COLORS IN ONE

EISENHOWER HIGH SCHOOL
GODDARD, KS

BUILDING FOR SPORTS FROM START TO FINISH

1-800-233-5714 | hellas.com

matrix H® BLEND PLUS

PILE WEIGHT	45 – 52 oz./sq. yd.
PILE HEIGHT	1.75” – 2.5” (+/- 1/8”)
TURF FIBERS	8 monofilament, 1 parallel fibrillated tape
RESIN	Polymer LLDP
BLADE SHAPE	2 blade shapes, 1 twisted in 2 sizes, 1 texturized fiber

HELIX SHAPE MEMORY TECHNOLOGY

MATRIX H® BLEND PLUS TURF FIBERS

Matrix H Blend Plus uses a combination of ultra durable XPS parallel fibrillated tape fibers, coiled monofilament Helix fibers and texturized monofilament fibers – providing a soft and strong surface.

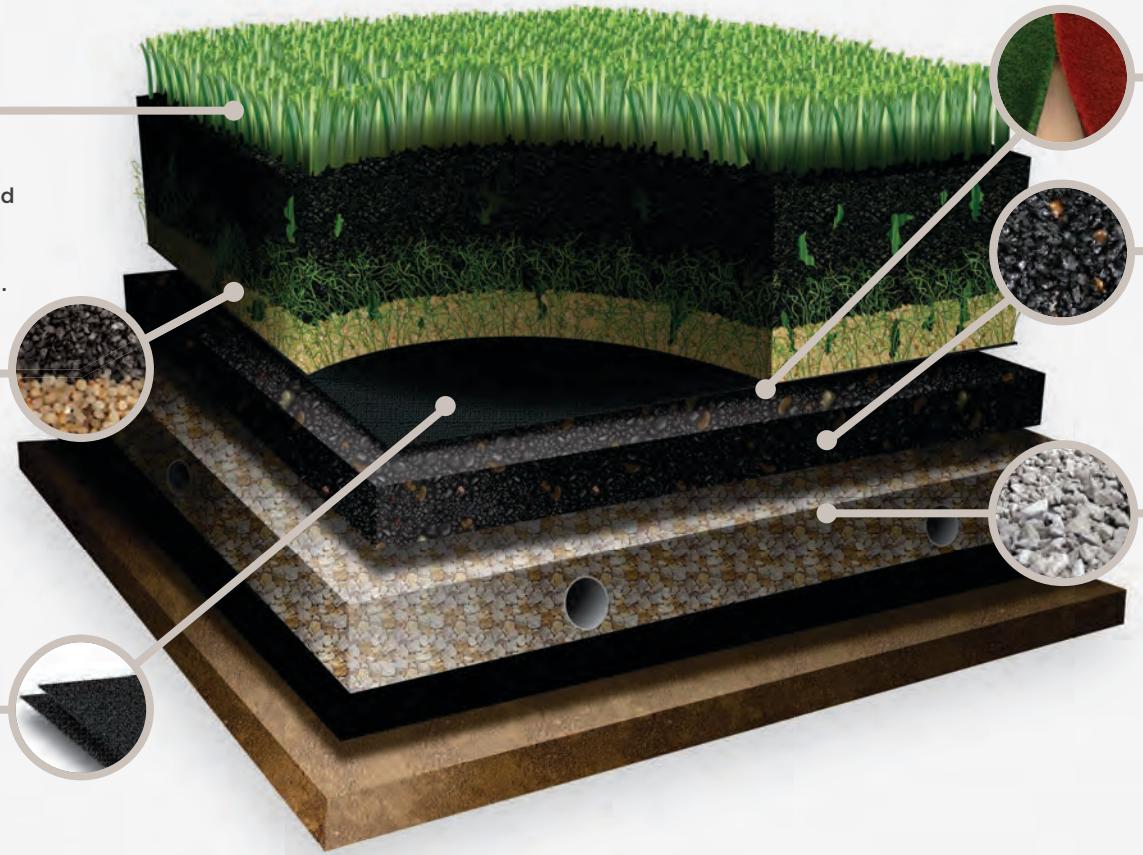
INFILL & PEA GRAVEL

Hellas offers a variety of infill options including **Realfill**® infill made of dust-free SBR granules, and **Ecotherm**® infill made with cellulose fibers.

The **pea gravel** holds the system in place while assisting with shock absorption and drainage.

K29 BACKING

The fibers are tufted into a multi-layer warp-knitted durable backing.



SEAM LOCK

A durable adhesive for exceptionally strong system seams.

CUSHDRAIN®

The recommended **Cushdrain** pad is a monolithic, paved-in-place elastic layer which enhances shock absorption, extends turf longevity, and may be utilized for multiple field life cycles.

DRAINSTONE

The foundation is a free-draining stone base, which allows for superior water migration, stability, and field planarity.

1.6.25

matrix HELIX®

(U.S. Patent No. 10,760,225 B2)

Hellas®

A TENCATE COMPANY

MATRIX HELIX TURF

Matrix Helix® turf has Shape Memory Technology added during the manufacturing process, which twists each monofilament fiber and secures the infill. The Helix Technology adds memory and strength to fibers, allowing the fibers to spring back quickly after use, creating an ideal playing surface. Matrix Helix blends two distinct fiber colors to create a more natural-looking appearance. Its reputation, performance, longevity, and aesthetics are unmatched in the industry.

AT&T STADIUM – HOME OF THE DALLAS COWBOYS
ARLINGTON, TX

BUILDING FOR SPORTS FROM START TO FINISH

1-800-233-5714 | hellas.com

matrix HELIX®

(U.S. Patent No. 10,760,225 B2)

PILE WEIGHT	40 – 50 oz./sq. yd.
PILE HEIGHT	1.75" – 2.5" (+/- 1/8")
TURF FIBERS	8 twisted monofilament
RESIN	C8 LLDP
BLADE SHAPE	1 blade shape (twisted, 2 sizes and 2 colors)

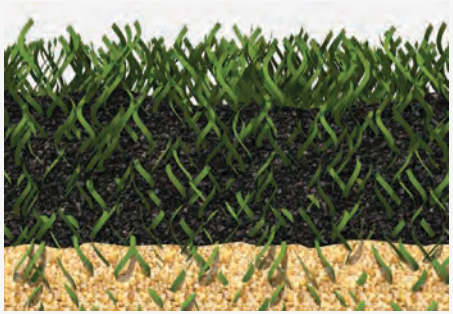
HELIX SHAPE MEMORY TECHNOLOGY

HELIX TECHNOLOGY*

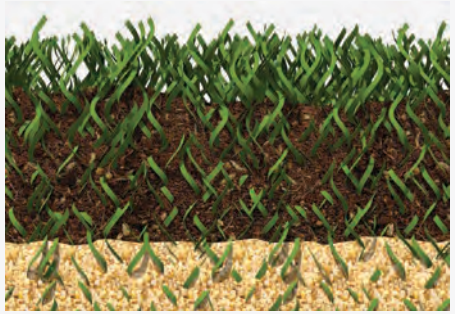
Matrix Helix® Turf is made from the highest quality raw materials. These spiral-shaped monofilament fibers have a natural look and feel and are tufted into a stable primary and coated backing to secure the fibers in place.

SHAPE MEMORY TECHNOLOGY (SMT)

SMT is the process used to make the helix shape of the fibers. During the manufacturing/extrusion process, each fiber is twisted, stretched and heat-set to retain shape and resiliency over the life of the field.



REALFILL



ecotherm® | Up to 30° cooler

APPEARANCE AND PLAYABILITY

The Helix Technology allows the fibers to spring up, versus laying flat, making it stable while still soft and playable. The twist of the fiber gives the surface a uniform, lush appearance.

MINIMIZE "SPLASH-OUT"

The spiral-shaped monofilament fibers help secure and prevent migration or splash-out of the infill, creating better control, more stable footing, and more consistent shock absorption.

Hellas offers a variety of infill options including **Realfill**® infill made of dust-free SBR granules and **Ecotherm**® infill made with cellulose fibers.

*Helix Technology is available for Major Play.

1-800-233-5714 | hellas.com

1.6.25

matrix® XPS™

Hellas®
A TENCATE COMPANY

MATRIX XPS TURF

Matrix® XPS™ turf is designed for multi-sport applications. This system utilizes the world-renowned XPS parallel fibrillated tape fiber by TenCate enhancing reliability and durability. Matrix XPS is a low-maintenance, for high-value choice for recreational facilities and municipal parks.

TENCATE'S XPS FIBERS FOR UNMATCHED DURABILITY

EPISCOPAL HIGH SCHOOL
BELAIRE, TX

matrix® XPS™

PILE WEIGHT	40 – 50 oz./sq. yd.
PILE HEIGHT	1.75" – 2.5" (+/- 1/8")
TURF FIBERS	Polyethylene Parallel Fibrillated Tape
RESIN	Polymer LLDP
BLADE SHAPE	

MATRIX® XPS™ TURF FIBERS

Matrix XPS synthetic turf uses XPS parallel fibrillated tape fibers – providing a reliable multi-sport playing surface.

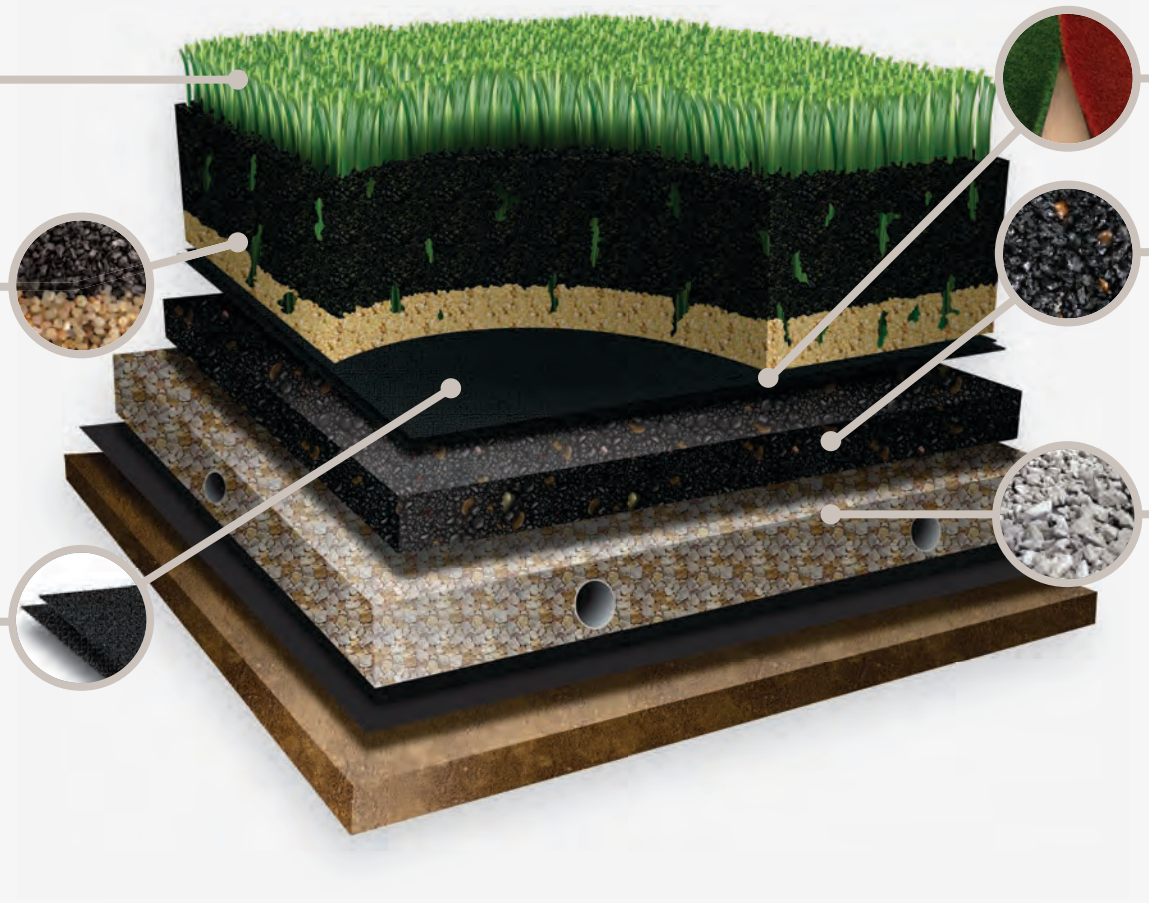
INFILL & PEA GRAVEL

Hellas offers a variety of infill options including **Realfill**® infill made of dust-free SBR granules, and **Ecotherm**® infill made with cellulose fibers.

The **pea gravel** holds the system in place while assisting with shock absorption and drainage.

K29 BACKING

The fibers are tufted into a multi-layer warp-knitted durable backing.



SEAM LOCK

A durable adhesive for exceptionally strong system seams.

CUSHDRAIN®

The recommended **Cushdrain** pad is a monolithic, paved-in-place elastic layer which enhances shock absorption, extends turf longevity, and may be utilized for multiple field life cycles.

DRAINSTONE

The foundation is a free-draining stone base, which allows for superior water migration, stability, and field planarity.

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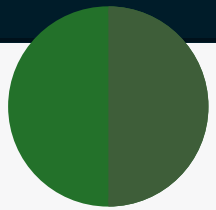
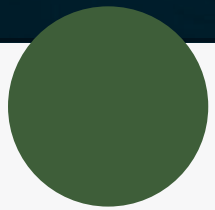
1.6.25

TURF COLOR OPTIONS

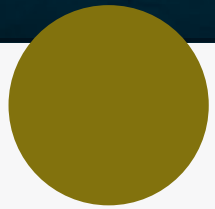
Hellas®
A TENCATE COMPANY



TWO-TONE GREEN
PANTONE 2278C
PANTONE 2280C



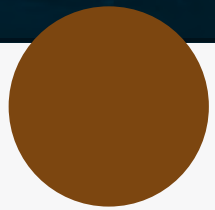
DARK GREEN
PANTONE 2280C



ARMY OLIVE
PANTONE 4495C

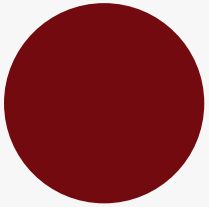
YELLOW
PANTONE 2006C

GOLD
PANTONE 7550C

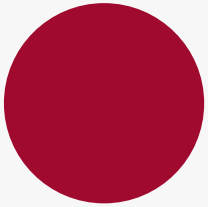


CAMEL
PANTONE 2314C

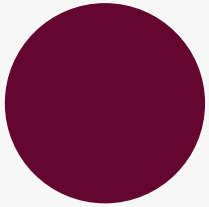
ORANGE
PANTONE 166C



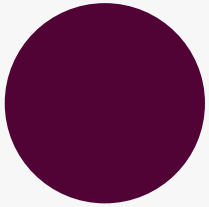
TERRA COTTA
PANTONE 1685C



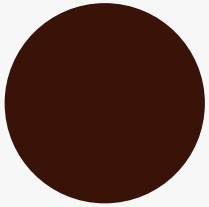
RED
PANTONE 200C



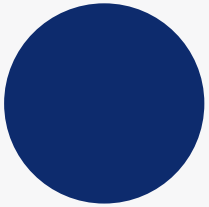
CRIMSON
PANTONE 7428C



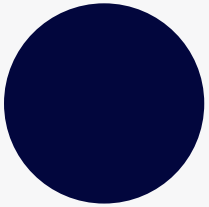
MAROON
PANTONE 188C



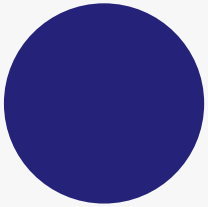
BROWN
PANTONE 476C



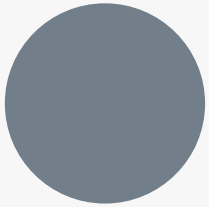
FLORIDA BLUE
PANTONE 2767C



NAVY BLUE
PANTONE 289C



PURPLE
PANTONE 2695C



SILVER
PANTONE 430C

BLACK
6C

WHITE
1C

PLEASE NOTE: Printed colors may vary. For an accurate color comparison, please reference the Pantone® color with a Pantone® (PMS) swatch book. Custom colors available upon request.

GOLD	CAMEL	WHITE	BLACK	TEAL*
PANTONE 7550C	PANTONE 2314C	1C	6C	PANTONE 2237C

JACKSONVILLE JAGUARS INDOOR PRACTICE FACILITY

JACKSONVILLE, FL

* Custom colors available upon request. Additional charges may apply.

1-800-233-5714 | hellas.com

9.27.24

Major Play®

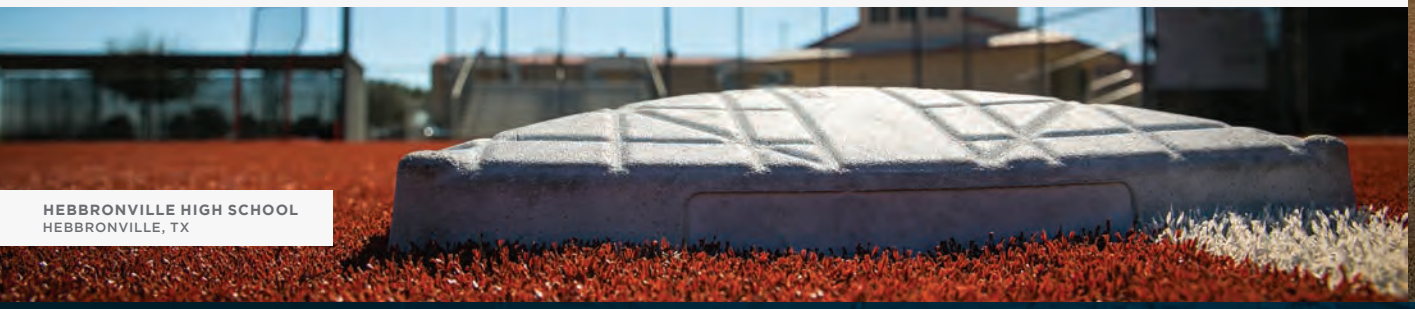
Hellas®

A TENCATE COMPANY

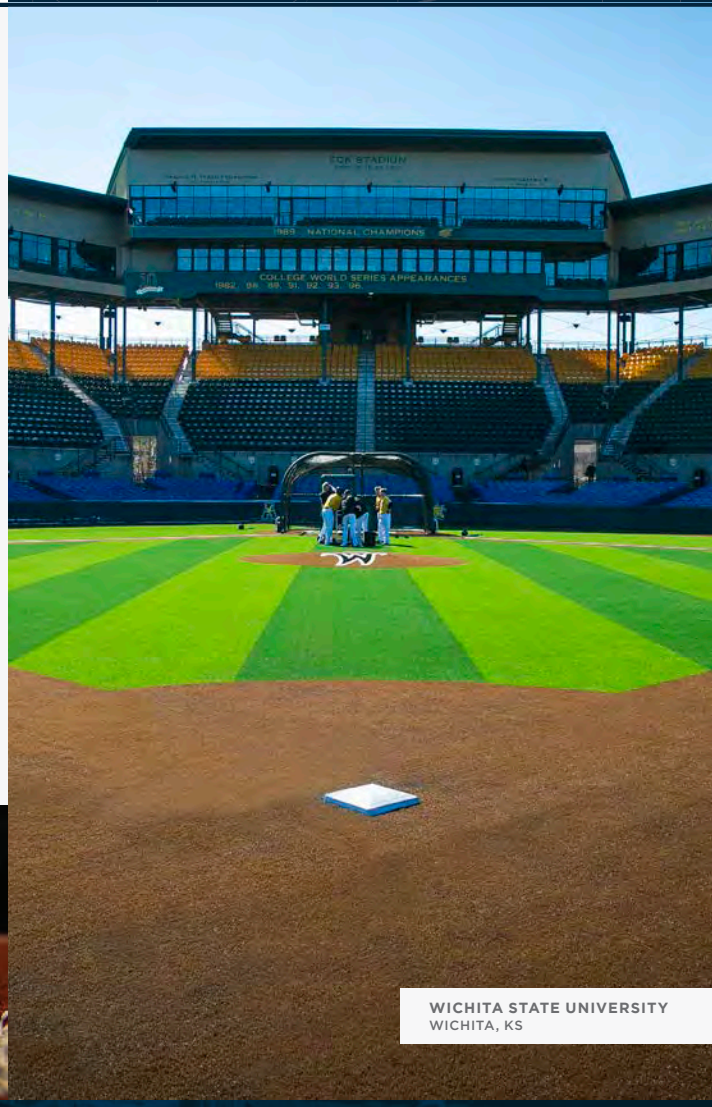
REDEFINING THE FIELD

Major Play® is the unmatched synthetic turf system created specifically for baseball and softball. Major Play delivers consistent and predictable ball response, a shock-absorbent field of play, and a long-lasting investment.

- **PREDICTABLE BOUNCE**
- **HIGH INFILL RETENTION**
- **FIRM AND FAST**
- **LOW VERTICAL DEFORMATION**



HEBBRONVILLE HIGH SCHOOL
HEBBRONVILLE, TX



WICHITA STATE UNIVERSITY
WICHITA, KS

BUILDING FOR SPORTS FROM START TO FINISH

1-800-233-5714 | hellas.com

Major Play®

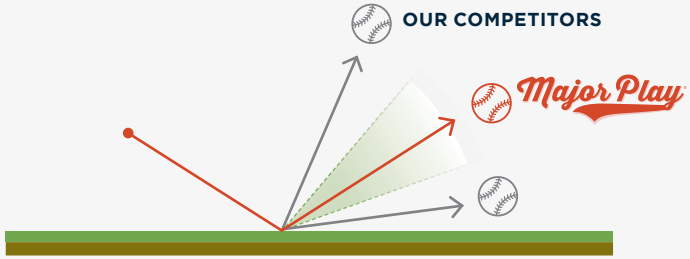
TESTING THE FIELD

FIRM AND FAST

Playing fast is key in baseball and softball. Hellas Major Play ensures optimal ball roll for a great game.

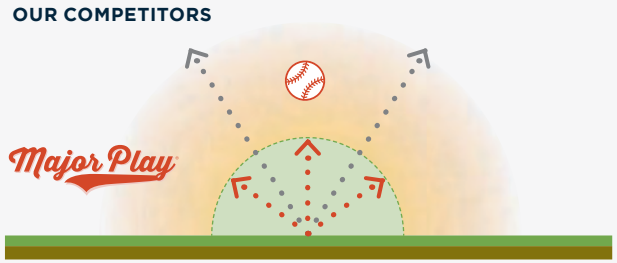
PREDICTABLE BOUNCE

The Major Play baseball system is designed to guarentee a reliable bounce and rebound.



HIGH INFILL RETENTION

Major Play Matix Helix coiled fibers encapsulate infill for reduced infill splash and more predictaable hops.



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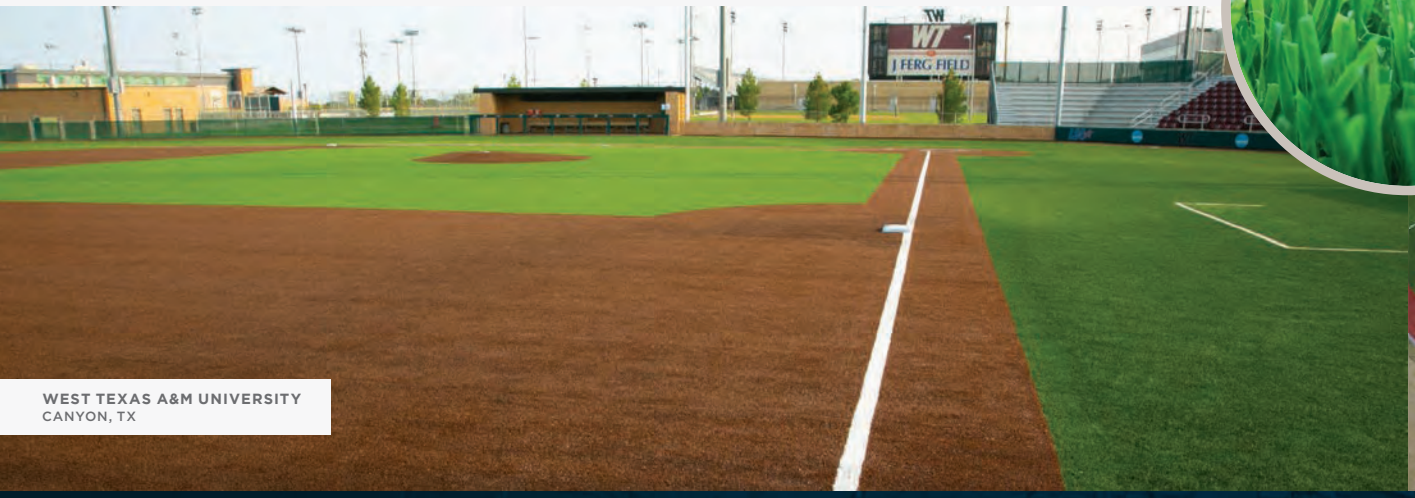
1.8.25

Major Play®
matrix H BLEND

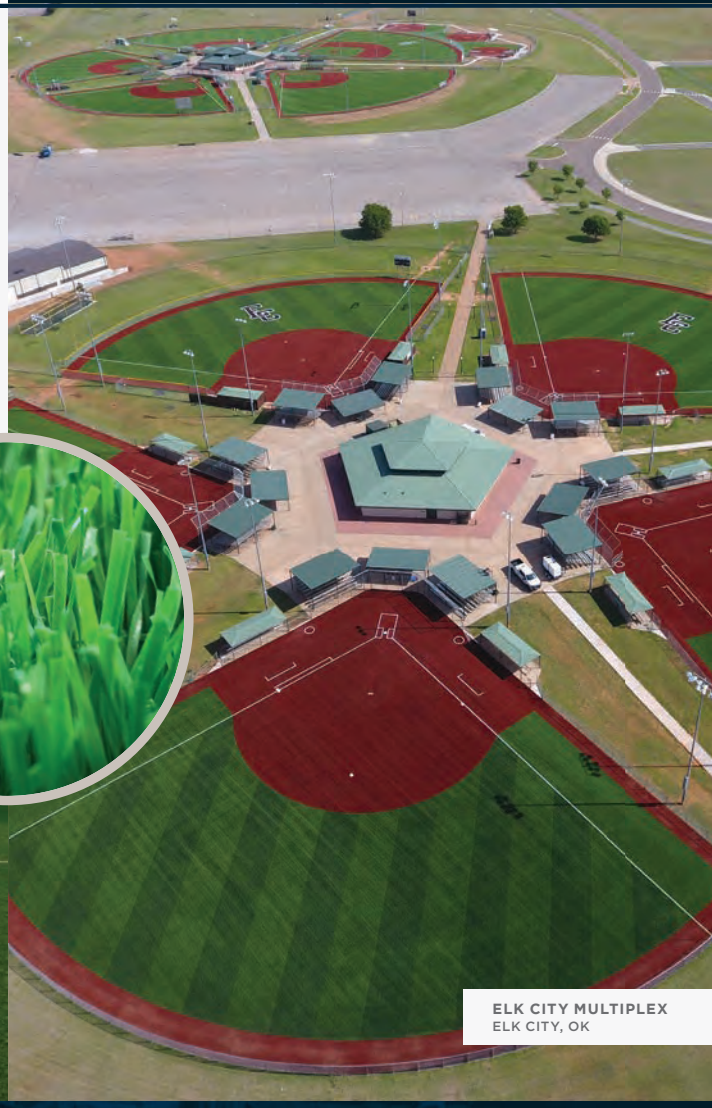
Hellas®
A TENCATE COMPANY

MAJOR PLAY MATRIX H BLEND

Major Play® Matrix H® Blend is a blended workhorse turf with two types of fibers. The configuration and weight of fibers are customized for each area of the field, guaranteeing true playing characteristics of natural grass with minimal maintenance. Helix Technology allows the monofilament fibers to spring back quickly after use and encapsulate infill for natural ball bounces and hope, while the TenCate XPS™ fibers are widely known for their unparalleled durability.



WEST TEXAS A&M UNIVERSITY
CANYON, TX



ELK CITY MULTIPLEX
ELK CITY, OK

BUILDING FOR SPORTS FROM START TO FINISH

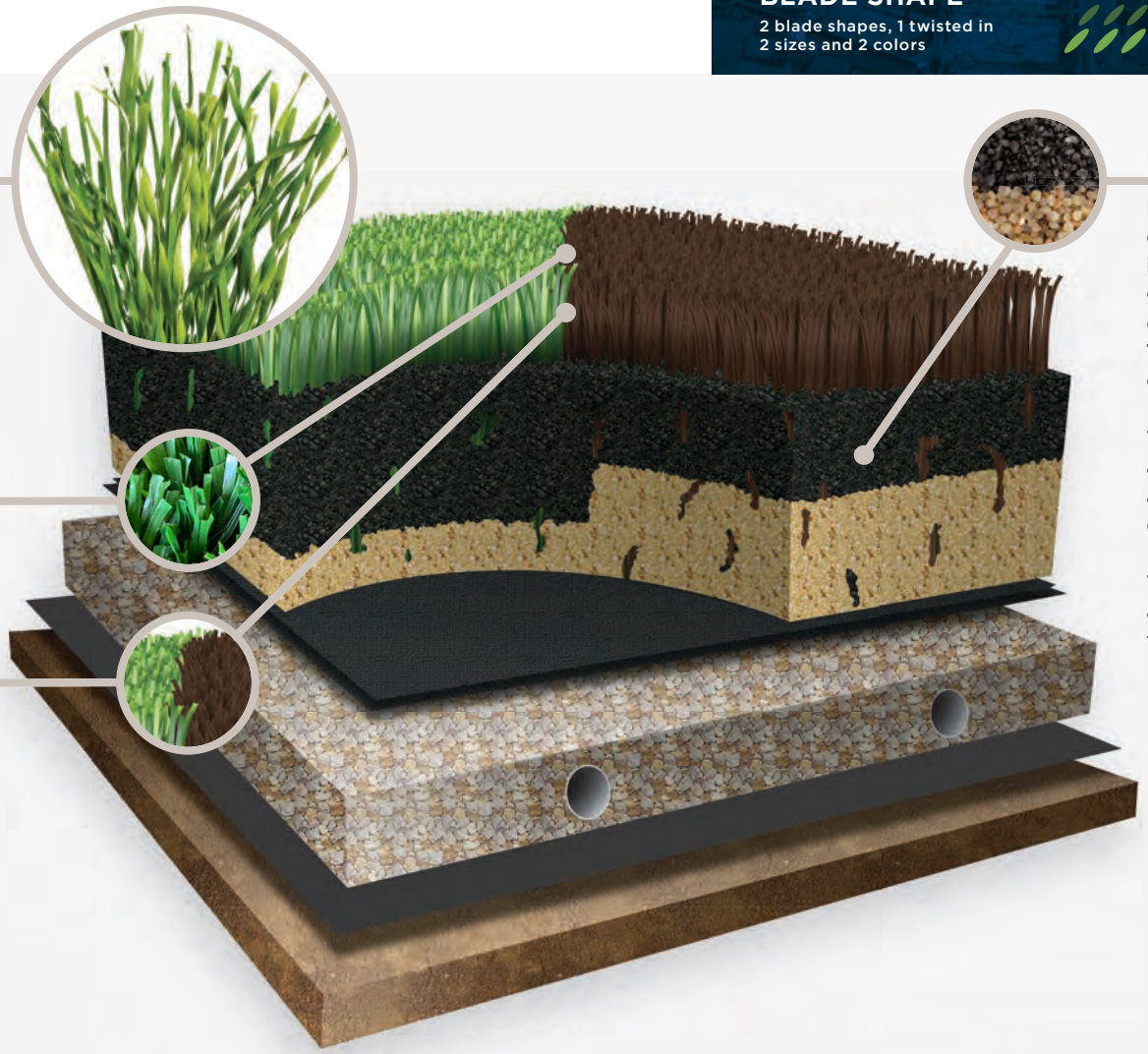
1-800-233-5714 | hellas.com

Major Play®

matrix H BLEND

PILE WEIGHT	42 – 46 oz./sq. yd.
PILE HEIGHT	1.25” – 2.25″ (+/- 1/8″)
TURF FIBERS	8 monofilament, 1 parallel fibrillated tape
RESIN	Polymer LLDPE
BLADE SHAPE	2 blade shapes, 1 twisted in 2 sizes and 2 colors

HELIX SHAPE MEMORY TECHNOLOGY



MATRIX HELIX® TURF FIBERS

The Helix technology adds structure and strength to each monofilament fiber. Every fiber acts like a muscle and bounces back after use – the field will wear better, look better, hold infill, and eliminate fly-out for unimpeded hops.

MATRIX XPS™ FIBERS

Ultra durable XPS parallel fibrillated tape fibers by TenCate enhance reliability and durability.

EQUAL PILE HEIGHTS

Major Play® systems use a consistent pile height across the field that is ideal for baseball and softball. It balances ball-to-surface interaction, field durability, and player protection. Major Play fields provide:

- **Predictable hops and bunts** (no lip between pile heights)
- **Superior durability** in high use areas (shorter pile heights in clay areas wear out more quickly)

INFILL & PEA GRAVEL

Hellas offers a variety of infill options including **Realfill®** infill made of dust-free SBR granules. Cooler, more natural offerings are available, such as **Thermoblend®** with olive and cellulose fibers.

The **pea gravel** provides ballast and a natural, firm feel while assisting shock absorption and drainage.

The ratios of infill materials are tailored to each area of the field, providing:

- Natural ball response and speed
- Superior impact attenuation, especially in skin areas

1-800-233-5714 | hellas.com

1.6.25

Major Play®

matrix HELIX

(U.S. Patent No. 10,760,225 B2)

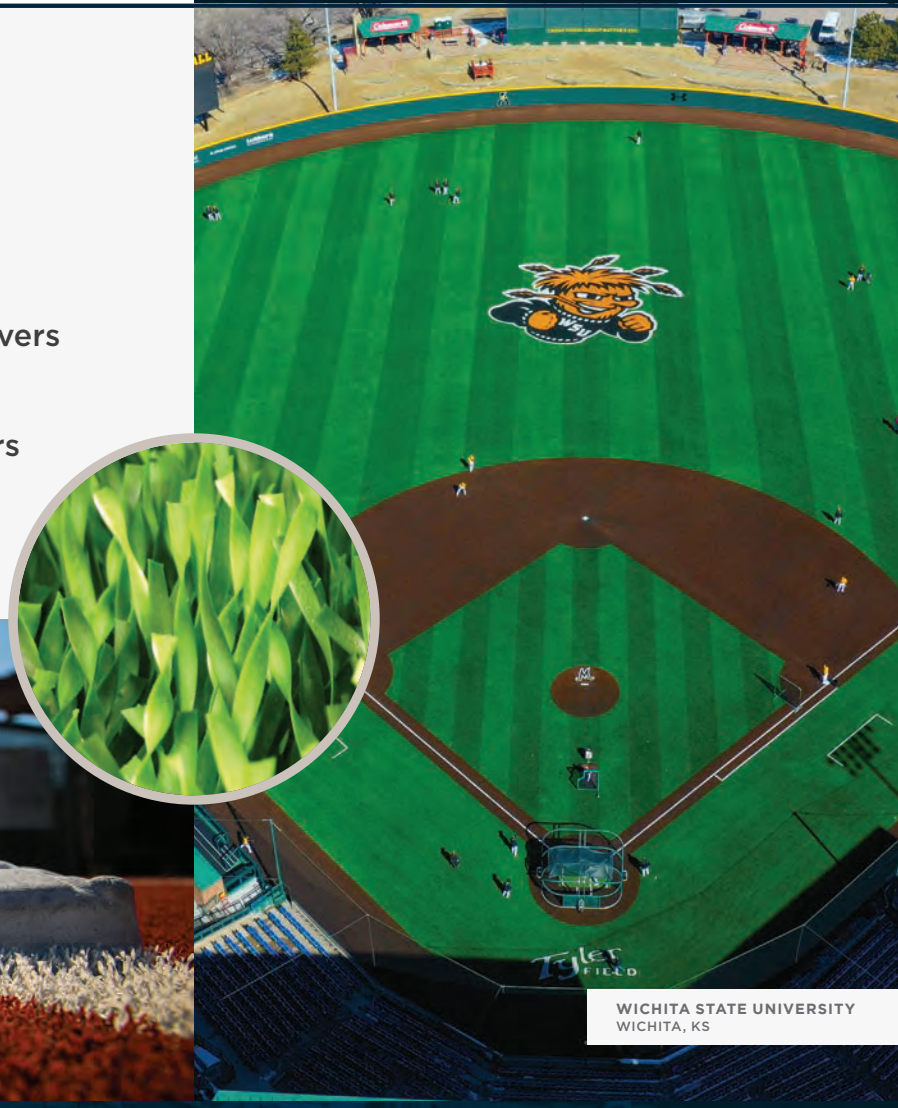
Hellas®

A TENCATE COMPANY

MAJOR PLAY MATRIX HELIX

Major Play® Matrix Helix® is the unmatched synthetic turf system created specifically for baseball and softball. This system is designed to create advantages specific to baseball and softball. Major Play Matrix Helix delivers consistent and predictable ball response and a long-lasting investment. Helix Technology adds memory and strength to fibers, allowing the fibers to spring back quickly after use and hold infill for improved hops.

HEBBRONVILLE HIGH SCHOOL
HEBBRONVILLE, TX



WICHITA STATE UNIVERSITY
WICHITA, KS

BUILDING FOR SPORTS FROM START TO FINISH

1-800-233-5714 | hellas.com

Major Play®

matrix HELIX®

PILE WEIGHT	42 – 46 oz./sq. yd.
PILE HEIGHT	1.25" – 2.25" (+/- 1/8")
TURF FIBERS	8 twisted monofilament
RESIN	C8 LLDPE
BLADE SHAPE	

1 blade shape (twisted, 2 sizes, 2 colors)

HELIX SHAPE MEMORY TECHNOLOGY

MATRIX HELIX® TURF FIBERS

Helix Fibers are manufactured with a spiral shape to secure infill in the field. Helix Technology adds memory and strength, as the fibers spring back quickly after use. With Major Play Matrix Helix, 100% of the fibers hold the infill in place, delivering:

- Predictable hops (less infill splash)
- Enhanced field durability (more infill protects the fibers)

EQUAL PILE HEIGHTS

Major Play® systems use a consistent pile height across the field that is ideal for baseball and softball. It balances ball-to-surface interaction, field durability, and player protection. Major Play fields provide:

- **Predictable hops and bunts** (no lip between pile heights)
- **Superior durability** in high use areas (shorter pile heights in clay areas wear out more quickly)
- Reliable **shock absorption**

INFILL & PEA GRAVEL

Hellas offers a variety of infill options including **Realfill®** infill made of dust-free SBR granules. Cooler, more natural offerings are available, such as **Thermoblend®** with olive and cellulose fibers.

The **pea gravel** provides ballast and a natural, firm feel while assisting shock absorption and drainage.

The ratios of infill materials are tailored to each area of the field, providing:

- Natural ball response and speed
- Superior impact attenuation, especially in skin areas

1-800-233-5714 | hellas.com

1.6.25

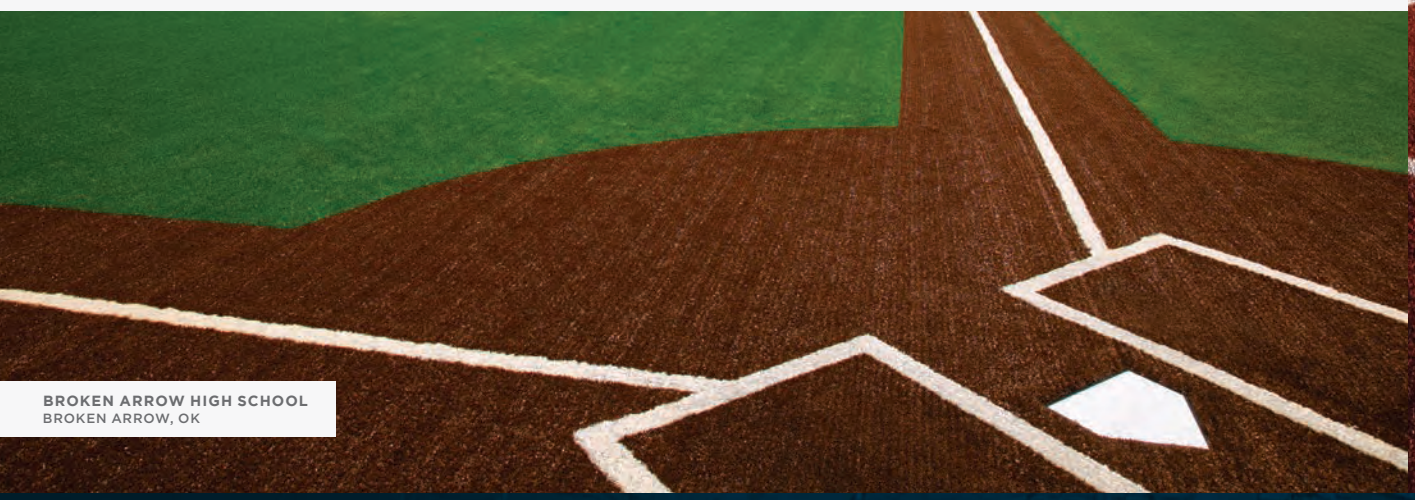
Major Play®
matrix® HI-SLIDE

Hellas®
A TENCATE COMPANY

MAJOR PLAY MATRIX HI-SLIDE

Major Play® Matrix® Hi-Slide was developed for baseball and softball fields to be used in the base and pitching areas where increased friction from sliding occurs. The sections can be easily replaced should wear occur.

Major Play Matrix Hi-Slide turf fibers consist of monofilament and secondary fibers with the increased density needed in specific areas of play. It features a shorter pile height without compromising playability or softness.



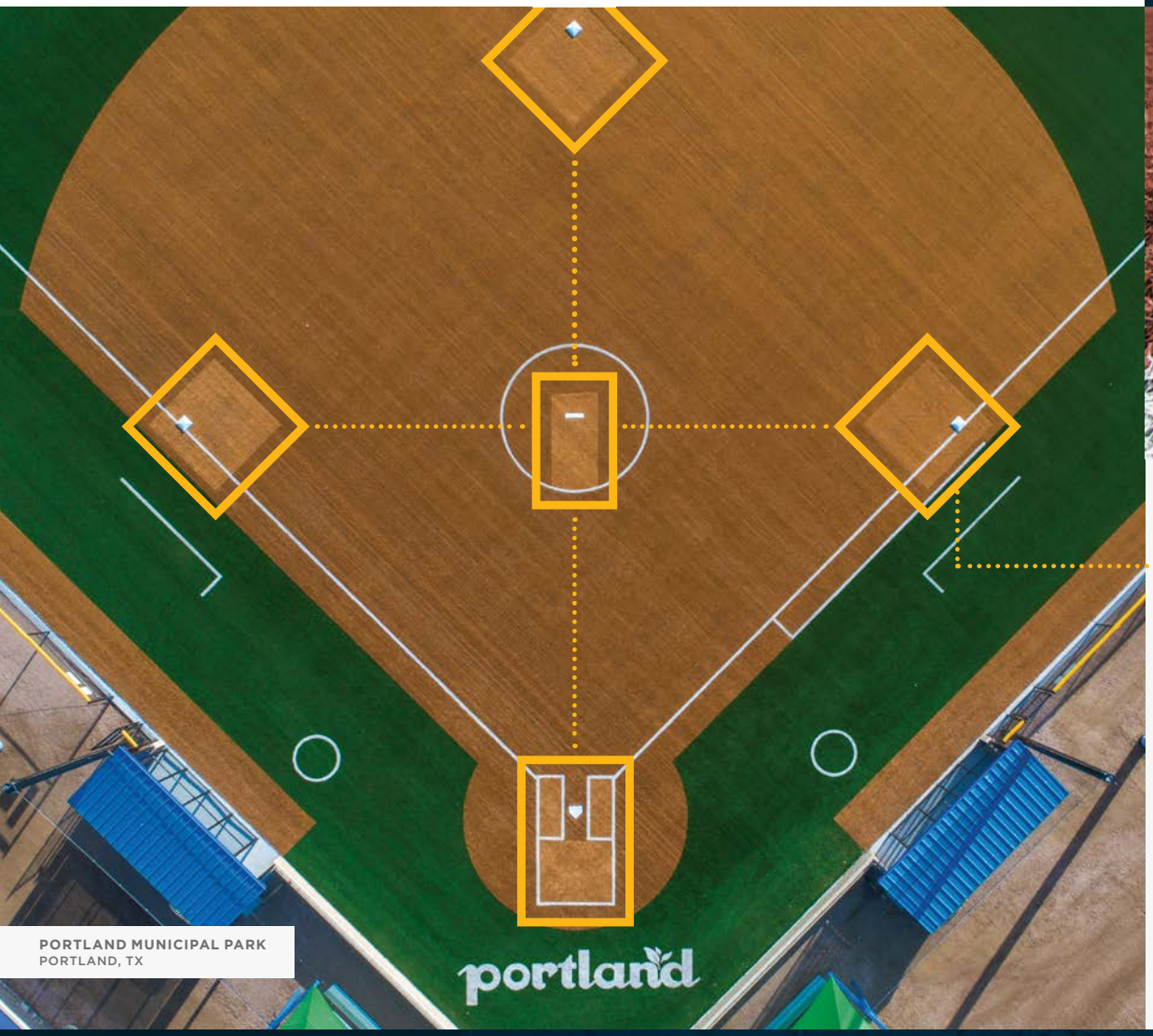
BROKEN ARROW HIGH SCHOOL
BROKEN ARROW, OK

WIMBERLEY HIGH SCHOOL
WIMBERLEY, TX

Major Play®

matrix® HI-SLIDE

PILE WEIGHT	80 oz./sq. yd.
PILE HEIGHT	1.25" – 1.75" (+/- 1/8")
INFILL	Customized to owner's preference for speed and bounce



PORTLAND MUNICIPAL PARK
PORTLAND, TX

MAJOR PLAY® MATRIX® HI-SLIDE

- For sliding & heavy traffic areas
- Replaceable sections
- Shorter pile height
- No holes from pitcher and catcher on the mound areas
- Reliable play: looks and plays like natural clay

COLOR OPTIONS

BROWN
PANTONE 476C

TERRACOTTA
PANTONE 7594C

CAMEL
PANTONE 2314C

1-800-233-5714 | hellas.com

1.6.25

Major Play®

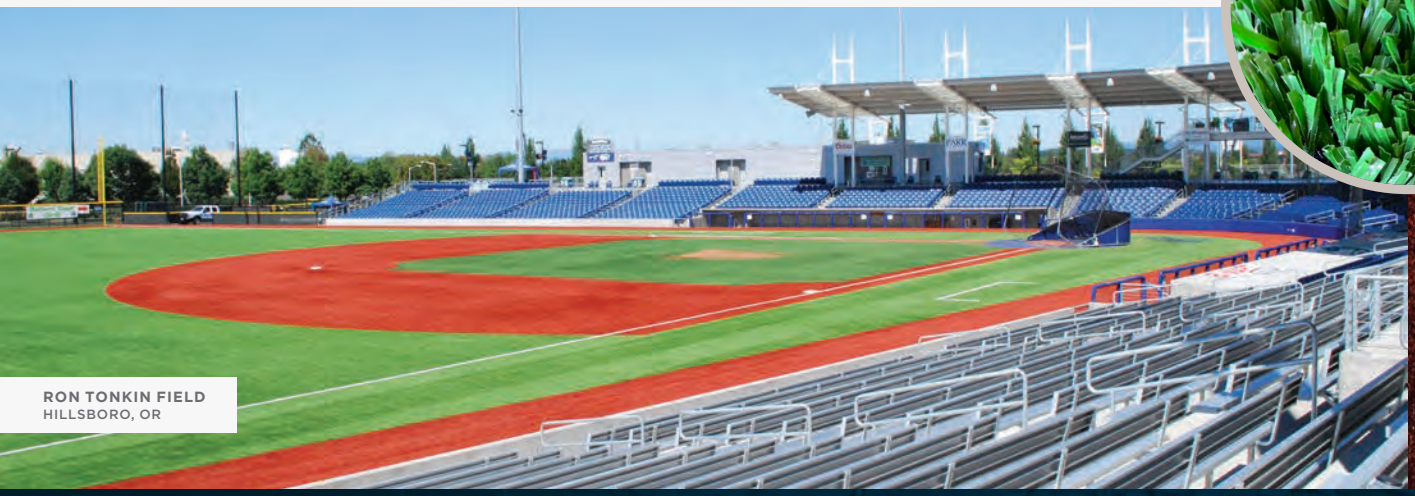
matrix® XPS™

Hellas®

A TENCATE COMPANY

MAJOR PLAY MATRIX XPS

Major Play® Matrix® XPS™ synthetic turf consists of the world-renowned XPS parallel fibrillated tape fiber by TenCate, and is designed for baseball, softball, multi-sport recreational facilities, and municipal parks. Matrix XPS is low-maintenance and provides a natural-looking playing surface that is durable.



RON TONKIN FIELD
HILLSBORO, OR

WIMBERLEY HIGH SCHOOL
WIMBERLEY, TX

BUILDING FOR SPORTS FROM START TO FINISH

1-800-233-5714 | hellas.com

Major Play®

matrix XPS

PILE WEIGHT	40 – 50 oz./sq. yd.
PILE HEIGHT	1.25” – 2.25″ (+/- 1/8″)
TURF FIBERS	Polyethylene Parallel Fibrillated Tape
RESIN	Polymer LLDPE
BLADE SHAPE	

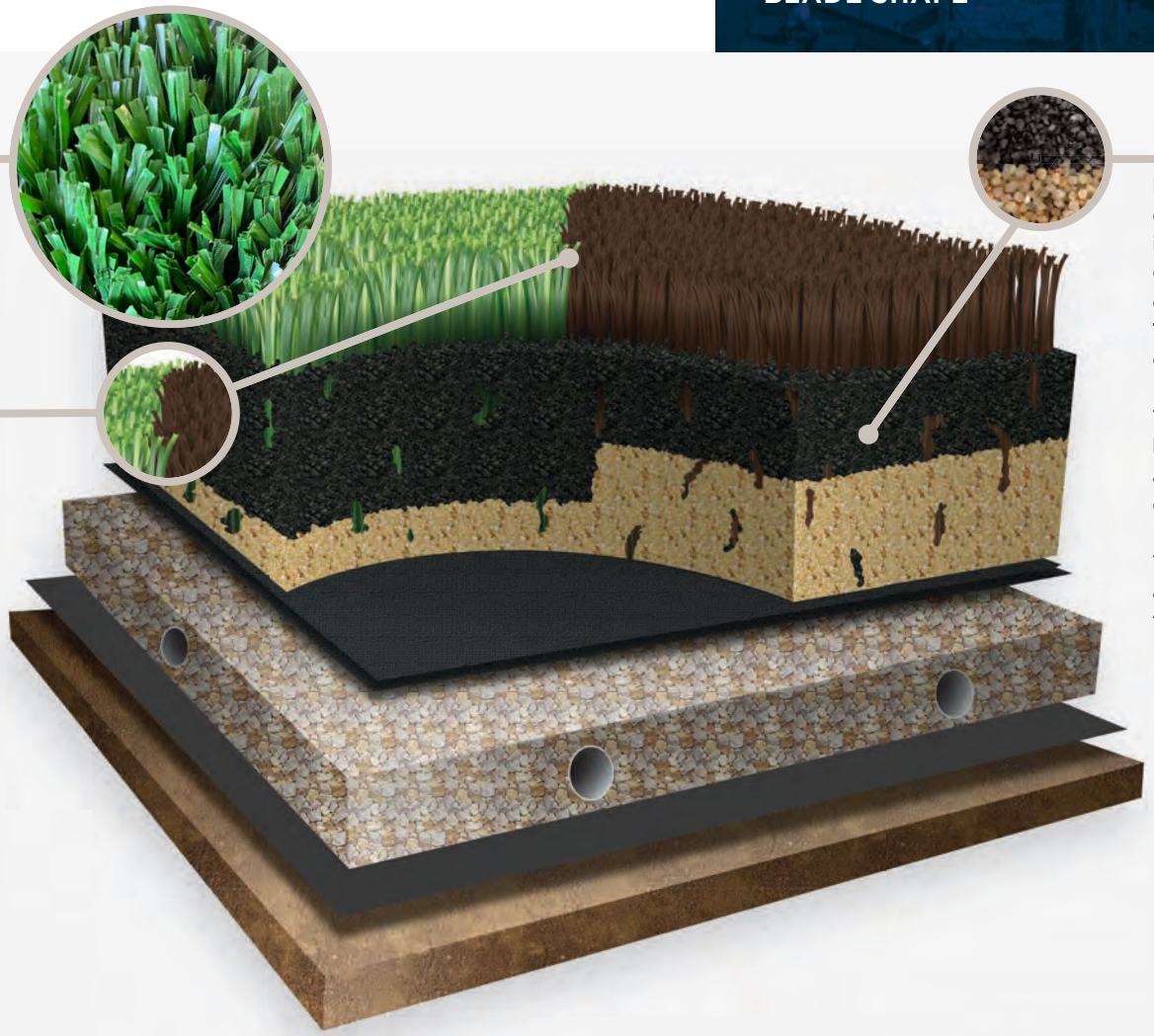
MATRIX® XPS™ FIBERS

Matrix XPS synthetic turf uses XPS parallel fibrillated tape fibers – providing a reliable multi-sport playing surface.

EQUAL PILE HEIGHTS

Major Play® systems use a consistent pile height across the field that is ideal for baseball and softball. It balances ball-to-surface interaction, field durability, and player protection. Major Play fields provide:

- **Predictable hops and bunts** (no lip between pile heights)
- **Superior durability** in high use areas (shorter pile heights in clay areas wear out more quickly)
- Reliable **shock absorption**



INFILL & PEA GRAVEL

Hellas offers a variety of infill options including **Realfill®** infill made of dust-free SBR granules. Cooler, more natural offerings are available, such as **Thermoblend®** with olive and cellulose fibers.

The **pea gravel** provides ballast and a natural feel while assisting shock absorption and drainage.

The ratios of infill materials are tailored to each area of the field, providing:

- Natural ball response and speed
- Superior impact attenuation, especially in skin areas

1-800-233-5714 | hellas.com

1.6.25

GEO COOLFILL®

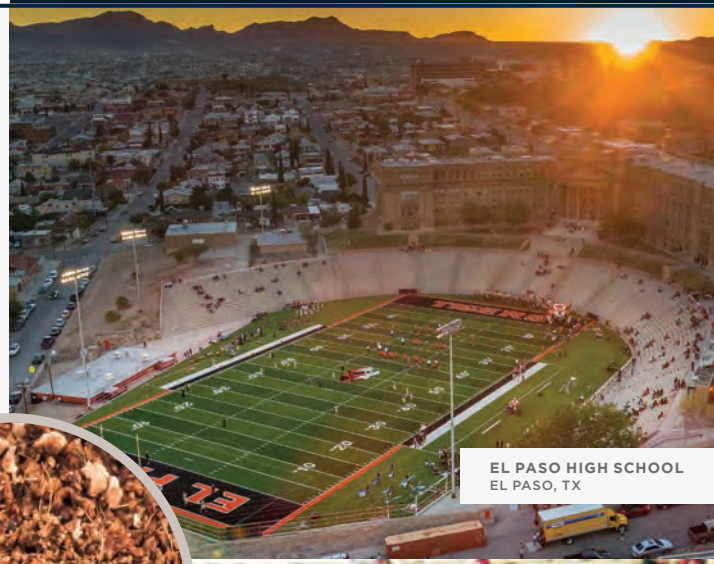
COOLER. NATURAL. PREFERRED.

Hellas®

A TENCATE COMPANY

GEO COOLFILL INFILL

Geo Coolfill® is a 100% USDA-Certified Organic infill material comprised of cork and coconut fibers. Geo Coolfill is a proven solution which yields extreme temperature reduction, optimal energy restitution, and superior foot control. It resists UV degradation, even in high temperatures. With proper irrigation, Geo Coolfill® retains moisture to make the field surface temperature up to 40˚ cooler.



EL PASO HIGH SCHOOL
EL PASO, TX

INDIANAPOLIS COLTS - LUCAS OIL STADIUM
INDIANAPOLIS, IN

GRAMBLING STATE UNIVERSITY
EDDIE G. ROBINSON MEMORIAL STADIUM
GRAMBLING, LA

BUILDING FOR SPORTS FROM START TO FINISH

1-800-233-5714 | hellas.com

GEO COOLFILL®

COOLER. NATURAL. PREFERRED.

UP TO **40°** *cooler*

GEO COOLFILL INFILL
The USDA-certified organic Geo Coolfill® infill absorbs the impact of the athlete's foot while providing superior stability for enhanced play. It's been proven to reduce field temperatures by up to 40°. It requires irrigation, but water usage is about 90% less than a natural grass field.

PEA GRAVEL
Pea gravel holds the system in place while assisting with shock absorption and drainage.

- **ENHANCED GMAX**
- **SUPERIOR FOOT STABILITY**
- **PREDICTABLE SURFACE**
- **HIGHLY PERMEABLE**
- **CONSERVES WATER**

1-800-233-5714 | hellas.com

2.3.25

THERMOBLEND®

ECOTHERM & ELIA

Hellas®

A TENCATE COMPANY

THERMOBLEND INFILL

Thermoblend® infill combines cellulose from recycled materials and olive particles into an infill mix with dramatic temperature reduction. The materials enable the infill to absorb, store, and slowly release water. Thermoblend is highly hydrophilic – acting like a sponge to absorb 62% of its weight in water, reducing field temperatures by up to 30°F versus SBR.

WINK-LOVING ISD
WINK, TX

UP TO 30° cooler*

*Ambient moisture required

SINTON HIGH SCHOOL
SINTON, TX

BUILDING FOR SPORTS FROM START TO FINISH

1-800-233-5714 | hellas.com

THERMOBLEND®

ECOTHERM & ELIA

THERMOBLEND® INFILL
Thermoblend combines cellulose and olive particles into an absorbent synthetic turf infill that reduces field temperatures by up to 30°F. No irrigation is required. Particle sizes range from 0.5 mm to 2.5 mm.

- **REDUCES TEMPERATURES**
- **SUPERIOR FOOT STABILITY**
- **PREDICTABLE SURFACE**
- **HIGHLY PERMEABLE**
- **ABSORBS WATER**

*Ambient moisture required

1-800-233-5714 | hellas.com

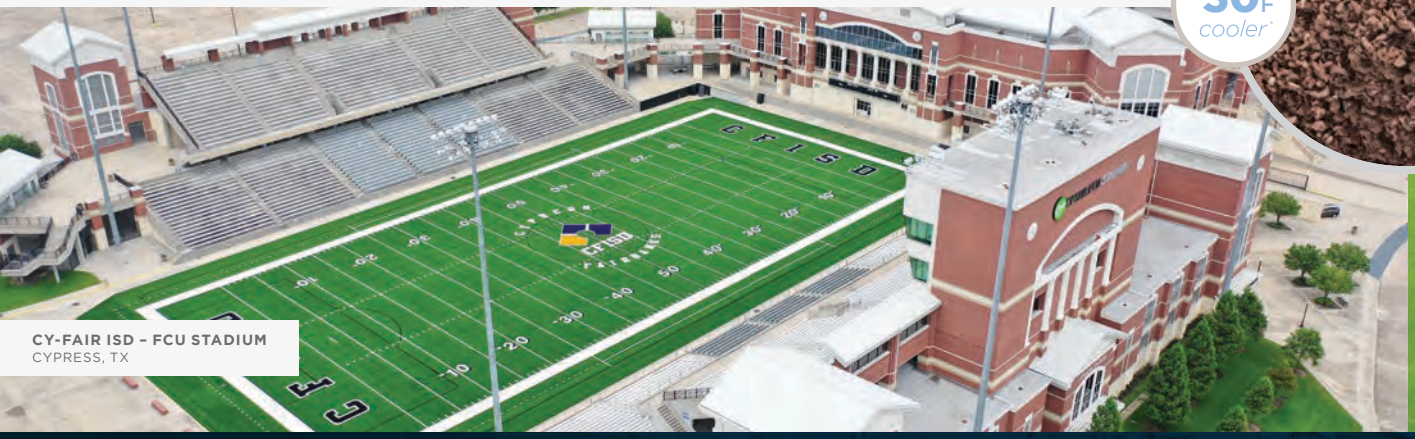
2.3.25

ecotherm®

Hellas®
A TENCATE COMPANY

ECOTHERM INFILL

Ecotherm® infill provides dramatic temperature reduction but unlike fully organic infill, Ecotherm requires no water. The uniquely shaped granules are made from recycled material and cellulose fibers. Cellulose is the natural fiber that makes up plant cell walls. As such, it naturally absorbs, stores, and slowly releases water. With cellulose, Ecotherm captures ambient moisture from the air, creating an evaporative cooling effect for the turf system – and temperature reductions up to 30°F.



CY-FAIR ISD – FCU STADIUM
CYPRESS, TX

*Ambient moisture required

UP TO 30°F cooler*

BERL HUFFMAN ATHLETIC COMPLEX
LUBBOCK, TX

BUILDING FOR SPORTS FROM START TO FINISH

1-800-233-5714 | hellas.com

ecotherm®

UP TO 30° cooler*

Available in green and brown

ECOTHERM® INFILL
The use of cellulose fibers in Ecotherm allows the infill to absorb and slowly release water to keep the field up to 30°F cooler than a synthetic field with black SBR infill. No irrigation is required with the Ecotherm infill. It is 100% recyclable and sized between 0.5 mm and 2.5 mm.

PEA GRAVEL
The pea gravel holds the system in place while assisting in shock absorption and drainage. The combination of Ecotherm and pea gravel makes for a long-lasting, uniform playing surface.
(U.S. Patent No. 6,800,339)

- NON-TOXIC
- ENHANCED GMAX
- PREDICTABLE SURFACE
- CONSERVES WATER
- SUPERIOR FOOT STABILITY
- HIGHLY PERMEABLE
- RECYCLABLE

*Ambient moisture required

1-800-233-5714 | hellas.com

2.14.24

REALFILL®

Hellas®
A TENCATE COMPANY

REALFILL INFILL

Realfill® infill starts with a patented silica pea gravel base that provides proper fiber support, ballast, drainage, and enhanced shock absorption. The large granules do not compact under severe weather conditions or heavy use, allowing for rapid drainage. The top layer of the Realfill infill is dust-free cuboidal SBR rubber that has a deliberate shape and size designed to minimize migration. This combination of rubber and pea gravel makes for a uniform, predictable playing surface with a consistent Gmax throughout the life cycle of the field.

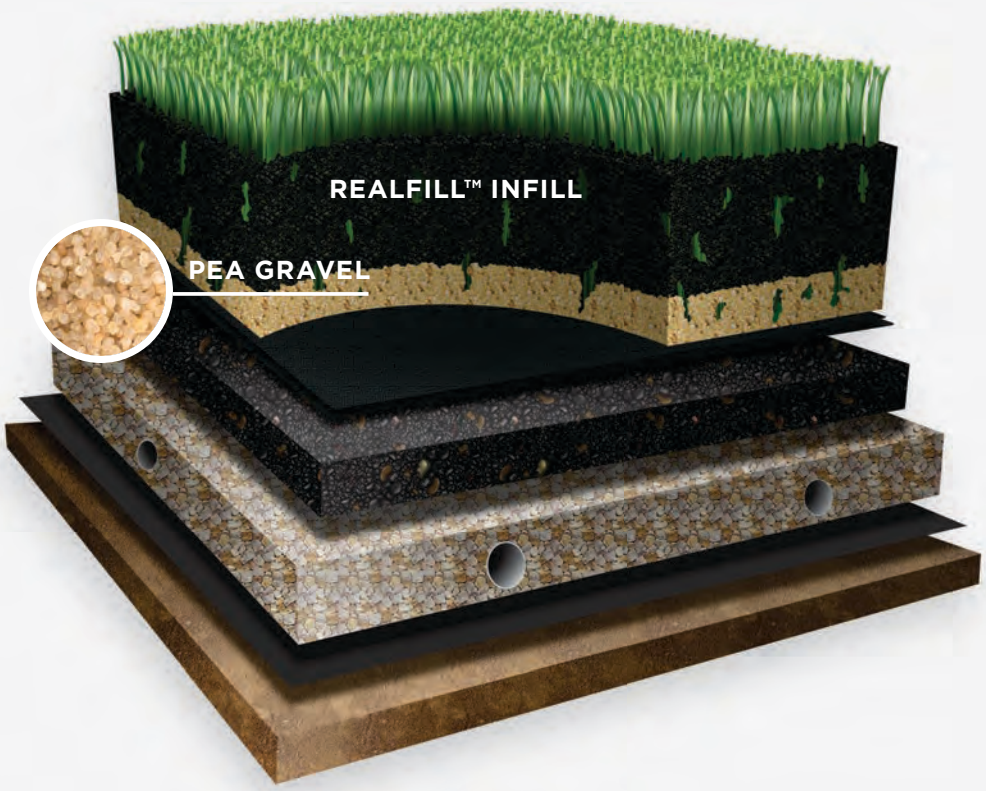
NEW YORK RED BULLS – HARVEY FIELD SPORTS COMPLEX
KEARNY, NJ

HOUSTON TEXANS – NRG STADIUM
HOUSTON, TX

BUILDING FOR SPORTS FROM START TO FINISH

1-800-233-5714 | hellas.com

REALFILL®



PEA GRAVEL
Pea gravel holds the system in place while assisting with shock absorption and drainage.
(U.S. Patent No. 6,800,339)

REALFILL SBR INFILL SYSTEM
After the base layer of pea gravel is placed in the system, a layer of dust-free, cuboidal SBR rubber granules complete the Realfill™ infill system. The rubber granules have a deliberate shape and size to minimize "splash-out" and migration of the rubber, resulting in a uniform, predictable playing surface.

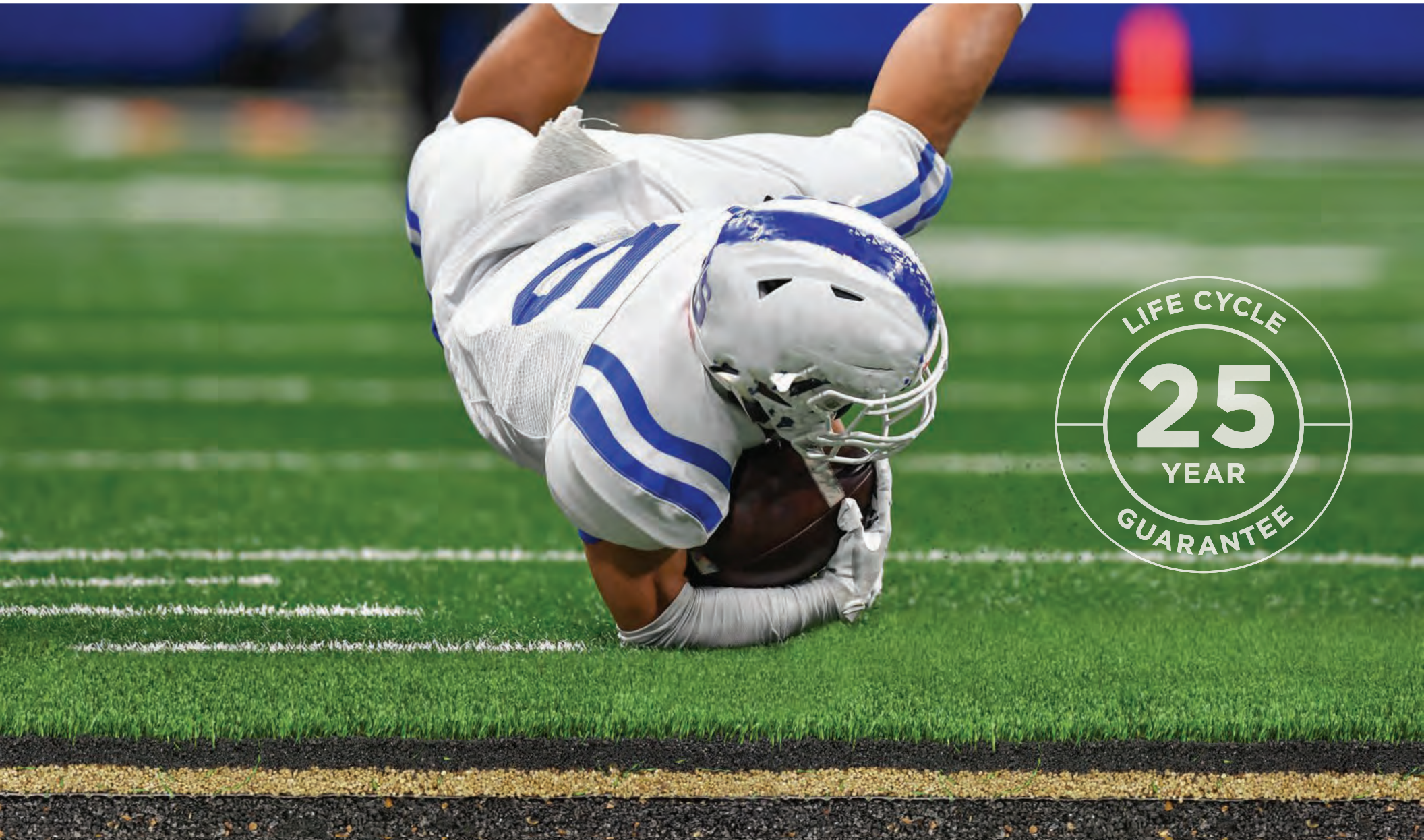
- **NON-TOXIC**
- **SUPERIOR FOOT STABILITY**
- **ENHANCED GMAX**
- **HIGHLY PERMEABLE**
- **PREDICTABLE SURFACE**
- **CONSERVES WATER**

1-800-233-5714 | hellas.com

9.30.24

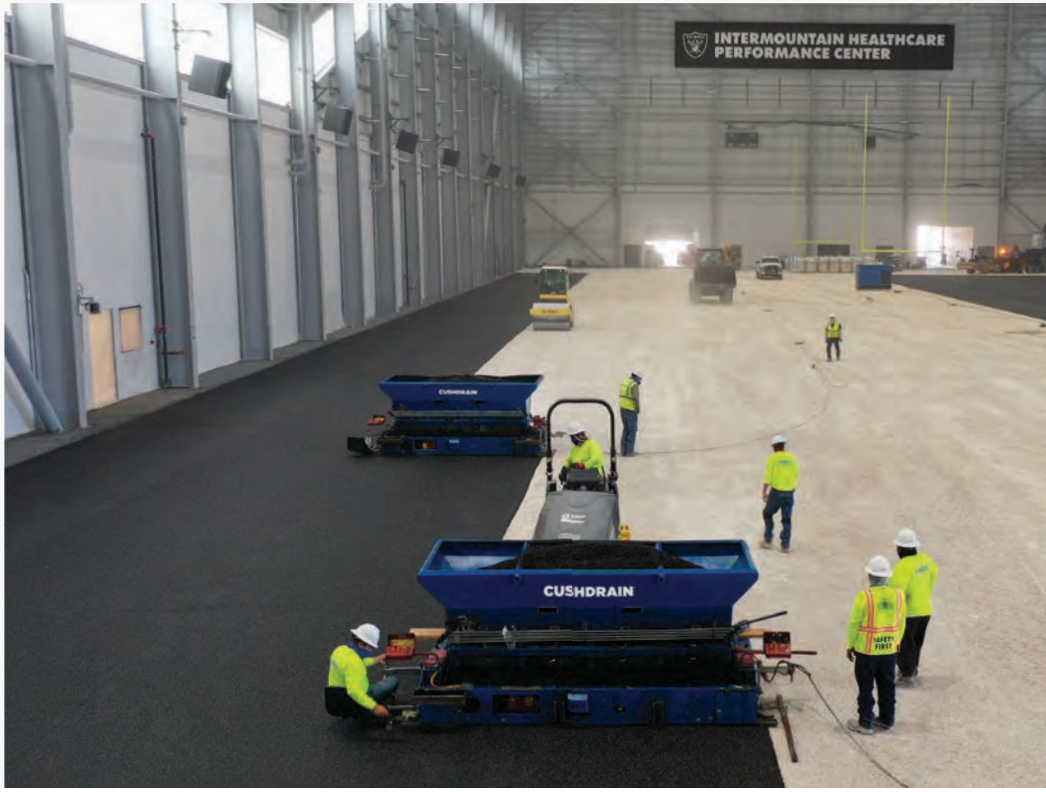
CUSHDRAIN®

THE **BEST** INVESTMENT FOR THE **SAFETY** OF ATHLETES



WHAT IS CUSHDRAIN®?

CUSHDRAIN pad is an elastic layer paved into place over a laser-graded drainstone foundation for a synthetic turf system to improve a field's drainage and shock absorption (Gmax). Cushdrain comes in 19mm or 25mm thicknesses and is made of SBR rubber granules, mineral aggregate and a moisture-cured polyurethane binder absent of any toxic components or heavy metals.



WHY CUSHDRAIN®?

1. Increases shock absorption upon impact providing a safer sports playing surface.
2. Prolongs the performance of the field by providing firm planarity through 3-4 turf lifecycles.
3. Provides cost efficiencies by eliminating the need to replace the elastic layer with each turf cycle.
4. Reduces downtime caused by heavy rains by improving field drainage.

PROMOTE THE SAFETY OF ATHLETES

A **CUSHDRAIN** shock pad helps protect athletes from injuries caused by hard impacts with a sports playing surface.

INTERNATIONAL GMAX STANDARDS

G FORCES

A linear force to the brain is measured in G's. One G is the acceleration due to the force of gravity.

THE LOWER THE GMAX, **THE BETTER** THE SURFACE.

AMERICAN SOCIETY FOR TESTING & MATERIALS

NFL

200 — ASTM GMAX REQUIREMENT: UNDER 200 G's

190

180

170

160

150 — EXTREME FOOTBALL IMPACT: 150 G's

140

130

120

110

100 — NFL GMAX REQUIREMENT: UNDER 100 G's
PRISTINE NATURAL GRASS: 100 G's
CUSHDRAIN® 19
GMAX TEST RESULT: 97 G's*

90

80

70

60

50

40

30

20

10

Source: Popular Mechanics
*Cusdrain results provided by Labosport. 2019

UNDERSTANDING SURFACE IMPACTS

Two field tests recognized in the athletic industry to determine impact resilience:

HIGHER CRITICAL FALL HEIGHT = **BETTER**

Head Injury Criterion (HIC) – is a model created to measure of the likelihood of head injury arising from an impact.

Critical Fall Height (CFH) – is the maximum height from which a dropped E-missile measures a HIC score of 1000. A higher CFH indicates a more shock absorbent surface.

LOWER THE GMAX = **BETTER**

Gmax – is the measure of the shock absorbency of a sports playing surface. The higher the G-max value signifies the poorer the shock-attenuation performance of the surface and the greater impact on an athlete.

SUPERIOR CUSHDRAIN RESULTS

CUSHDRAIN® 19

CFH	GMAX
4.0 feet* (1.21 m)	97 G's*

Cushdrain® 25 results: CFH 4.3 feet (1.32m) | Gmax 89 G's*

PRISTINE NATURAL GRASS

CFH 5.6-7.2 feet (1.7-2.2m)

Gmax 100 G's

*Results provided by Labosport. 2019

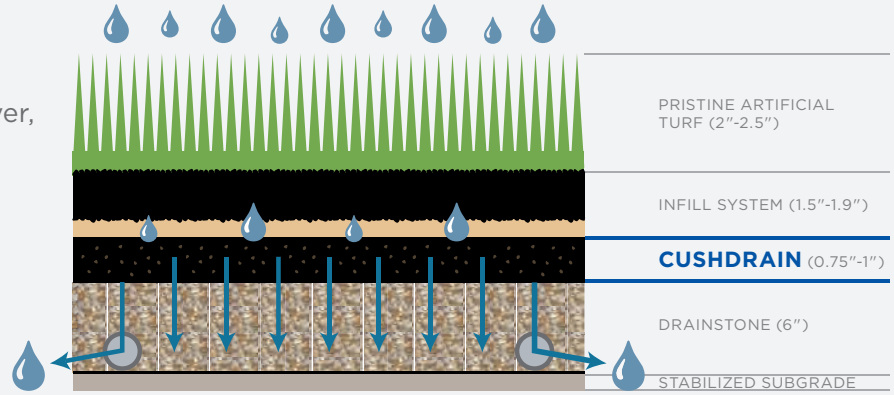
CUSHDRAIN®

THE **BEST** INVESTMENT FOR THE **SAFETY** OF ATHLETES

INCREASED LONGEVITY

Cushdrain is precisely installed and bound together as a monolithic layer, holding its true form and position over 3-4 lifecycles of synthetic turf.

Cushdrain not only improves drainage of the field which minimizes downtime caused by heavy rains, but its materials make it resistant to rot, mildew, water freeze-thaw and compression set associated with normal athletic field use.



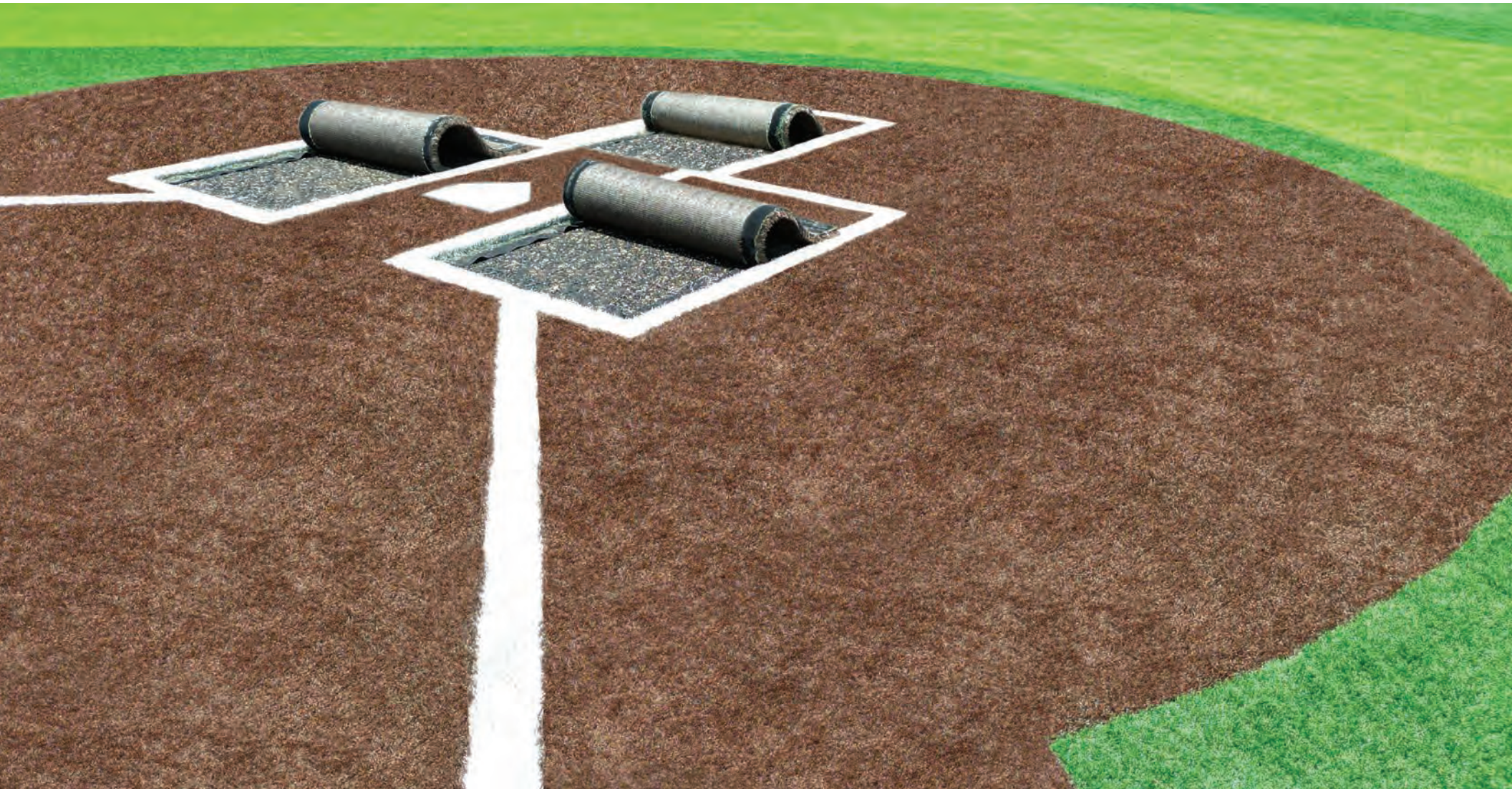
1-800-233-5714 | cushdrain.com

*Results provided by Labosport. 2019

EXTRA INNINGS

Hellas®

A TENCATE COMPANY



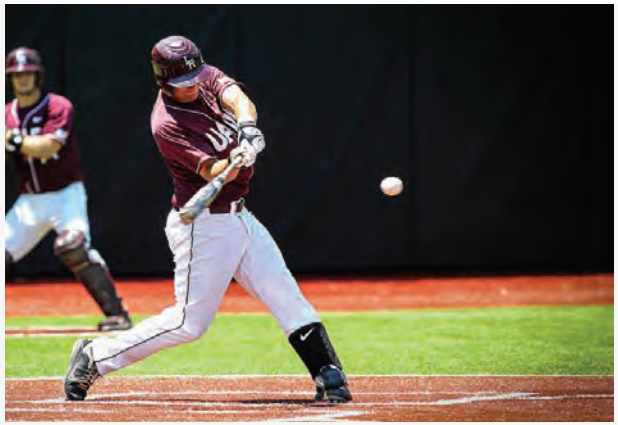
COVER YOUR BASES

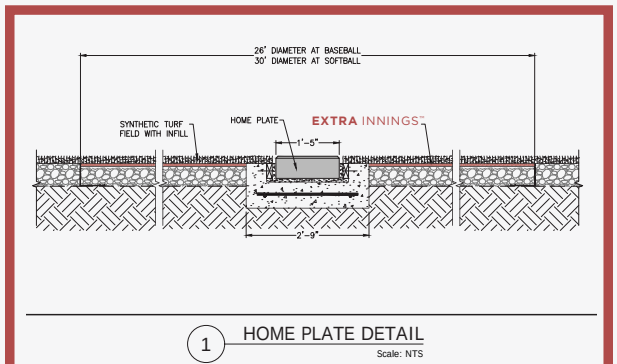
EXTRA INNINGS™

Baseball and softball batters' box turf receives the heaviest toll of any sports surface.

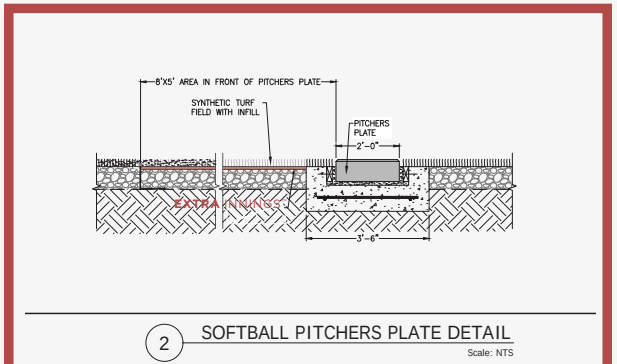
Without Extra Innings™, torsional forces generated by batters swinging at 270 pitches per game can displace the drainstone under the synthetic turf.

As a result, voids under the batters' boxes allow cleated, twisting batters to rip straight through the turf—accelerating the replacement schedule of these high wear areas.

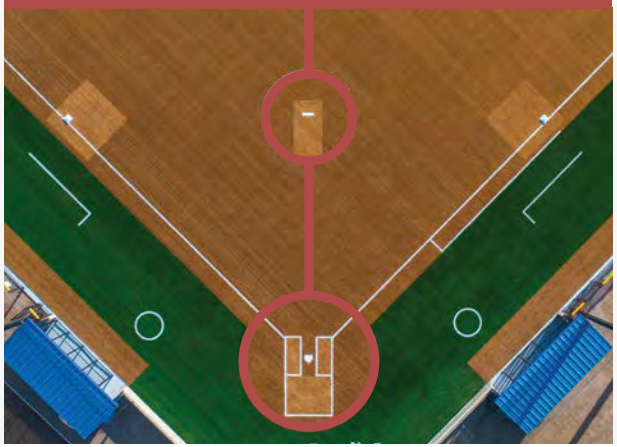




1 HOME PLATE DETAIL
Scale: NTS



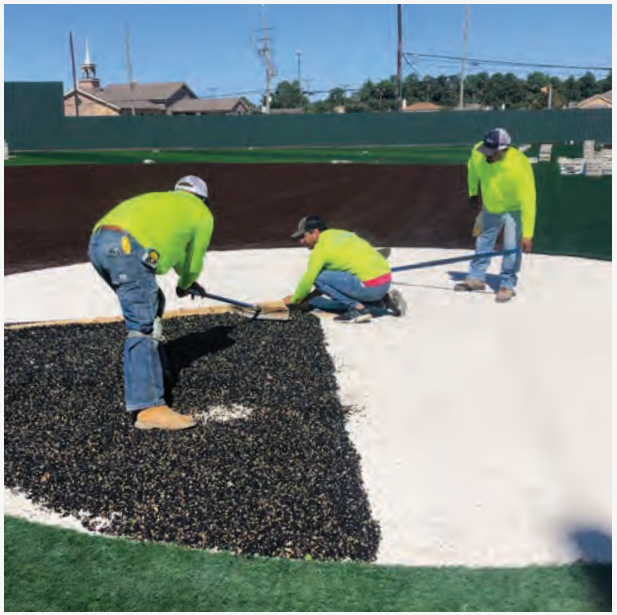
2 SOFTBALL PITCHERS PLATE DETAIL
Scale: NTS



THE UNIQUE DEMANDS OF BASEBALL AND SOFTBALL DEMAND UNIQUE SOLUTIONS.

Used in conjunction with heavyweight High Slide synthetic turf, Extra Innings is a resilient layer that is in situ under the home plate, pitching mound and softball pitching circles. This 16mm layer of rubber and polyurethane binder forms a resilient and smooth platform that protects the drainstone and prolongs the life of the synthetic turf.

EXTRA INNINGS



EXTRA INNINGS

COVER YOUR BASES

Velcro® can be glued to Extra Innings for fast and easy change over.

1-800-233-5714 | hellas.com

9.27.24

max FLO
SHOCK PAD

Hellas®
A TENCATE COMPANY

MAX FLO SHOCK PAD

Max Flo is a high compressive strength, moisture conducting, non-absorbent, geo-composite shock pad made from recycled materials. Max Flo is a pre-fabricated system that consists of a formed polystyrene or polypropylene core. The core provides a high compressive strength structure that allows water to flow to designated outflows. Installation provides an uninterrupted vertical-to-horizontal flow path for superior rainfall evacuation and enhanced Gmax performance without changing the ball action or feel under foot. The integrity of the system moisture-seal is maintained by use of an impervious bonding tape, which also expands and contracts, thus maintaining the function of the integral expansion joints.

(Protected by one or more patents, including US Patent No. 7,128,497)

BAYLOR UNIVERSITY
WACO, TX

max FLO
SHOCK PAD

THICKNESS
15mm (+/- 1mm)

COMPRESSIVE STRENGTH
20,000 lbs/ft²

When installed properly, Max Flo shock pad lowers Gmax by 15 to 20 units.

PLAQUEMINE HIGH SCHOOL
PLAQUEMINE, LA

DYNAMIC SHOCK PAD

BENEFITS

Improves Gmax
Provides exceptional horizontal and vertical drainage

PROPERTIES

FABRIC PROPERTIES	
Material	Polypropylene
Permeability	0.01 ft/sec
Flow rate	150 gpm/ft2

CORE PROPERTIES	
Material	Polypropylene
Thickness	15 mm
Product Weight	30 oz/yd2
Comp. Strength	20,000 lbs/ft2
Flow capacity per unit width	16 gpm/ft

All information, drawings and specifications are based on the latest product informationavailable at the time of printing. Constant improvement and engineering progress make it necessary that we reserve the right to make changes without notice. All physical properties are typical values. Standard variations in mechanical properties of 10% and in hydraulic properties of 20% are normal.

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1.6.25

max FLO+

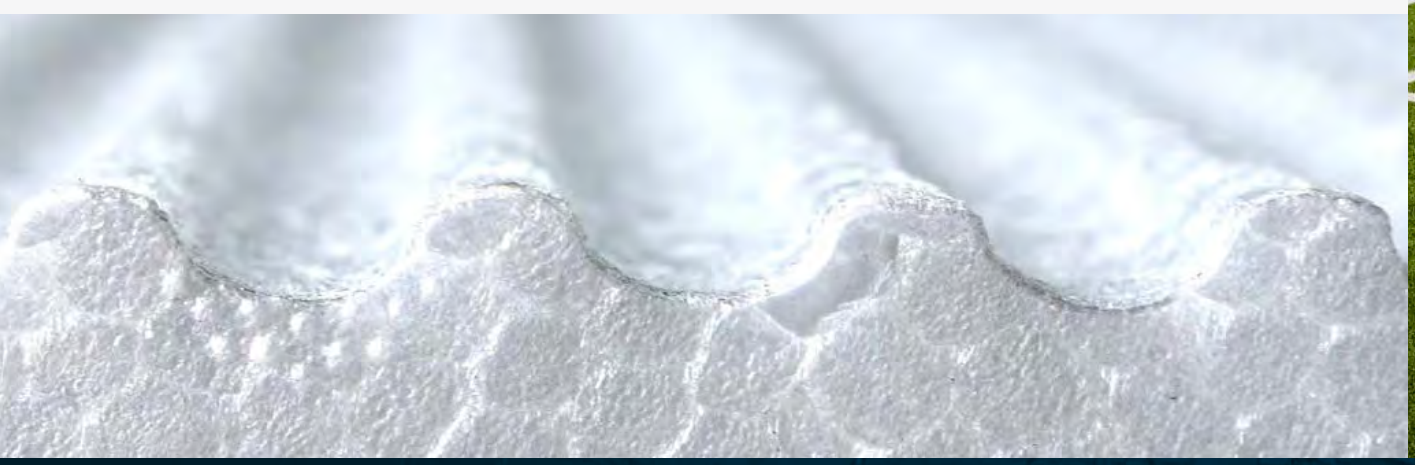
SHOCK PAD

Hellas®

A TENCATE COMPANY

MAX FLO+ SHOCK PAD

Max Flo+ is a expanded polypropylene shock pad. Max Flo+, available in with and without perferation, is a pre-fabricated system that consists of a formed expanded polypropylene. It is a highly resilient closed-cell expanded bead product, and is an ideal energy absorbing material for sport surfaces that require impact protection and shock absorption due to the inherent shock absorption properties of expanded polypropylene.



WOODLANDS CHRISTIAN ACADEMY
THE WOODLANDS, TX

max FLO+

SHOCK PAD

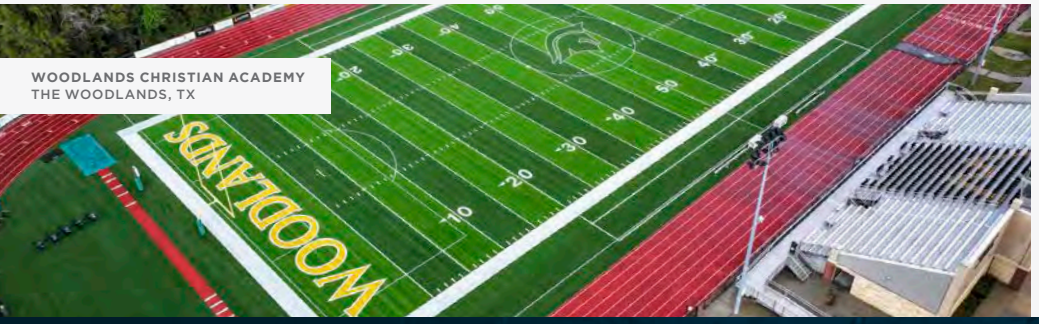
THICKNESS
15mm (+/- 1mm)
20mm (+/- 1mm)
25mm (+/- 1mm)

TILE SIZE
4′ x 6′

PATENTED

Max Flo+ installation

Installation provides an uninterrupted vertical-to-horizontal flow path for superior rainfall evacuation and enhanced G-MAX performance without changing the ball-action or feel under-foot. The integrity of the systems expansion and contraction capabilities is maintained by the use of the GeoClip™ system which holds the Max Flo+ in place during the installation of the turf system. The GeoClip also decreases the risk of wind negatively impacting the installation process. The GeoClip allows each individual pad to naturally react to changing temperature and humidity conditions while assuring the turf installation team is able to perform on a secure monolithic work surface. The proper installation of the Max Flo+ system reduces G-MAX by up to 50 points.



WOODLANDS CHRISTIAN ACADEMY
THE WOODLANDS, TX

DYNAMIC SHOCK PAD & DRAINAGE BLANKET

PROPERTIES

Max Flo+ is multi-directional (isotropic) in nature, so unlike traditional extruded products, which yield different properties along the extrusion, vertical and horizontal axis, the properties of the Max Flo+ products are the same for a given density along all three axes, regardless of orientation.

SAFETY FEATURES

Guaranteed Maximum G-Max of field of 135 during 8-year warranty period of turf (ASTM F355 or ASTM 1936) as a system test with infill. Guaranteed 1.3 m critical fall height rating during 8-year warranty period of turf (ASTM F355-16e1) as a system test with infill.

RESILIENT POLYPROPYLENE SHOCK PAD

Horizontal Drainage:
50” per hour minimum
Vertical Drainage:
100” per hour minimum
(On perforated core)
Maximum Initial G-MAX:
Less than 135

RESISTANCE

Flammability Resistance TEST FMVSS-302: Pass
Fuel Immersion Test Coast Guard (Fuel B): Pass
Chemical Resistance (1 Hour Exposure to Solvents): Pass

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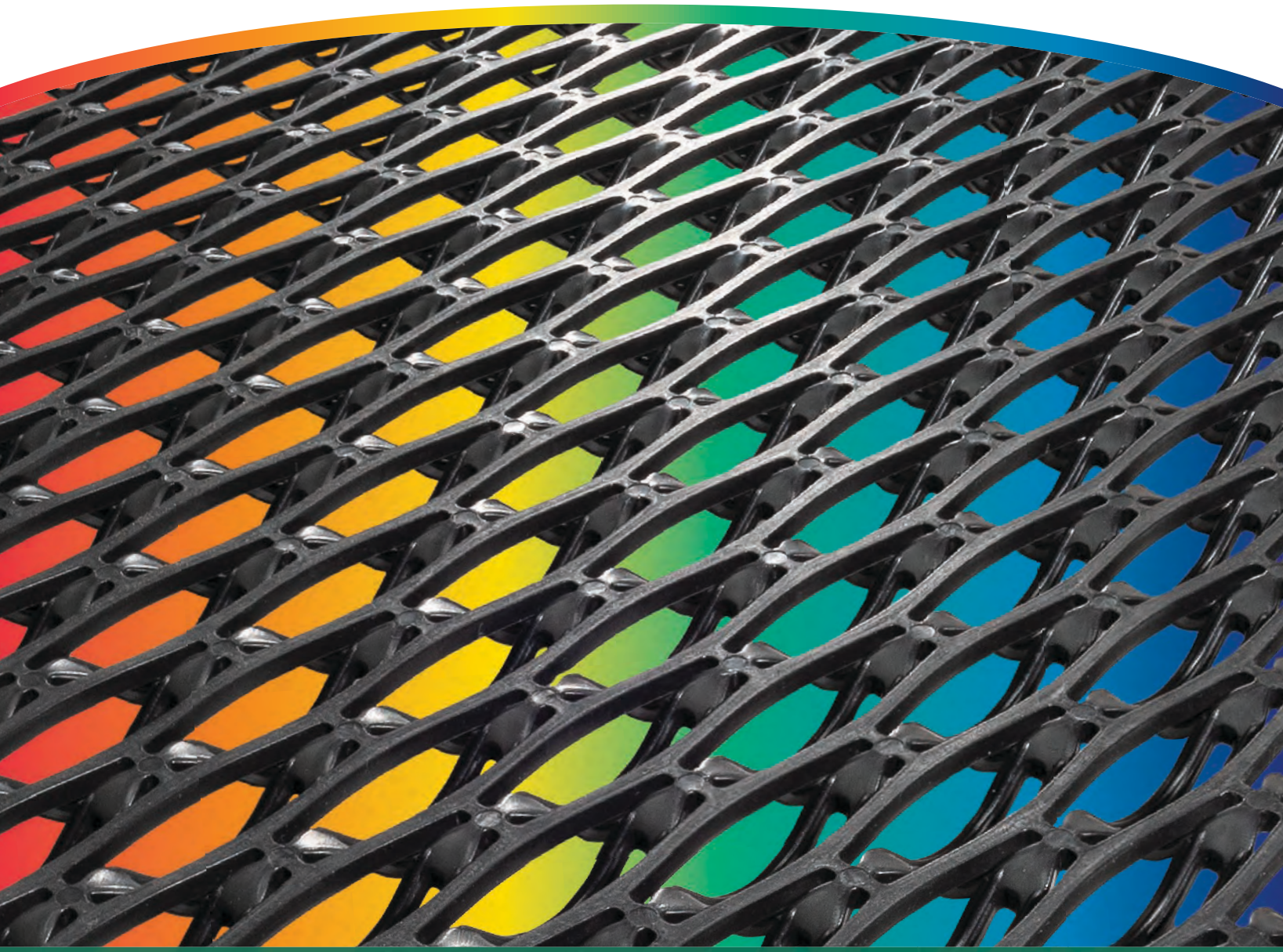
1.6.25

WAVE SPORTS PAD



The Wave is a pre-fabricated pad designed to enhance athlete safety with optimal shock absorption. As players fall, the force of the impact is pulled down and reverberates through the engineered ribs and away from the athlete, rather than being returned straight back up. The Wave is a 15mm high impact injection-molded polypropylene pad made from recycled material and is fully recyclable after use.

WAVE SPORTS PAD

The 15mm Wave pad is designed to enhance field performance and player experience by improving the turf system's shock absorption, energy restitution, and Gmax. The engineered geometry allows the Wave to capture and move forces away from the point of impact, reverberating energy through the ribs of the pad, away from the athlete.

TECHNICAL CHARACTERISTICS

Injection molded tiles

Recyclable polypropylene

Horizontal Drainage	>.9 l/s*m
Tensile strength	>7 MPa
Vertical deformation	5 mm
Energy restitution	33.5%

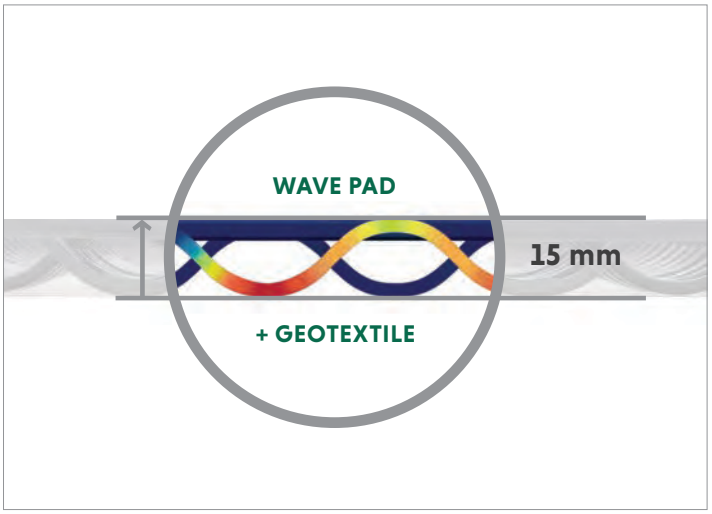
MAIN ADVANTAGES

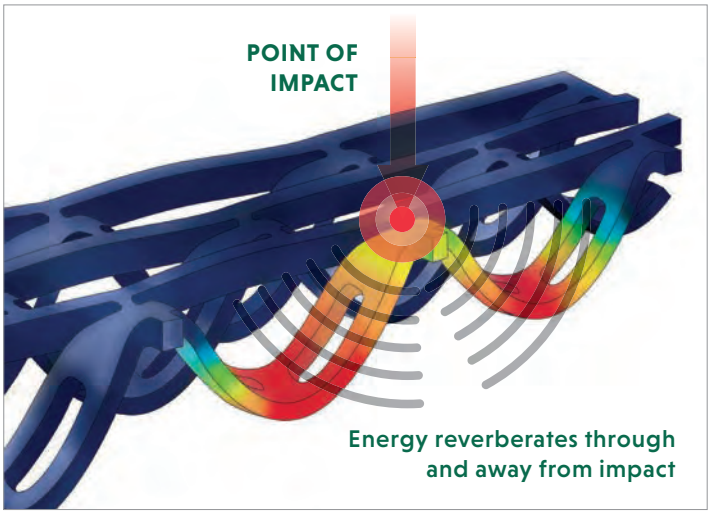
Easy to install – no adhesive needed

Superior foot stability

Horizontal and vertical drainage; cost efficient and faster subbase construction

Guarantees top performance level with 1.75"–2" turf pile height





STUDY OF VERTICAL DEFORMATION AND STRESS ANALYSIS. F.E.M. FINITE ELEMENTS METHOD

THICKNESS	TILE SIZE	WEIGHT	SHOCK ABSORPTION	SYSTEM GMAX
15mm (+/- 1mm)	48.6" x 31.3"	56 oz./sq. yd.	>65%	<100

The following Italian Patents have been granted to Wave: N. 102021000003215, N. 102021000003242, N. 102021000003233.

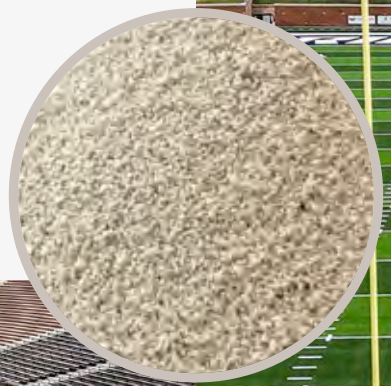
3.3.23

GeoCool™ Cooling Agent

Hellas®
A TENCATE COMPANY

GEOCOOL

GeoCool is an innovative cooling agent that provides heat absorption and disbursement for reduction in surface temperatures. GeoCool can be used with SBR rubber granules and silica sand infills. It is not organic and therefore eliminates the problems associated with organic infills—decay, flotation, dust, migration (due to wind, rainfall, and foot traffic) and the need for constant watering of the turf to maintain efficacy.



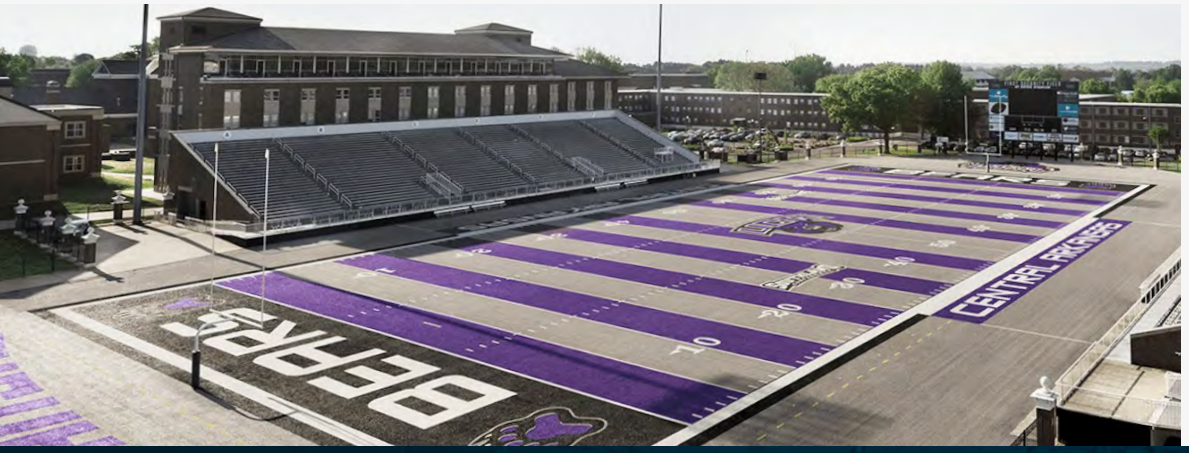
RICE UNIVERSITY
HOUSTON, TX

GeoCool™ Cooling Agent

UP TO 50°F cooler*

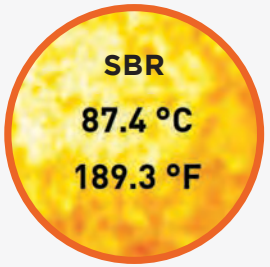
GeoCool™ is an inorganic oolitic ("egg shaped") calcium carbonite mineral ("aragonite") created — and constantly renewed—in shallow sea beds. It is 100% recyclable, neutralizes some odors, and is virtually dust-free. It is non-toxic—in fact, calcium carbonite has been ingested by humans for eons.

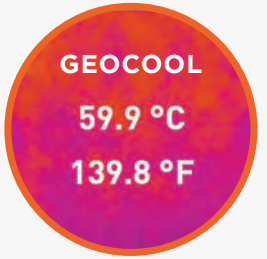
GeoCool has a specific gravity similar to sports field sand which means it will not float in heavy rain events and will not blow away in dry, windy environments.



BEAT THE HEAT

GeoCool has a unique crystalline structure that aids in natural heat reduction: it is a mineral with a high surface area and thus high micro-porosity. As a consequence, GeoCool is very hydrophilic — it absorbs and captures a high amount of moisture from the atmosphere or when watered. As the moisture in GeoCool granules evaporates, the playing surface and athletes on it cool significantly.





*Temperature taken after two (2) hours.

- **SUPERIOR ATHLETIC PERFORMANCE**
- **RESISTANT TO DECAY, ROT, AND MILDEW**
- **TEMPERATURE REDUCTION**
- **HYDROPHILIC**

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2.14.24

Hellas®

LANDSCAPING

A TENCATE COMPANY

GRASSO® LANDSCAPE

Fido™ PET GRASS

EAGLE PUTT

BUILDING LANDSCAPES FROM START TO FINISH

1-800-233-5714 | hellas.com

GRASSO® LANDSCAPE

Grasso® Landscape turf is ideal for residential and commercial landscaping. Home and business owners alike love the lush appearance, soft feel, and low maintenance requirements of the Grasso system. It is perfect for yards, high traffic community areas, hotel and restaurant landscaping, and more. Plus, Grasso saves money over time by eliminating the need for ongoing professional maintenance services and watering.

PILE WEIGHT	48 oz./sq. yd.
PILE HEIGHT	1.75"
TURF FIBERS	Polyethylene monofilament blades
BLADE SHAPE 1 blade shape, 2 colors + polypropylene secondary fiber	

Fido™ PET GRASS

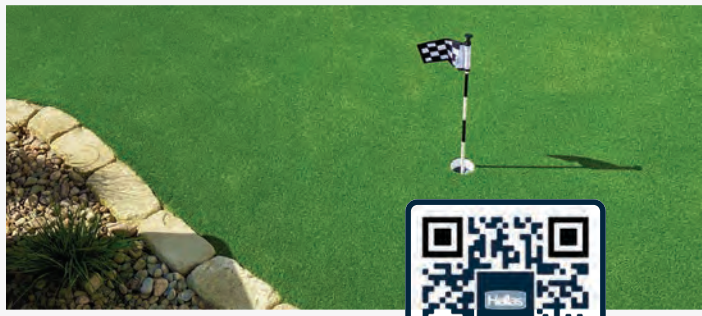
This synthetic grass system provides green play areas year-round. Perfect for backyards, dog parks, apartment complexes, doggy daycares, veterinary clinics and more. The specialized knitting process creates a highly porous system – ideal for draining waste from the surface. Plus, the knitting process knots the fibers together creating the strongest possible construction.

PILE WEIGHT	62 oz./sq. yd.
PILE HEIGHT	1.00"
TURF FIBERS	100% Polyethylene
BLADE SHAPE 1 blade shape, 2 colors + secondary fiber	

EAGLE PUTT

Let Hellas Landscaping design the ultimate backyard putting green, customized for your home. Hellas Landscaping's Eagle Putt is a synthetic turf system that is specifically made to replicate putting greens. Our experienced installers deliver your preferred green speed – whether you're a weekend warrior or a professional golfer.

FACE WEIGHT	30 oz./sq. yd.
PILE HEIGHT	.56"
TURF FIBERS	Texturized Polypropylene
BLADE SHAPE	1 texturized blade shape, 2 colors



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9.27.24

kickabout®

Hellas®

A TENCATE COMPANY

KICKABOUT
A PLACE WHERE KIDS WANT TO PLAY

Kickabout® turf is a new, customizable playing surface that allows children to safely participate in a wide variety of sports and activities. By providing a safe, reliable surface for games, sports, and activities, Kickabout turf helps children reach the 60 minutes of daily activity recommended for optimal health.

Kids can't get enough of this fun-packed playground and mini-sports field that combines intelligent design and the best synthetic turf in the industry.

INTERNATIONAL SCHOOL OF TEXAS
AUSTIN, TX

LITTLE ELM ISD
LITTLE ELM, TX

BUILDING FOR SPORTS FROM START TO FINISH

1-800-233-5714 | hellas.com

kickabout®

PILE WEIGHT	60-75 oz./sq. yd.
PILE HEIGHT	1.25” – 1.5″ (+/- 1/8″)
TURF FIBERS	1 monofilament, 1 secondary
RESIN	Polymer LLDPE
BLADE SHAPE	2 blade shapes, 2 colors + secondary fiber in 2 colors

Kickabout® playing surfaces are made using a monofilament fiber with a secondary texturized layer. Every manufactured turf system is rigorously tested under extreme conditions and simulates the look and feel of natural grass, while withstanding heavy usage and severe weather elements.

STANDARD COLORS

- FIELD GREEN
- APPLE GREEN

CUSTOM COLORS*

- CRIMSON
- ARMY OLIVE
- YELLOW
- GOLD
- CAMEL
- ORANGE
- TERRA COTTA
- RED
- MAROON
- BROWN
- FLORIDA BLUE
- NAVY BLUE
- PURPLE
- SILVER
- BLACK
- WHITE

*PLEASE NOTE: Printed colors may vary. Custom colors available upon request and additional charges may apply.

KICKABOUT PLAYING SURFACE BENEFITS

Customizable size from 2,000 to 20,000 sq. ft., made to fit your existing space.

Surface stays safe, dry, and ready for fun with no downtime after severe weather.

Low-maintenance turf requires little to no water, no mowing.

Additional shock pads can be added for extra safety, even under existing playground equipment.

Ignites physical education programs, making it a great fitness and wellness solution.

A variety of sports, games, and colors can be included on the surface.


BOKENKAMP CHILDREN’S CENTER
CORPUS CHRISTI, TX


LITTLE ELM ISD
LITTLE ELM, TX

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2.4.25

REALGRASS®

Hellas®
A TENCATE COMPANY

REALGRASS TURF

Realgrass® consists of lifelike individual blades of grass, tufted into the strongest and most dimensionally stable backing system available with a polyurethane pre-coat for the ultimate in tuft-bind, which creates unmatched dimensional stability. Realgrass is a fully UV stabilized system ideal for outdoor use.

THE STAR – COWBOYS TOSTITOS CHAMPIONSHIP PLAZA
FRISCO, TX

BUILDING FOR SPORTS FROM START TO FINISH

1-800-233-5714 | hellas.com

REALGRASS®

PILE WEIGHT	55 - 80 oz./sq. yd.
PILE HEIGHT	1.0” – 1.25” (+/- 1/8”)
TURF FIBERS	1 monofilament, 1 secondary
RESIN	Polymer LLDPE
BLADE SHAPE	1 blade shape, 3 colors + secondary fiber in 2 colors

REALGRASS® TURF FIBERS

Realgrass is a strong fiber that provides excellent performance, longevity, and aesthetics.

K29 BACKING

The fibers are tufted into a multi-layer warp-knitted durable backing.

SEAM LOCK

A durable, eco-friendly, and non-toxic adhesive for exceptionally strong system seams.

DRAINSTONE

The foundation for every Hellas turf system is a free-draining stone base, which allows for superior water migration, stability, and field planarity.

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2.10.25

epiQ TRACKS® COLOR OPTIONS

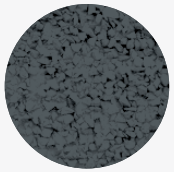
Hellas®
A TENCATE COMPANY

STANDARD COLORS

BLACK
RAL 9004

RED
RAL 3016

CUSTOM COLORS



DARK GRAY
RAL 7011

MIDDLE GRAY
RAL 7037

GRAY
RAL 7038

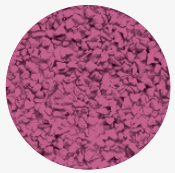
BROWN
RAL 8025

BEIGE BROWN
RAL 8024

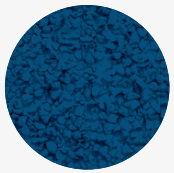
BRIGHT RED
RAL 3017

BRIGHT ORANGE
RAL 2008

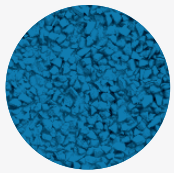
LILAC
RAL 4005



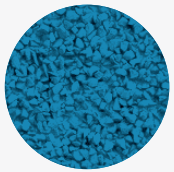
PINK
RAL 4003



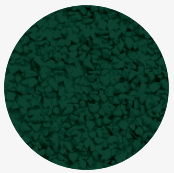
DARK BLUE
RAL 5010



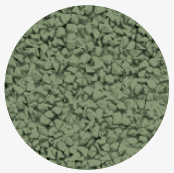
BLUE
RAL 5015



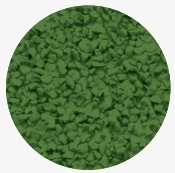
BRIGHT BLUE
RAL 5012



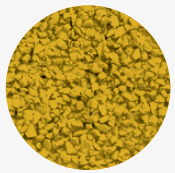
DARK GREEN
RAL 6005



GREEN
RAL 6021

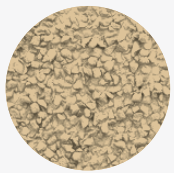


BRIGHT GREEN
RAL 6017

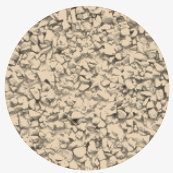


BRIGHT YELLOW
RAL 1012

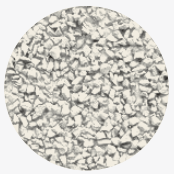
YELLOW
RAL 1002



BEIGE
RAL 1014



EGGSHELL
RAL 1015

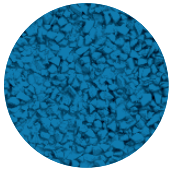


WHITE
RAL 9010

PLEASE NOTE:
Actual material color may vary. Colors other than black and red require additional lead times and added costs.

BLACK

RAL 9004



BLUE

RAL 5015

ANDOVER
HIGH SCHOOL
ANDOVER, KS

* Custom colors available upon request.
Additional charges may apply.

epiQ TRACKS®

FASTER. SMARTER. STRONGER.

6.3.24

epiQ TRACKS® G4000

Hellas®
A TENCATE COMPANY

G4000 epiQ TRACKS® SYSTEM

FASTER. SMARTER. STRONGER.

The **G4000** is similar in design and functionality to the Z5000, but thinner in composition. It uses eco-friendly, non-petroleum-based materials for its poured-in-place, multi-layered application. This grand performance system is ideal for high-exposure high school or collegiate facilities.

HILLCREST HIGH SCHOOL
MIDVALE, UT

ANDREWS HIGH SCHOOL
ANDREWS, TX

BUILDING FOR SPORTS FROM START TO FINISH

1-800-233-5714 | hellas.com

epiQ TRACKS® G4000

DEPTH 13mm

TYPE Full-Pour System

LIFESPAN 10–11 years, with maintenance

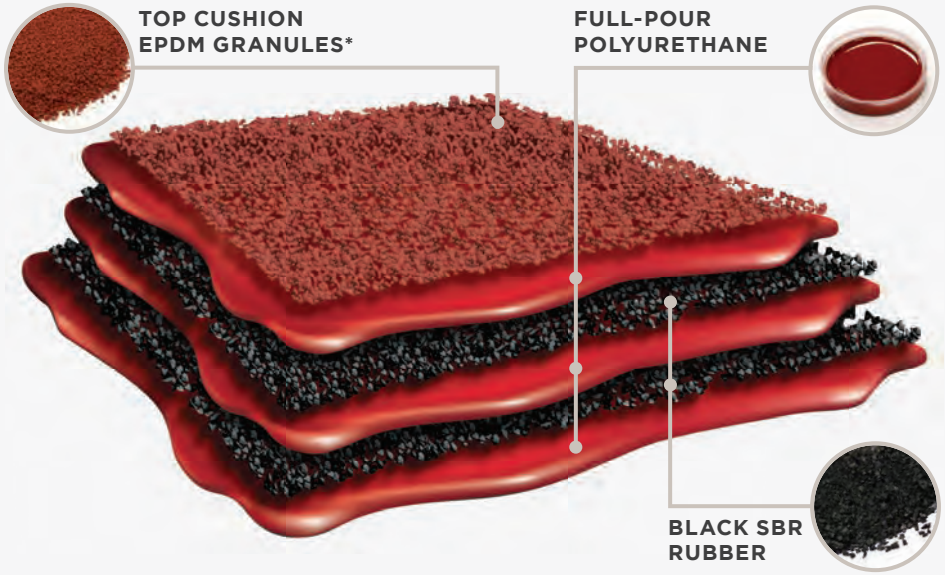
ECO-FRIENDLY Non-petroleum-based materials.
Contains plant-based components

G4000 epiQ TRACKS® SURFACE

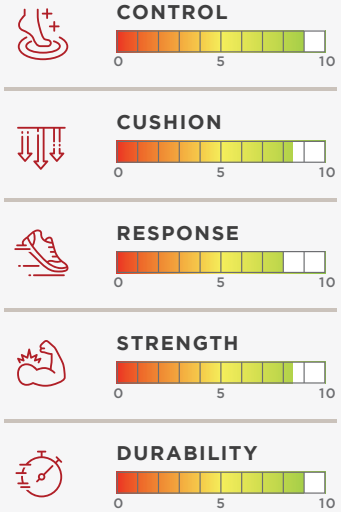
The G4000 track surface is an impermeable, poured-in-place surface, comprised of two base layers of polyurethane and rubber granules. The top layer is a flow-applied layer of matching, pigmented polyurethane and embedded EPDM rubber granules. This 13 mm surface is pliable, textured, and all-weather resistant. Our Eco-Manufacturing Process (EMP) uses superior, non-petroleum-based raw materials and "green" technology to produce the most environmentally friendly running track systems.

SYSTEM PERFORMANCE

Thickness	Average ≥ 13 mm or as specified
Force Reduction	35–50%
Modified Vertical Deformation	0.6 mm–2.5 mm
Friction TRRL Skid Resistance	> 47
Tensile Strength	> 0.5 MPa
Elongation at Break	≥ 40%



*Other colors available



epiQ TRACKS® RATING SYSTEM

The epiQ Tracks rating system is a standardized reflection of calculations based on independent research, third-party testing performed on equivalent track surfaces, and the system's actual measurements of thickness, tensile strength, product manufacturing techniques, and system specifications.

1-800-233-5714 | hellas.com

9.30.24

epiQ TRACKS® Q3000

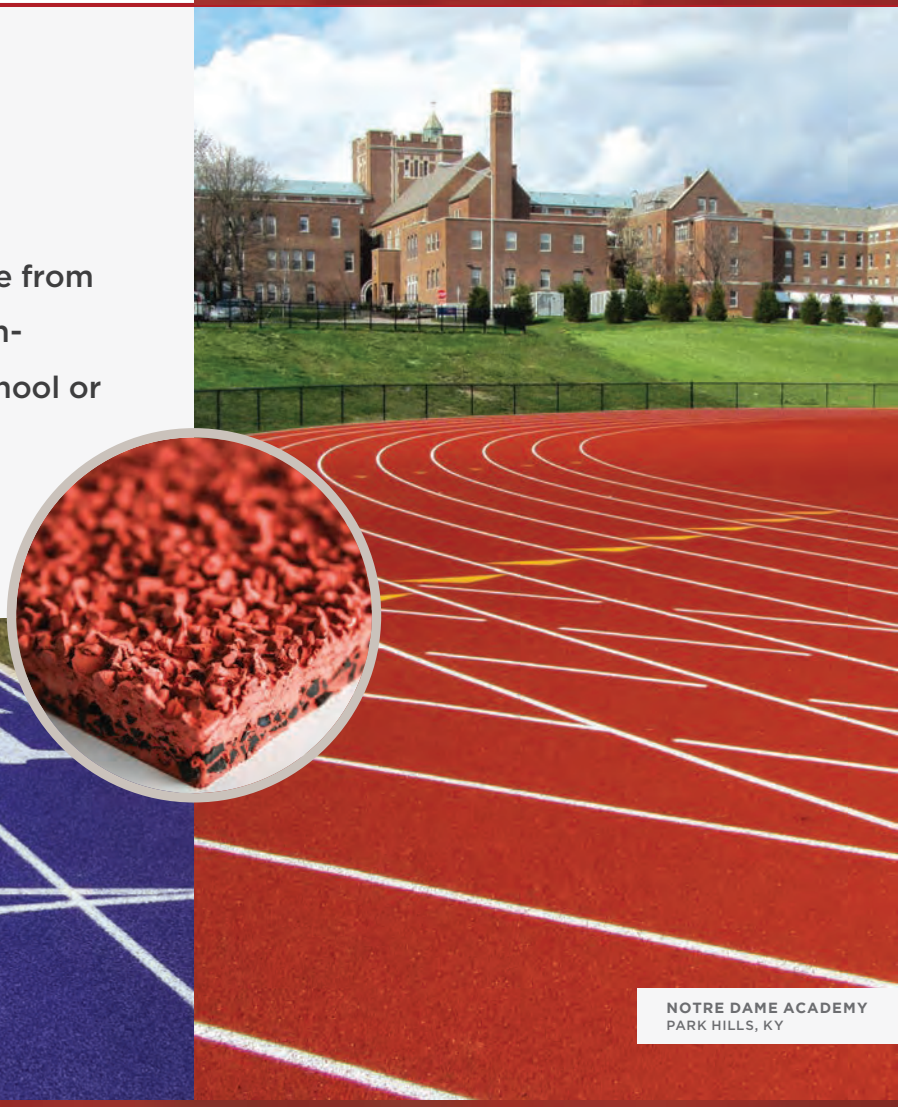
Hellas®
A TENCATE COMPANY

Q3000 epiQ TRACKS® SYSTEM

FASTER. SMARTER. STRONGER.

The **Q3000** is the preferred, high-quality performance track system, made from eco-friendly, non-petroleum-based materials. It is impermeable, poured-in-place, and installed in a multi-layered application. This results in a high school or collegiate track that is both durable and resilient.

MILLSAPS COLLEGE
JACKSON, MS



NOTRE DAME ACADEMY
PARK HILLS, KY

BUILDING FOR SPORTS FROM START TO FINISH

1-800-233-5714 | hellas.com | epiqtracks.com

epiQ TRACKS® Q3000

DEPTH 10 mm

TYPE Full-Pour System

LIFESPAN 9–11 years, with maintenance

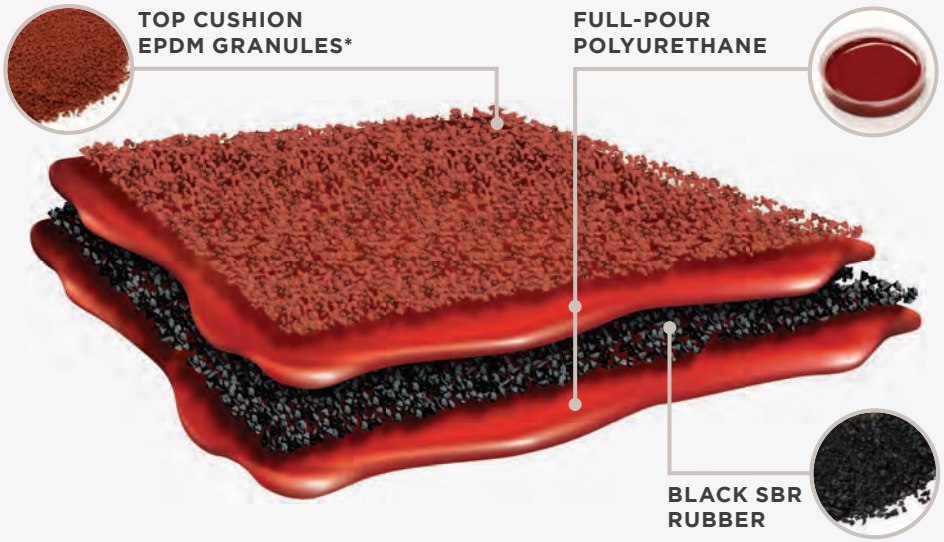
ECO-FRIENDLY Non-petroleum-based materials.
Contains plant-based components

Q3000 epiQ TRACKS® SURFACE

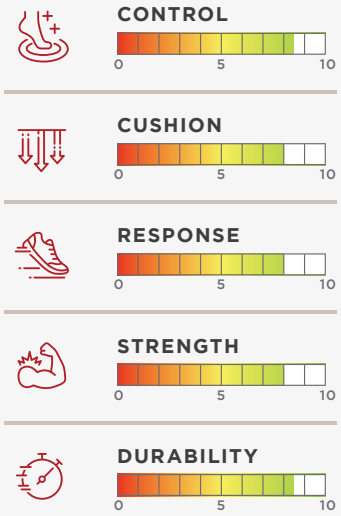
The Q3000 track surface is an impermeable, poured-in-place, 10 mm surface, comprised of a base layer of polyurethane and embedded rubber granules. A top coat of polyurethane is then applied. A final layer of red EPDM rubber is embedded. Our Eco-Manufacturing Process (EMP) uses superior, non-petroleum-based raw materials and "green" technology to produce the most environmentally friendly running track systems.

SYSTEM PERFORMANCE

Thickness	Average ≥ 10 mm or as specified
Force Reduction	20–50%
Modified Vertical Deformation	0.6 mm–2.5 mm
Friction TRRL Skid Resistance	> 47
Tensile Strength	> 0.5 MPa
Elongation at Break	≥ 40%



*Other colors available at an additional cost



epiQ TRACKS® RATING SYSTEM

The epiQ Tracks rating system is a standardized reflection of calculations based on independent research, third-party testing performed on equivalent track surfaces, and the system's actual measurements of thickness, tensile strength, product manufacturing techniques, and system specifications.

1-800-233-5714 | hellas.com

9.30.24

epiQ TRACKS® S200

WORLD ATHLETICS CERTIFIED PRODUCT

Hellas®

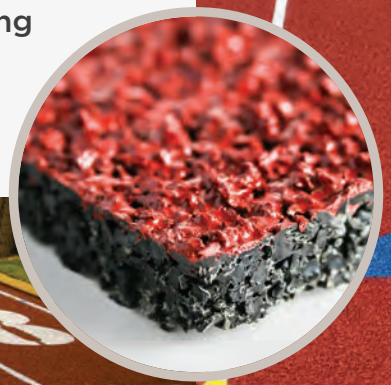
A TENCATE COMPANY

S200 epiQ TRACKS® SYSTEM

FASTER. SMARTER. STRONGER.

The **S200** is the fundamental running track system suitable for any facility, from elementary to junior high school. This porous, paved-in-place surface is made from eco-friendly, non-petroleum-based materials. Hellas quality, installation, and after-the-sale service make epiQ Tracks the best choice for any running track project.

AUBREY HIGH SCHOOL
AUBREY, TX



BELLS HIGH SCHOOL
BELLS, TX

BUILDING FOR SPORTS FROM START TO FINISH

1-800-233-5714 | hellas.com

epiQ TRACKS® S200

DEPTH 13 mm

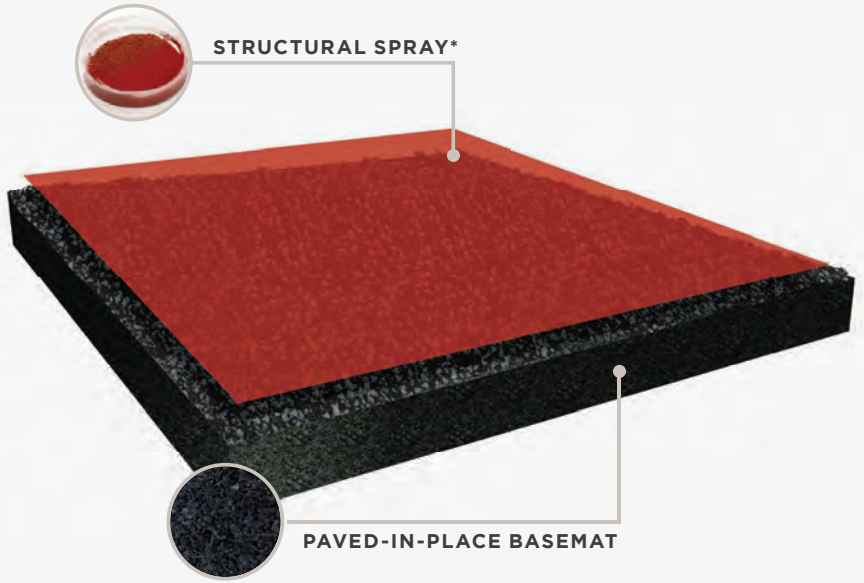
TYPE Paved-in-place, porous

LIFESPAN 7–9 years, with maintenance

ECO-FRIENDLY Non-petroleum-based materials.
Contains plant-based components

S200 epiQ TRACKS® SURFACE

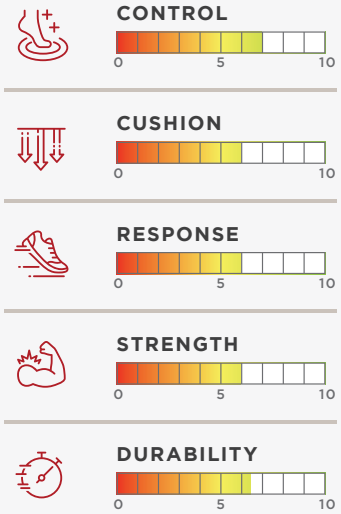
The S200 track surface is a porous, paved-in-place surface, comprised of a bottom layer of polyurethane-bound rubber granules topped with a spray-applied coat of polyurethane. Our Eco-Manufacturing Process (EMP) uses superior, non-petroleum-based raw materials and "green" technology to produce the most environmentally friendly running track systems.



*Other colors available at an additional cost

SYSTEM PERFORMANCE

Thickness	1/2" (13 mm) or as specified
Shore A Hardness (ASTM D-2240)	55 +/-5
Elongation at Break (ASTM D-412)	≥ 40%
Tensile Strength (ASTM D-412)	0.75 N/mm² at 70°F
Compression Set Recovery (ASTM D-412)	90–95% at 70°F over a 24-hour period
Abrasion Resistance (ASTM D-501)	0.25 grams loss after 1000 cycles
Chalking (ASTM D-822)	No change after 1000 hours in weather meter
Coefficient of Friction (ASTM D-1984)	Dry: 0.70–0.75 / Wet: 0.60–0.65
Resilience (ASTM D-2632)	37–39%
Tear Resistance (ASTM D-624)	50–65 psi



epiQ TRACKS® RATING SYSTEM

The epiQ Tracks rating system is a standardized reflection of calculations based on official test data (for World Athletics certified products), independent research, third-party testing performed on equivalent track surfaces, and the system's actual measurements of thickness, tensile strength, product manufacturing techniques, and system specifications.

1-800-233-5714 | hellas.com

9.30.24

epiQ TRACKS® V300

WORLD ATHLETICS CERTIFIED PRODUCT

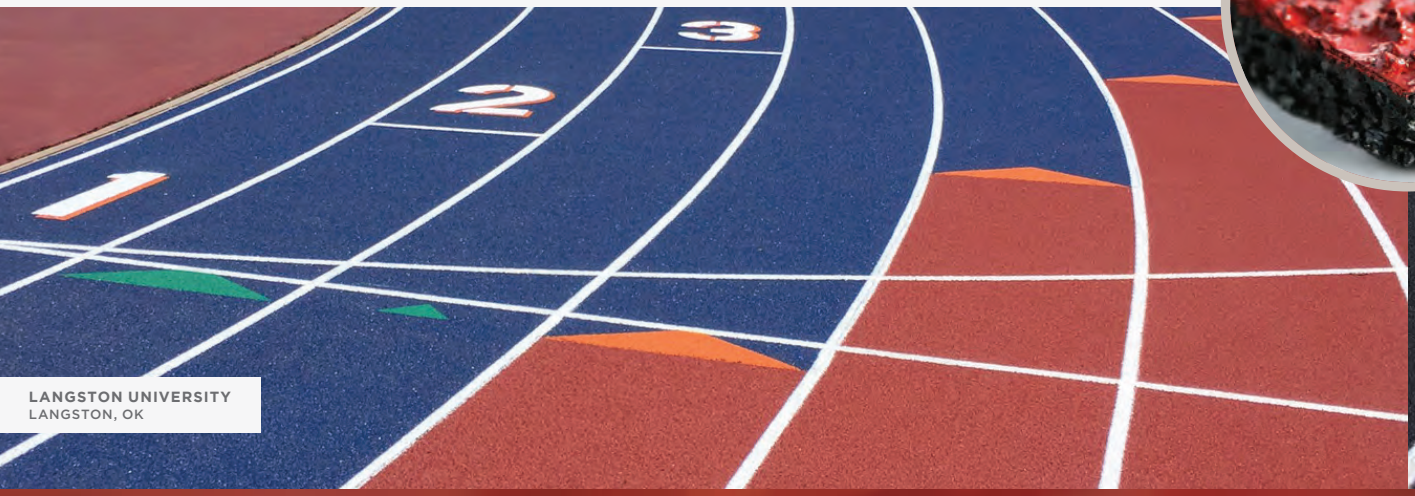
Hellas®

A TENCATE COMPANY

V300 epiQ TRACKS® SYSTEM

FASTER. SMARTER. STRONGER.

The **V300** is the premier running track system for any high-traffic facility. This impermeable, paved-in-place surface, made from eco-friendly, non-petroleum-based materials, uses a proprietary and technologically advanced sealer for a superior, long-lasting sports surface.



LANGSTON UNIVERSITY
LANGSTON, OK

SANGER HIGH SCHOOL
SANGER, TX

BUILDING FOR SPORTS FROM START TO FINISH

1-800-233-5714 | hellas.com

epiQ TRACKS® V300

DEPTH 13 mm

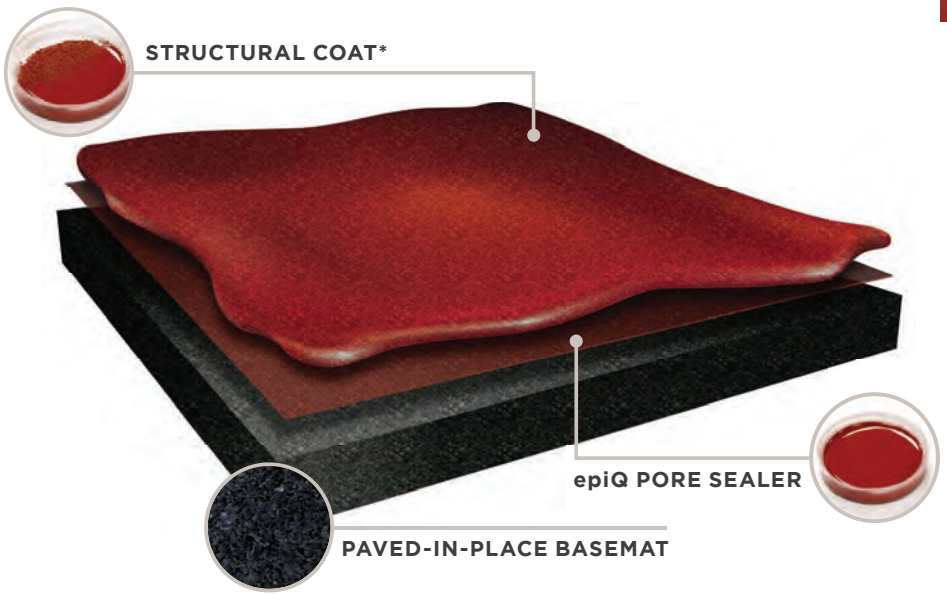
TYPE Paved-in-place, impermeable

LIFESPAN 8–10 years, with maintenance

ECO-FRIENDLY Non-petroleum-based materials. Contains plant-based components

V300 epiQ TRACKS® SURFACE

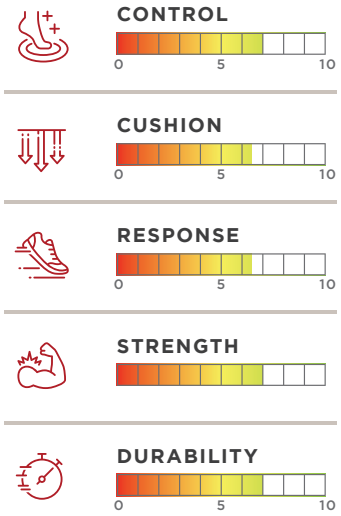
The V300 track surface is an impermeable, paved-in-place surface, comprised of a bottom layer of polyurethane-bound rubber granules topped with a spray-applied coat of polyurethane. The proprietary epiQ Tracks Single Cast Sealer (SCS) is then applied. This unique technological innovation creates a thixotropic effect, seamlessly binding the track into one single layer and sealing all the pores better than the traditional rubber dust application that merely coats the surface. Our Eco-Manufacturing Process (EMP) uses superior, non-petroleum-based raw materials and "green" technology to produce the most environmentally friendly running track systems.



*Other colors available at an additional cost

SYSTEM PERFORMANCE

Thickness	1/2" (13 mm) or as specified
Shore A Hardness (ASTM D-2240)	55 +/-5
Elongation at Break (ASTM D-412)	≥ 40%
Tensile Strength (ASTM D-412)	0.80 N/mm² at 70°F
Compression Set Recovery (ASTM D-412)	90-95% at 70°F over a 24-hour period
Abrasion Resistance (ASTM D-501)	0.25 grams loss after 1000 cycles
Chalking (ASTM D-822)	No change after 1000 hours in weather meter
Coefficient of Friction (ASTM D-1984)	Dry: 0.70–0.75 / Wet: 0.60–0.65
Resilience (ASTM D-2632)	38–42%
Tear Resistance (ASTM D-624)	60–75 psi



epiQ TRACKS® RATING SYSTEM

The epiQ Tracks rating system is a standardized reflection of calculations based on official test data (for World Athletics certified products), independent research, third-party testing performed on equivalent track surfaces, and the system's actual measurements of thickness, tensile strength, product manufacturing techniques, and system specifications.

1-800-233-5714 | hellas.com

9.30.24

epiQ TRACKS® X1000

WORLD ATHLETICS CERTIFIED PRODUCT

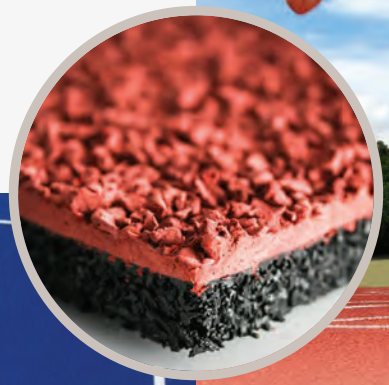
Hellas®

A TENCATE COMPANY

X1000 epiQ TRACKS® SYSTEM

FASTER. SMARTER. STRONGER.

The **X1000** is one of our premium World Athletics certified running track systems and is made from eco-friendly, non-petroleum-based materials. This impermeable, paved-in-place surface uses a proprietary and technologically advanced sealer that creates a superior, long-lasting sports surface.



PASCAGOULA HIGH SCHOOL
PASCAGOULA, MS

WESTERN OREGON UNIVERSITY
MONMOUTH, OR

BUILDING FOR SPORTS FROM START TO FINISH

1-800-233-5714 | hellas.com | epiqtracks.com

epiQ TRACKS® X1000

DEPTH 13 mm

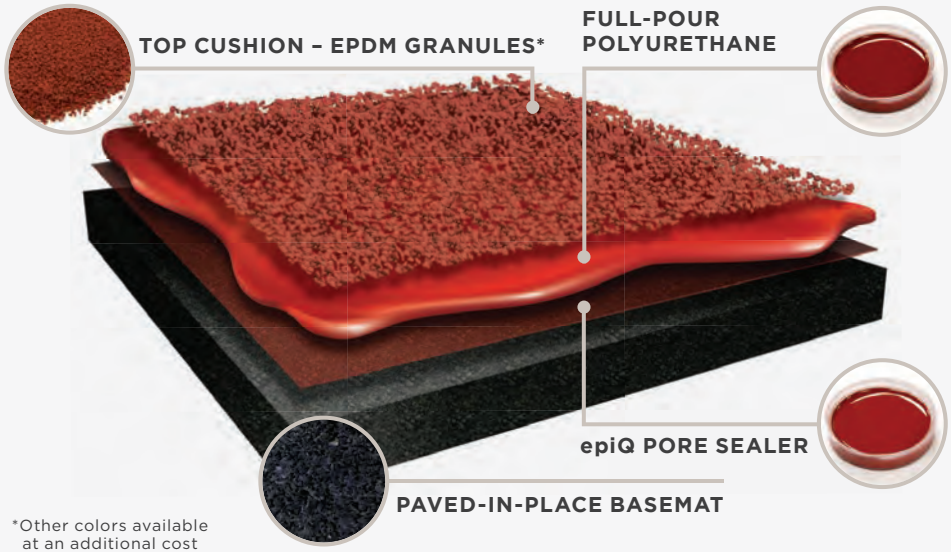
TYPE Sandwich system, impermeable

LIFESPAN 9–11 years, with maintenance

ECO-FRIENDLY Non-petroleum-based materials.
Contains plant-based components

X1000 epiQ TRACKS® SURFACE

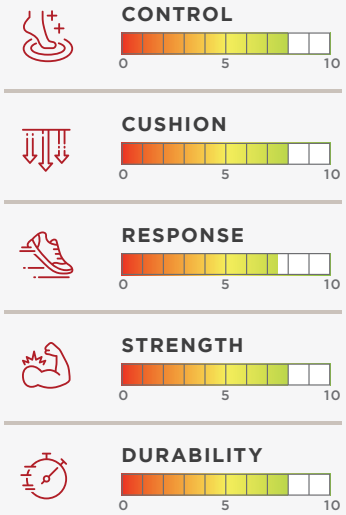
The X1000 track surface is an impermeable, paved-in-place surface, comprised of graded SBR granules, bonded with a polyurethane binder. The top layer is a combination of colored EPDM granules and similarly colored polyurethane, providing a finished surface that looks identical to our top of the line epiQ Tracks Z5000 surface. The proprietary epiQ Tracks Single Cast Sealer (SCS) is then applied. This unique technological innovation creates a thixotropic effect, seamlessly binding the track into one single layer and sealing all the pores better than the traditional rubber dust application that merely coats the surface. The X1000 is superior for any high-traffic facility. Our Eco-Manufacturing Process (EMP) uses superior, non-petroleum-based raw materials and "green" technology to produce the most environmentally friendly running track systems.



*Other colors available at an additional cost

SYSTEM PERFORMANCE

Thickness	Average ≥ 13 mm or as specified
Force Reduction	35–50%
Modified Vertical Deformation	0.6 mm–2.5 mm
Friction TRRL Skid Resistance	> 47
Tensile Strength	> 0.5 MPa
Elongation at Break	40%



epiQ TRACKS® RATING SYSTEM

The epiQ Tracks rating system is a standardized reflection of calculations based on official test data (for World Athletics certified products), independent research, third-party testing performed on equivalent track surfaces, and the system's actual measurements of thickness, tensile strength, product manufacturing techniques, and system specifications.

1-800-233-5714 | hellas.com

9.30.24

epiQ TRACKS® Z5000

WORLD ATHLETICS CERTIFIED PRODUCT

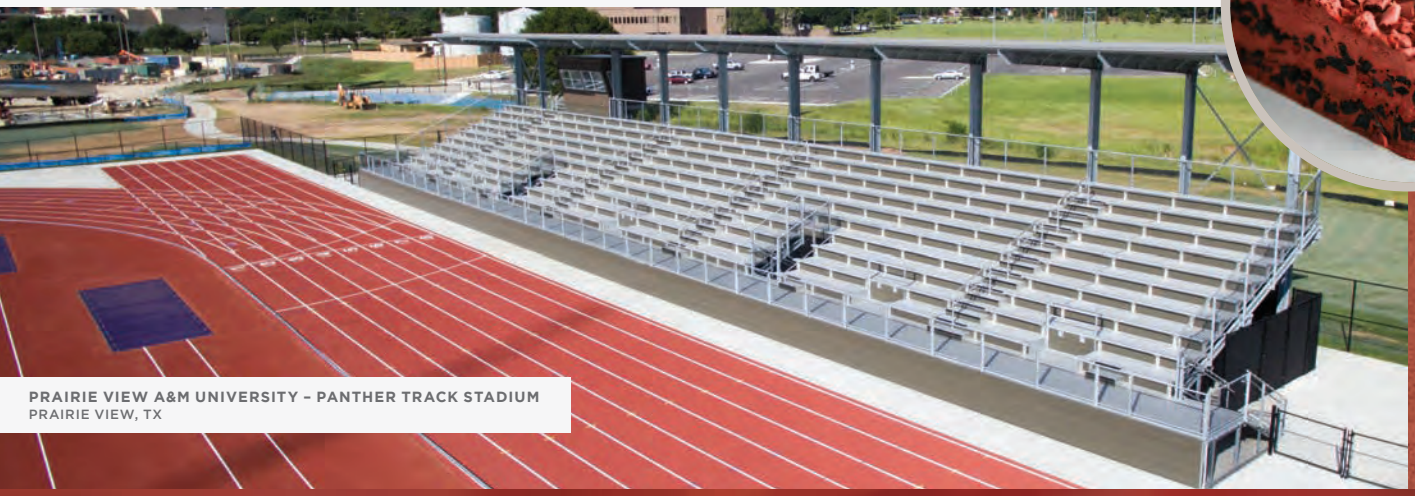
Hellas®

A TENCATE COMPANY

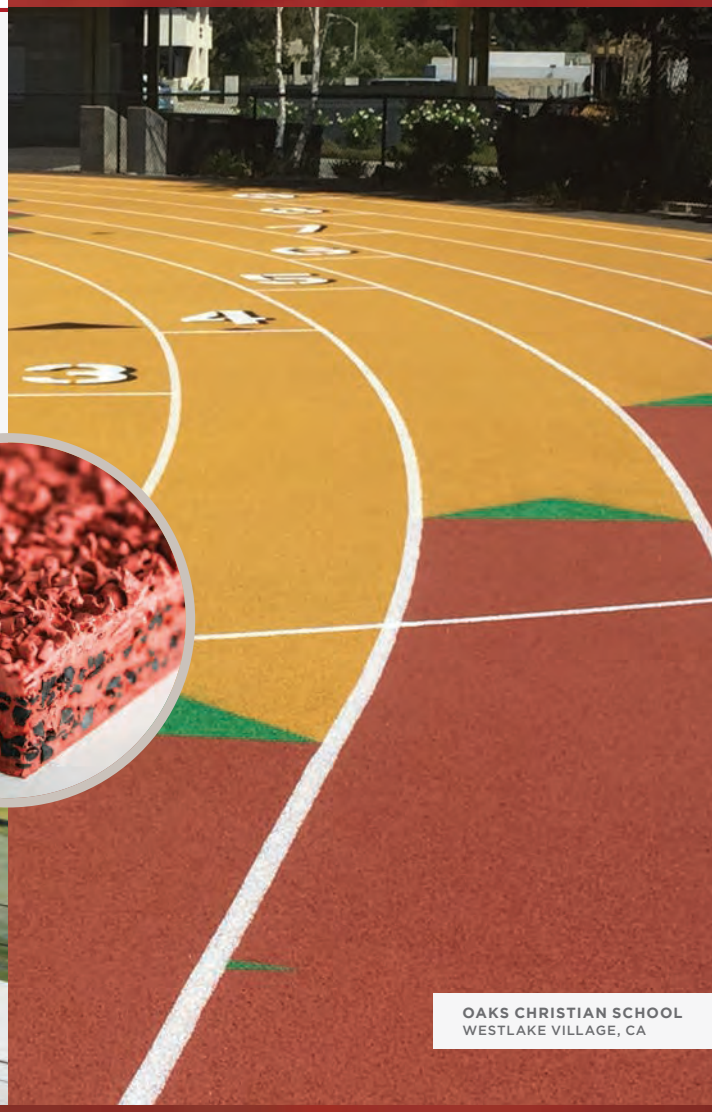
Z5000 epiQ TRACKS® SYSTEM

FASTER. SMARTER. STRONGER.

The **Z5000** is an Olympic quality, World Athletics certified track system that has all-encompassing superiority of cushion, control, energy return, and performance, perfect for major venues. It's eco-friendly, poured-in-place in multi-layers, resulting in a resilient, all-weather surface resistant to the elements.



PRAIRIE VIEW A&M UNIVERSITY – PANTHER TRACK STADIUM
PRAIRIE VIEW, TX



OAKS CHRISTIAN SCHOOL
WESTLAKE VILLAGE, CA

BUILDING FOR SPORTS FROM START TO FINISH

1-800-233-5714 | hellas.com | epiqtracks.com

epiQ TRACKS® Z5000

DEPTH 13 mm

TYPE Full-Pour System

LIFESPAN 10–12 years, with maintenance

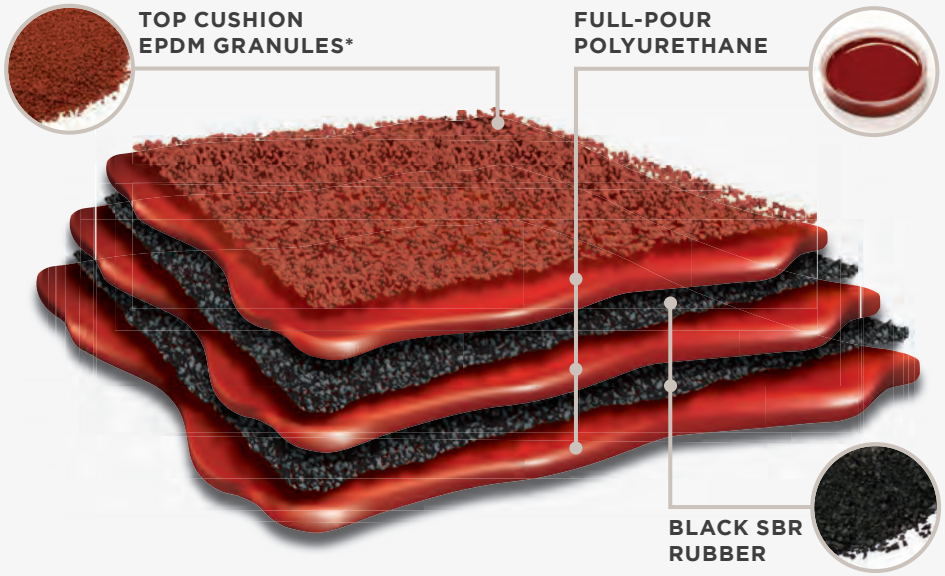
ECO-FRIENDLY Non-petroleum-based materials.
Contains plant-based components

Z5000 epiQ TRACKS® SURFACE

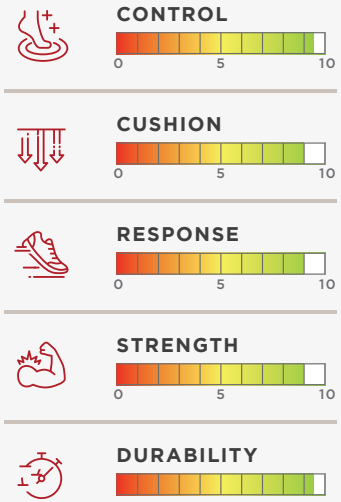
The Z5000 track surface is an impermeable, poured-in-place surface, comprised of a base layer of polyurethane, followed by SBR rubber, a middle layer of polyurethane/SBR and a top layer of flow-applied polyurethane. Finally, the track is broadcast with EPDM rubber. This 13 mm (to match World Athletics Certification) surface is durable, textured, energy-absorbing, and can resist UV degradation, abrasion, shrinkage, and mold. Our Eco-Manufacturing Process (EMP) uses superior, non-petroleum-based raw materials and "green" technology to produce the most environmentally friendly running track systems.

SYSTEM PERFORMANCE

Thickness	Average ≥ 13 mm or as specified
Force Reduction	35–50%
Modified Vertical Deformation	0.6 mm–2.5 mm
Friction TRRL Skid Resistance	> 47
Tensile Strength	> 0.5 MPa
Elongation at Break	≥ 40%



*Other colors available at an additional cost



epiQ TRACKS® RATING SYSTEM

The epiQ Tracks rating system is a standardized reflection of calculations based on official test data (for World Athletics certified products), independent research, third-party testing performed on equivalent track surfaces, and the system's actual measurements of thickness, tensile strength, product manufacturing techniques, and system specifications.

1-800-233-5714 | hellas.com

6.3.24

Stobitan®

PURe SPEED®

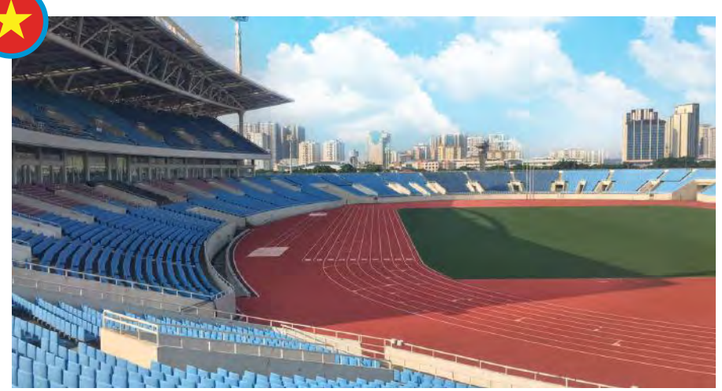
STOCKMEIER URETHANES

Stobitan®

Stobitan® has been installed worldwide since 1991 and is available in a variety of systems. These systems offer secure running grip, optimum fall protection and elasticity that promotes speed. All of the systems offered within the Stobitan® series are a combination of our highly trusted and durable Stobielast® S product line.

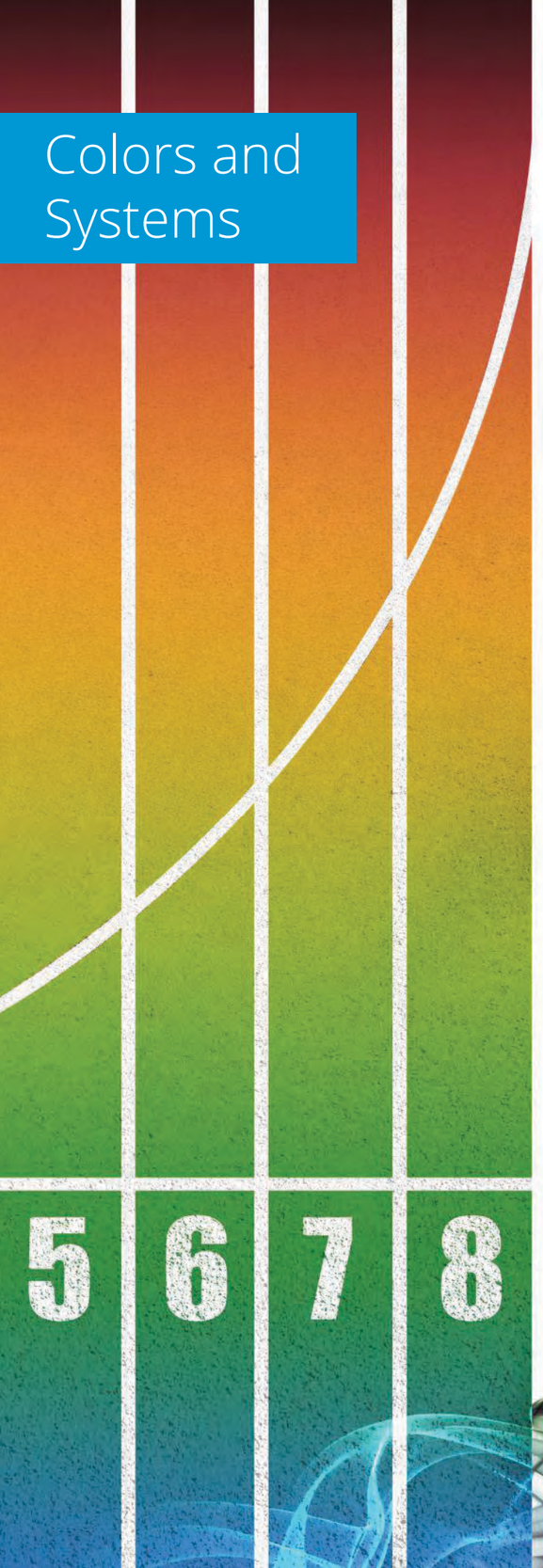
www.stockmeier-urethanes.com

Bislett Stadium
Oslo, Norway
Photo courtesy of LAIDERZ ApS
www.laiderz.no
Stobitan® SC



Track and Field Athletics of the Central Stadium- National Sports Complex
Hanoi, Vietnam
Photo courtesy of Quang Tuyen Sports Co. Ltd.
www.quangtuyensports.com.vn
Stobitan® SW

Parc-école de l'Odyssée-des-Jeunes
Ville de Laval • Québec, Canada
Photo courtesy of Carpell Surfaces
www.Carpell.com
Stobitan® SW



Colors and Systems

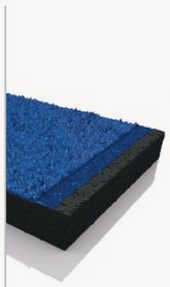
Stobitan® is Brilliant

The symbolism of color is one of the most thrilling aspects of making your track unique. At STOCKMEIER Urethanes, our color options enhance the meaning of your design by fostering emotions of happiness, excitement, and pride, that your athletes and community will be proud of. Frame your field with brilliancy so that it is as radiant as your athletes during their victory lap.

Stobitan® is The Right Track

From high school training to world class competitions – Stobitan® surfaces provide ideal properties to exceed your expectations by using our crafted Stobielast® S products.

- Superior wear resistance
- High energy return
- Spike tested
- Safety and longevity for athletes
- Recycled content
- Optimal mechanical properties
- Heavy metal/mercury free
- Quality tested, always

	Stobitan® Full Pour System	**Stobitan® XS** Full PUR System	**Stobitan® SW** Sandwich System	**Stobitan® SSC** Sealed Basemat and Spray Coat	**Stobitan® SC** Basemat and Spray Coat
					
World Athletics Certified	✓	✓	✓	✓	✓
EN 14877	✓	✓	✓		✓
DIN 18035-6	✓		✓		✓
UL GREENGUARD Certified	✓	✓	✓	✓	✓
UL GREENGUARD Gold Certified	✓	✓	✓	✓	✓
LEED® Credits Certified	✓		✓	✓	✓
Impermeable Surface	✓	✓	✓	✓	
Permeable Surface					✓
Encapsulation Option	✓	✓	✓		

Contact us about our UL GREENGUARD and GREENGUARD Gold certified products.

Stobitan® Water-based Solutions

Revitalizing Your Venue

Colors need to be radiant. Bring color back to your track by installing a Stobitan® water-based spray coating with excellent properties ensuring color stability and longevity. Our systems are not only designed to build new sport surfaces, but to revitalize an existing running track surface breathing new life and team spirit into your facility. We can cater to your team colors so you can express your team spirit. It is a perfect way for you to stand out and to unite. Together, we will create that energizing spray of color that your athletes and community will continue representing with honor.

Vibrant and Eco-Friendly Technology

The Stobitan® water-based system creates a full coverage, eco-friendly spray coating to protect and revitalize your track bringing it back to its former glory. Your spray coating applies perfectly and precisely creating a high-quality, stunning track surface. Be bold and request an athletic complex that makes a statement for victory.

Choose Stobitan® to be your vehicle to success creating the right sports surface. Stobitan® with its Stobielast® components will enable you to create your home advantage.

Turf Underlayment Systems

Crumb rubber filled artificial turf sounds like the equivalent to a horse drawn cart in today's world. We have the "self-driving car" for your needs. Stobielast® products will take your field to the next level.

Removing the rubber infill or alternative materials such as cork out from the turf enables STOCKMEIER Urethane to create an adjustable underlayment. Combined with the right turf, Stobielast® products will absorb big impacts, reduce surface heat, allow water drainage, and provide a high traction surface for foot speed and stability. Our turf underlayment systems represent the most sustainable products and design in the industry, as they are paved insitu to outlast the turf.

Stobitan® EL: Single Layer Elastic Rubber System

Stobitan® ET: Single Layer Elastic Stone and Rubber System

Additional Featured Stobielast® Solutions

Stobigym®
Indoor Flooring

Stobisafe®
Safety Surface System

Stobiplay®
Multipurpose Sports and Leisure System

What do the above product lines and the Stobitan® running track and artificial turf underlayment surfaces have in common? High-quality Stobielast® S products from STOCKMEIER Urethanes.

Stobitan®

Stobitan® Track Record

STOCKMEIER Urethanes' co-founder Edwin Martinkat was one of the polyurethane pioneers in the rubberized running track industry throughout the world. He developed and perfected these creations throughout his career to provide premium products for the market. Stobitan® track and field systems have been installed worldwide since 1991 utilizing our trusted Stobielast® S components. With ISO 9001.2015 manufacturing and production plants in Germany, France, the United Kingdom, and the United States, STOCKMEIER Urethanes is continuously researching and developing high quality polyurethane systems to exceed the needs of every customer, every time, with The Smart Solution.

PURe SPEED®

Delivering Urethane Solutions Worldwide
www.stockmeier-urethanes.com

Concept and design: Skull House Group | US 06/2021

Stobitan® Base

Base Mat System

Cut Sheet

The Stobitan® Base Running Track System is a synthetic surface of 12mm thickness, water permeable and suitable for most levels of competition. The system consists of a paved in place base mat using rubber granules bound with a single component polyurethane binder. The surface has a non-textured finish.

INSTALLATION OF STOBITAN® BASE SYSTEM

ASPHALT AND CONCRETE PREPARATION

A. It is the responsibility of the asphalt-paving contractor to provide documentation that the paving meets those requirements set forth for asphalt paving. Additionally, the asphalt is to cure for a minimum of 28 days prior to synthetic surfacing being applied. Asphalt compaction tests are to be provided showing a compaction of 95% or greater. The asphalt will be checked with a 10-foot straight edge in all directions. Those areas not in conformance will be repaired and/or replaced by the paving contractor. Flooding the asphalt surface to locate irregularities is highly recommended.

B. All concrete work is to cure for a minimum of 45 days. No curing agents are to be used. Any concrete flat work such as run ups etc. will be checked as in 3.1.A.

C. All areas to receive synthetic surfacing are to be clean and free of any loose particles or foreign substances such as dirt, oil, grease, etc.

INSTALLATION OF STOBITAN® BASE SURFACING

A. Primer - All asphalt and concrete is primed using a mixture of polyurethane binder either S135 or S131.09 and solvent (1:1 w/w). Only the area to be covered within the working day should be primed to ensure a good bond to the base. Concrete base may require additional coating based on absorption rate of applied primer.

B. Base Layer – The base layer is a mixture of 1-4 mm SBR black rubber granules mixed in a mechanical mixer with a polyurethane binder, either S135 or S131.09. The materials are mixed until homogeneous. Mixing ratio is 100 parts rubber to 20 parts polyurethane. The prepared rubber and polyurethane are then paved in place using a heated mechanical screed paver, specially designed for this work, to an approximate depth of 11–12 mm.

C. All methods for mixing of products are to be approved by STOCKMEIER Urethanes and can be found on their Technical Data Sheet (TDS)

D. All labor shall be full time employees of the surfacing contractor.

LINE MARKINGS

A. All line marking paint is to be approved by the synthetic surfacing manufacturer.

B. All markings will be in accordance with the desires of the owner.

Revised March 2024

Stobitan® FP

Full Pour System

Cut Sheet

The Stobitan® running track system is a synthetic surface of a minimum 15 mm thickness, impermeable and suitable for all levels of competition. The system consists of three layers. The first and second layers consist of two component flow coat polyurethane materials with black SBR rubber granules scattered onto each layer prior to curing of the flow coat. The final layer consists of two component flow coat polyurethane materials with like colored EPDM rubber granules scattered onto the surface prior to curing of the flow coat. The finished surface is of the embedded type. Alternative top layer materials can be applied to achieve an encapsulated finish if desired. S154 is certified through USDA's Bio Based Preferred Program.

CUSTOM COLORS AVAILABLE

INSTALLATION OF STOBITAN® FULL POUR SYSTEM

ASPHALT AND CONCRETE PREPARATION

A. It is the responsibility of the asphalt-paving contractor to provide documentation that the paving meets those requirements set forth for asphalt paving. Additionally, the asphalt is to cure for a minimum of 45 days prior to synthetic surfacing being applied. Asphalt compaction tests are to be provided showing a compaction of 95% or greater. The asphalt will be checked with a 10-foot straight edge in all directions. Those areas not in conformance will be repaired and/or replaced by the paving contractor. Flooding the asphalt surface to locate irregularities is highly recommended.

B. All concrete work is to cure for a minimum of 45 days. No curing agents are to be used.

C. All areas to receive synthetic surfacing are to be clean and free of any loose particles or foreign substances such as dirt, oil, grease, etc.

INSTALLATION OF STOBITAN® SURFACING

A. Primer – All asphalt and concrete are primed using a mixture of polyurethane binder and solvent. Only the area to be covered within the working day should be primed to ensure a good bond to the base. Concrete base may require additional coating based on absorption rate of applied primer.

B. Base Layers – Two applications of double mixed polyurethane coating respectfully are applied with a notched squeegee. After the material has self-leveled and is still liquid, dry SBR rubber granules (1-4 mm) are broadcast into the surface to excess. After curing (hardening) the excess SBR granules are removed for reuse. Total surface thickness to be approx. 9-11mm.

C. Top Layer – One application of double mixed polyurethane coating is applied on top of the base layer with a notched squeegee. After the material has self-leveled and is still liquid, colored 1-3.5 mm EPDM rubber granules are broadcast into the surface to excess. After curing (hardening) the excess-colored EPDM granules are removed.

D. All methods for mixing of products are to be approved by STOCKMEIER Urethanes and can be found on their Technical Data Sheet (TDS).

E. All labor shall be full time employees of the surfacing contractor.

LINE MARKINGS

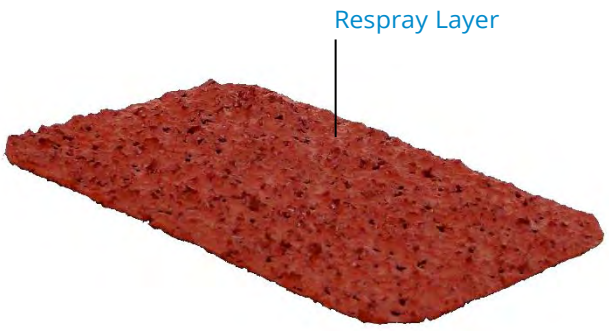
A. All line marking paint is to be approved by the synthetic surfacing manufacturer.

B. All markings will be in accordance with the appropriate governing body and the desires of the owner.

Stobitan®

Respray System

Cut Sheet



The Stobitan® respray running track system is a synthetic surface approximately 2mm thick, suitable for all levels of competition. The system consists of spraying multiple coats of pigmented polyurethane mixed with colored EPDM granules in opposite directions to achieve a uniform texture. The system fully meets the performance requirements for NFHS and the NCCA.

CUSTOM COLORS AVAILABLE

INSTALLATION OF STOBITAN® RESPRAY SYSTEM

SURFACE PREPARATION

Cleaning

The existing synthetic surface shall be cleaned to remove dirt, algae, and debris. The synthetic surfacing contractor will determine the best method of cleaning to achieve the desired results to promote a proper adhesion between the existing synthetic surface and the new synthetic surface.

Patching

The synthetic surfacing contractor will Identify areas to be corrected and use the appropriate methods and materials to achieve a sound uniform base to receive the new synthetic surface.

INSTALLATION

Primer

After the existing synthetic surface has been cleaned and free of debris, the appropriate primer is applied at a minimum rate of 0.28lbs/sy

Spray Coats

A specially designed spray machine is used to apply a minimum of two coats of pigmented polyurethane mixed with colored EPDM granules in opposite directions to achieve the desired thickness. The minimum granule size is 0.5mm and maximum granule size is 2.0mm.

Consumption rate is a minimum of 3.68lbs/sy (S127-2.21lbs and EPDM-1.47lbs)

Note: The Stobielast® S 127 spray coating may be applied over a tacky primer. When using the S 169 spray coating, the primer must be allowed to dry completely.

LINE MARKINGS

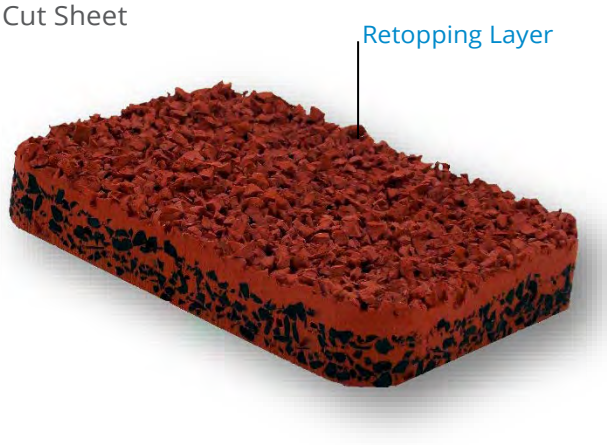
All line markings shall be accurately laid out and applied by an experienced contractor using approved line marking paint.

Revised May, 23

Stobitan®

Retopping System

Cut Sheet



The Stobitan® retopping running track system is designed to re-top an existing synthetic running track surface. A layer of pigmented polyurethane flow coat with embedded colored EPDM granules is applied to yield an approximate new finish thickness of 3-5mm. The finished surface is impervious and suitable for the highest levels of competition. It provides an excellent surface for traction and speed with its embedded finished surface. Alternative top layer materials can be applied to achieve an encapsulated finish if desired.

CUSTOM COLORS AVAILABLE

INSTALLATION OF STOBITAN® RETOPPING SYSTEM

Surface Preparation

A. It is recommended that the existing synthetic surface be cleaned to remove dirt, oil, grease and loose particles. The synthetic surfacing contractor shall determine the exact means and methods needed to achieve proper cleaning.

B. The synthetic surfacing contractor shall identify areas to be repaired and determine the appropriate methods and materials to perform such repairs.

C. All new asphalt areas must cure for a minimum of 28 days and new concrete areas must cure a minimum of 45 days before installation of new synthetic surfacing.

INSTALLATION OF STOBITAN® RETOPPING S

A. Primer – A primer shall be applied at a rate of 0.28lbs/sy over the existing synthetic surface prior to applying the retopping. Only apply primer to areas that can be resurfaced within one working day.

B. Resurface Layer – An application of double mixed Stobielast® pigmented polyurethane flow coating is applied over the existing primed synthetic surface using a notched squeegee or trowel. After the material has self-leveled and is still in a liquid form, colored 1.0-3.5 mm EPDM rubber granules are broadcast into the surface to excess. After curing (hardening) the excess-colored EPDM granules are removed. Finished surface depth shall be approximately 3-5mm depending on project specifications.

C. All methods for mixing of products are to be approved by STOCKMEIER Urethanes USA, Inc. and can be found on their Stobielast® Technical Data Sheet (TDS)

D. All labor shall have experience installing Stobitan® track systems and be full time employees of the synthetic surfacing contractor.

E. All used product containers shall be legally disposed of according to state and local regulations.

LINE MARKINGS

A. All line marking paint is to be approved by the synthetic surfacing manufacturer.

B. All markings will be in accordance with the appropriate governing bodies for the end user.

Revised January 23

Stobitan® SW

Sandwich System

Cut Sheet

The Stobitan® SW running track system is a multi-layer sandwich surface of minimum 13mm (14.7 mm for WA) thickness, impervious and suitable for the highest levels of competition. The system consists of a paved in place black rubber base mat, seal layer and a layer of pigmented Stobielast® S 154 polyurethane flow coat liquid with like colored EPDM rubber granules embedded into the coating. It provides an excellent surface for traction and speed with its embedded finished surface. Alternative top layer materials can be applied to achieve an encapsulated finish if desired. S 154 is certified through USDA's Bio Preferred program.

CUSTOM COLORS AVAILABLE

INSTALLATION OF STOBITAN® SW SYSTEM

ASPHALT AND CONCRETE PREPARATION

A. It is the responsibility of the asphalt-paving contractor to provide documentation that the paving meets those requirements set forth for asphalt paving. Additionally, the asphalt is to be cured for a minimum of 45 days prior to synthetic surfacing being applied. Asphalt compaction tests are to be provided showing a compaction of 95% or greater. The asphalt will be checked with a 10-foot straight edge in all directions. Those areas not in conformance will be repaired and/or replaced by the paving contractor. Flooding the asphalt surface to locate irregularities is highly recommended.

B. All concrete work is to be cured for a minimum of 45 days. No curing agents are to be used. Concrete moisture content is recommended to be checked prior to installation.

C. All areas to receive synthetic surfacing are to be clean and free of any loose particles or foreign substances such as dirt, oil, grease, etc.

INSTALLATION OF STOBITAN® SW SURFACING

A. Primer – The area of asphalt or concrete must be primed the same day the base layer is applied to ensure a good bond. A concrete base may require additional coating based on the absorption rate of applied primer.

B. Base Layers – The base layer is a mixture of 1-4 mm SBR black rubber granules mixed in a mechanical mixer with Stobielast® base polyurethane binder. The ingredients are mixed until homogeneous. The prepared rubber and polyurethane mix is then paved in place using a specially designed heated mechanical screed paver, to an approximate depth of 10-11 mm.

C. Seal Coat – The base layer is sealed by scraping a thixotropic mixture of a Stobielast® coating onto the surface to render it impermeable. The sealed surface must be checked for pin holes prior to further application. Primer is needed should seal layer be exposed to the elements for over 72 hours.

D. Top Layer – The Stobielast® 154 polyurethane coating is double mixed and applied at a depth of approximately 3-4mm over the base layer using a notched squeegee or trowel. After the material has self-leveled and is still in liquid form, colored 1.0-3.5 mm EPDM rubber granules are broadcast into the surface to excess. After curing (hardening) the excess-colored EPDM granules are removed.

E. All methods for mixing products are to be approved by STOCKMEIER Urethanes USA, Inc. and can be found on their Stobielast® Technical Data Sheet (TDS)

F. All laborers shall be full time employees of the surfacing contractor.

LINE MARKINGS

A. All line marking paint is to be approved by the synthetic surfacing manufacturer.

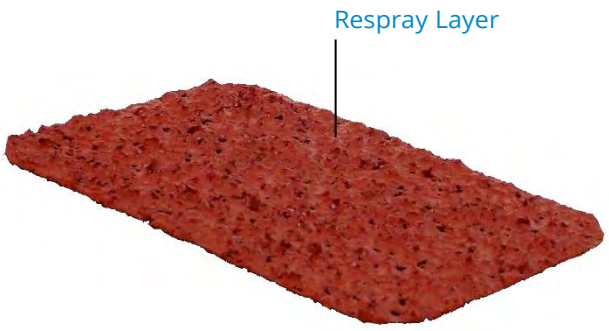
B. All markings will be in accordance with the appropriate governing bodies and desires of the owner.

Revised October 22; January 23

Stobitan®

Varnish Respray

Cut Sheet



The Stobitan® Varnish Respray is designed to bring back the vibrant color of your existing track surface. It is best suited where little or no repairs are necessary. The system fully meets the performance requirements for NFHS and the NCCA.

CUSTOM COLORS AVAILABLE

INSTALLATION OF STOBITAN® RESPRAY SYSTEM

SURFACE PREPARATION

Cleaning

The existing synthetic surface shall be cleaned to remove dirt, algae, and debris. The synthetic surfacing contractor will determine the best method of cleaning to achieve the desired results to promote a proper adhesion between the existing synthetic surface and the new synthetic surface.

Patching

The synthetic surfacing contractor will Identify areas to be repaired and use the appropriate methods and materials to achieve a sound uniform base to receive the new varnish spray coating.

INSTALLATION

Primer

After the existing synthetic surface has been cleaned, free of debris and repaired, an appropriate primer may be necessary to achieve proper bonding between the existing surface and the new varnish coat.
The Primer is applied at a minimum rate of 0.28lbs/sy using specialized spray equipment.

Spray Coats

A specialized spray machine using the appropriate tip size which can control the fluid pressure and fan pattern is used to apply a single coat of pigmented polyurethane varnish. A second varnish coat sprayed in the opposite direction may need to be applied to achieve the desired coverage.

The consumption rate is a minimum of 0.35lbs/sy per coat.

LINE MARKINGS

All line markings shall be accurately marked out and applied by an experienced striping contractor using approved line marking paint.

Revised October 2024

Stobitan® SC

Base Mat and Spray Coat System

Cut Sheet

The Stobitan® SC running track system is a synthetic surface of 13 mm thickness, water permeable and suitable for all levels of competition. The system consists of a paved in place black rubber base mat bound with polyurethane and coated with multiple applications of spray applied pigmented polyurethane and like colored fine EPDM rubber granules to produce a fine textured surface. The Stobitan® SC system has a finely granulated finish providing a soft, comfortable surface and is spike resistant.

CUSTOM COLORS AVAILABLE

INSTALLATION OF STOBITAN® SC SYSTEM

ASPHALT AND CONCRETE PREPARATION

A. It is the responsibility of the asphalt-paving contractor to provide documentation that the paving meets those requirements set forth for asphalt paving. Additionally, the asphalt is to cure for a minimum of 14 days prior to synthetic surfacing being applied. Asphalt compaction tests are to be provided showing a compaction of 95% or greater. The asphalt will be checked with a 10-foot straight edge in all directions. Those areas not in conformance will be repaired and/or replaced by the paving contractor. Flooding the asphalt surface to locate irregularities is highly recommended.

B. All concrete work is to cure for a minimum of 45 days. No curing agents are to be used.

C. All areas to receive synthetic surfacing are to be clean and free of any loose particles or foreign substances such as dirt, oil, grease, etc.

INSTALLATION OF STOBITAN® SC SURFACING

A. Primer - All asphalt and concrete is primed using a mixture of polyurethane binder and solvent. Only the area to be covered within the working day should be primed to ensure a good bond to the base. Concrete base may require additional coating based on absorption rate of applied primer.

B. Base Layer - The base layer is a mixture of 1-4 mm SBR black rubber granules mixed in a mechanical mixer with polyurethane binder. The materials are mixed until homogeneous. Mixing ratio is 100 parts rubber to 20 parts polyurethane. The prepared rubber and polyurethane are then paved in place using a heated mechanical screed paver, specially designed for this work, to an approximate depth of 11 - 12 mm.

C. Structural Spray Coat (two coats minimum) - is spray applied with air and volume-controlled spray equipment. Care is to be taken to provide an even surface without streaking. This is accomplished by reversing direction of application for the second spray coat. A mixture of a spray coat and 0.5-1.5 mm like colored EPDM rubber granules is prepared in a mortar mixer or similar mixing vessel. A small quantity of EPDM dust may be required, for viscosity control, to provide a thick liquid mix for spraying.

D. All methods for mixing of products are to be approved by STOCKMEIER Urethanes and can be found on their Technical Data Sheet (TDS)

E. All labor shall be full time employees of the surfacing contractor.

LINE MARKINGS

A. All line marking paint is to be approved by the synthetic surfacing manufacturer.

B. All markings will be in accordance with the desires of the owner.

Revised October 22

Stobitan® SSC

Sealed Mat and Spray Coat System

Cut Sheet

The Stobitan® SSC running track system is a synthetic surface of 13 mm thickness, impervious and suitable for all levels of competition. The system consists of a paved in place black rubber base mat bound with polyurethane, a seal layer to make the surface impervious and multiple applications of spray applied pigmented polyurethanes and like colored fine EPDM rubber granules. The finished surface consists of a fine textured surface. The system has a finely granulated finish providing a soft, comfortable surface and is spike resistant.

CUSTOM COLORS AVAILABLE

INSTALLATION OF STOBITAN® SSC SYSTEM

ASPHALT AND CONCRETE PREPARATION

A. It is the responsibility of the asphalt-paving contractor to provide documentation that the paving meets those requirements set forth for asphalt paving. Additionally, the asphalt is to cure for a minimum of 28 days prior to synthetic surfacing being applied. Asphalt compaction tests are to be provided showing a compaction of 95% or greater. The asphalt will be checked with a 10-foot straight edge in all directions. Those areas not in conformance will be repaired and/or replaced by the paving contractor. Flooding the asphalt surface to locate irregularities is highly recommended.

B. All concrete work is to cure for a minimum of 45 days. No curing agents are to be used. Concrete moisture content is recommended to be checked prior to installation.

C. All areas to receive synthetic surfacing are to be clean and free of any loose particles or foreign substances such as dirt, oil, grease, etc.

INSTALLATION OF STOBITAN® SSC SURFACING

A. Primer - All asphalt and concrete are primed using a mixture of Stobielast® polyurethane binder and solvent. Only the area to be covered within the working day should be primed to ensure a good bond to the base. Concrete base may require additional coating based on absorption rate of applied primer.

B. Base Layer - The base layer is a mixture of 1-4 mm SBR black rubber granules mixed in a mechanical mixer with Stobielast® polyurethane binder. The materials are mixed until homogeneous. The prepared rubber and polyurethane are then paved in place using a heated mechanical screed paver, specially designed for this work, to an approximate depth of 11-12 mm.

C. Seal Coat – The base layer is sealed by scraping a thixotropic mixture of Stobielast® sealer onto the surface to render it impermeable. The sealed surface must be checked for pin holes prior to further application. Installations may require 10-20% more pore sealer due to the porosity of the base mat and the temperature at the time of installation. Primer is needed for top layer if exposed for over 72 hours.

D. Structural Spray Coat (two coats minimum) – Spray applied Stobielast® and like colored EPDM granules with air and volume-controlled spray equipment. Care is to be taken to provide an even surface without streaking. This is accomplished by reversing direction of application for the second spray coat

E. All methods for mixing of products are to be approved by STOCKMEIER Urethanes and can be found on their Technical Data Sheet (TDS)

F. All labor shall be full time employees of the surfacing contractor.

LINE MARKINGS

A. All line marking paint is to be approved by the synthetic surfacing manufacturer.

B. All markings will be in accordance with the desires of the owner.

Revised October 22

TenCate

INSTALLATION MANUAL

Applied Landscape Technologies

ACADEMY
SPORTS TURF

CONTENTS

[New England Baseball Complex - Northborough, MA]

MOST
FIFA
CERTIFIED FIELDS
WORLDWIDE

FIH PREFERRED SUPPLIER

FIFA QUALITY
Preferred Producer

INTRODUCTION

We would like to welcome you to the Tencate Installation team. At Tencate, we are committed to producing the world's most technologically advanced and innovative synthetic turf systems on earth. Tencate makes this possible with ongoing research and development efforts, our uncompromising commitment to total customer satisfaction, and with the help of our installers. Our innovative approach to building the best artificial turf systems is inspired by nature. Everything we make is designed to look and feel natural so that players and fans can have the best possible experience when using our products.

To maintain our competitive edge in the market, Tencate developed this installation manual composed of guidelines for a quality artificial turf installation. The manual is comprised of input from Tencate Operations department, R&D department, the FIFA team, and experienced installers. With the involvement of these groups, we can guarantee a high quality finished product for our customers.

This manual covers all the expectations Tencate installers should understand and meet when handling our artificial turf systems. Provided are approved techniques for seaming, inlay and infill as well as specific quality checks to use throughout the process.

We highly recommend members of your crew to attend any training opportunities offered by Tencate in your region to help with certification or for new procedures implemented. To become a certified installer, a minimum of three (3) crew members must attend a workshop and pass any exam provided.

This manual is required to be available to crew members on the job site.

We look forward to you being a part of continuing success at Tencate.

[SAFETY]

Safety for our employees and affiliates is of utmost importance to Tencate. If a jobsite possesses unsafe working conditions, installation teams will not be allowed to proceed.

On the project site, installers are expected to wear all Personal Protective Equipment (PPE) as mandated by OSHA regulations. This includes, but not limited to: safety shoes, ear protection when working with machinery, hard hats, safety vests, Z-87 rated eye protection and any other protection deemed necessary by the site superintendent. In some cases, special safety certificates are required to enter the job site. Tencate recommends that all installation crew members have at least an OSHA 10-hour certification. Other recommended certifications include a rough-terrain heavy forklift operator's license, and a heavy equipment operator certification.

Tencate requires an OSHA approved first aid kit available, fire extinguisher, and Material Safety Data Sheets on the project site AT ALL TIMES.

[Charlotte Motor Speedway]

[BEHAVIOR]

A professional attitude is expected from all Tencate installers. If installers are working a project on behalf of Tencate, it is expected that they behave appropriately according to general decorum standards. Rough housing, foul language, offensive hand gestures and clothing with inappropriate graphics will not be tolerated on a job site. Also, all Tencate representatives should refrain from interacting with bystanders that surround an active jobsite. Ensure non-installation personnel are not allowed onto the field or allowed to play on the field prior to project completion. Play prior to signature of the Certificate of Completion will negatively affect the warranty.

PREPARATIONS

[BEFORE DEPARTURE]

Before departure, installers should review the installer checklist as well as the standard installer equipment checklist (See jobsite package from assigned project manager). Essential information about the location (address) and type of field to install should be known. Review the site plan and determine what installation equipment is needed for the project. Ascertain if the field incorporates a shock pad system, if there are drawings available and if any additional materials are needed for installation of the pad. Ensure all crew members have appropriate credentials. It is best to prepare for unforeseen circumstances prior to mobilization so as not to waste available installation time.

Ensure the following are available prior to departure:

All equipment and tools required for the project.

Personal Protective Equipment for every crew member to be present on the site.

MSDS Sheets for all products required for installation.

Contact Information:

- Tencate project manager
- Local contact person/Client representative
- General Contractor/Superintendent

[University Of Arkansas: Pine Bluff]

Always ensure you have a phone connection. Send new contact information to the Tenacte Product Manager

TENCATE

[West Fields Regional Park]

[ARRIVAL AT INSTALLATION SITE]

Upon arrival at the job site several steps should be completed to ensure an efficient and swift installation. First, it is essential to make an overview of the site and the field. Installers must be familiar with the site to properly coordinate deliveries and material movement. Second, locate the client representative or superintendent. Discuss issues such as acceptable work hours, any special safety concerns or protocols on the site, staging room for both turf rolls and infill material, as well as appropriate areas for equipment and trailer storage.

Third, check the status of all materials and machinery scheduled to arrive on the site (confirm using the Site Plan and internal information). If materials or equipment are late or missing, report the issue to the Greenfields USA project manager listed on the site plan and engage with the necessary companies to gain insight on the problem.

Fourth, determine a strategic place where infill and the garbage container should be placed (Pictured below). Ideally this should be as close to the field as possible to reduce transportation time during installation. Be sure to consider the location of trucks for unloading and minimize distance from the unload to the staging area.

Finally, unload the work trailer or vehicle and ready turf moving equipment and field setup tools so they are available as material is delivered to the site.

Dividing tasks

In most cases you will be with two or more persons to do the preparations and installation of the field. Try to work efficient and divide tasks. E.g. when one person is helping to place the material at the right place, the second person can begin the field inspection.

[FIELD INSPECTION AND INITIAL SETUP]

Initial field setup and inspection are key to installing a quality field. The initial setup is meant to check the dimensions of the field and position the field in the correct way field and is also used to determine if any issues are present with drainage, planarity, or curbing. With a 300', metal, measuring tape, the dimensions of the field should be checked by measuring the distance between the curbs at, at least, 3 locations. Also, confirm that the dimensions correspond with the seaming plan and full color render on the site plan. Establish both a center line, bisecting the field from goal post to goal post (football), as well as a 50-yard line bisecting the field from sideline to sideline. Please note that for any other sport the goal posts must be bisected to establish the same center line. These two lines will allow for sidelines and goal/end lines to be established. Next, measure from the center line and establish the locations of the sidelines (80' for a football field) to allow for quarter-turned sideline rolls to be placed correctly. See the site plan for measurements on sidelines, these are subject to change depending on sports present and customer requirements.

After these lines are established, check the sidelines at the corners to ensure they are perpendicular to end lines. To measure if a corner is perpendicular the 30/40/50 method is used. This measurement is done in every corner of the field, and at the 50-yard line (or center line depending on sport). First the 30

and 40 feet are measured from the corner. The corner is perpendicular if the diagonal measures 50 feet. (NOTE: doubling the distances measured will lower the likelihood of any error being introduced into the layout of the field. Example: 60',80',100')

Paint or draw markings at the curbs where the touch lines, goal lines and center line should be positioned. Additionally, always check the dimensions of the runoff areas.

[Western Carolina University - Cullowhee, NC]

During the field inspection the sub-base is checked, as well as the curbing and system used to secure the field (usually nailer board or concrete curbing). Pay attention to any unevenness or irregularity in the sub-base. Stretch a string line from the center of the field to the curb/drainage line to measure if the sub-base surface maintains planarity under the engineered slope, and to expose any long depressions in the surface. The difference between the sub-base surface and wire can be measured with the help of a measuring wedge or steel tape. Sub-base planarity is of utmost importance and deviation of more than 1/4" are not accepted and must be marked and repaired.

Because deviations in the sub-base become especially visible in the areas of the lines; the touch lines, goal lines, goal area and penalty area need to be checked with extra attention and detail.

Along with this measurement, the string line should be stretched 20' to 40' and walked every 3 feet across the sub-base. Any depressions will be evident from space existing between the string line and the sub-base (be sure to measure and mark any depressions/high spots). The space between the string line and the surface may not be more than 1/4". This will determine similar deviations and expose the short depressions of the sub-base surface while the previous test reveals the long depressions. Not all unevenness can be detected with the initial test because the slope can deviate over a distance of more than 10' to 12'.

Any deviations in planarity need to be repaired before continuing work. Always contact Tencate if any questions arise regarding base quality and always address any issues before installation of turf rolls.

[UNLOADING TURF ROLLS]

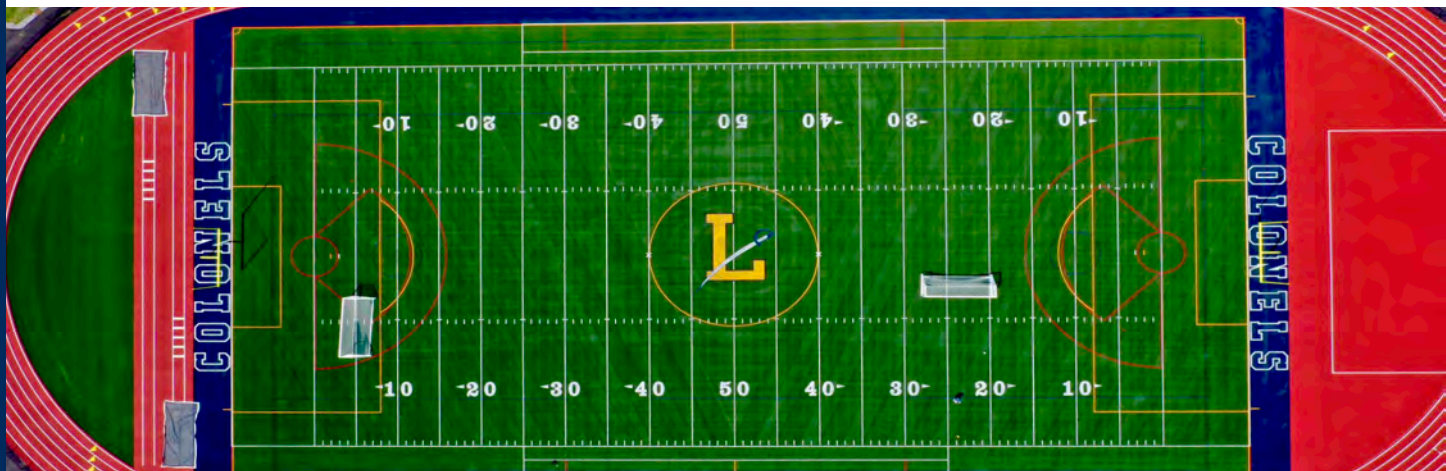
Upon arrival of the delivery truck, the installation crew should be ready to prioritize the unload. Active construction sites are usually very congested, Tencate recommends swiftly and safely unloading trucks so as to minimize any complication that arises from working around other contractors. When the turf arrives at the site it is most efficient to place the rolls directly at the side of the field. Be sure to inventory the rolls using the Bill of Lading from the truck and the Seaming diagram from the Site Plan. During the unloading, materials should also be inspected for any damage and checked for correct tufting. Usually a visual examination of the rolls will show if the lines are in approximately the correct locations. Proper measurement is required if there is any suspected error in roll usage or labeling. To measure, refer to the roll layout and measure based on the roll details provided. Report any shortage of materials directly and immediately to Tencate manufacturing. (Failure to report this information immediately can impact the completion schedule of the overall project.)

Tencate emphasizes the importance of safety during an unload situation. Many unloads take place on active roadways and as such proper traffic management is necessary to ensure the safety of the installation crew and other drivers. Be sure that all flaggers wear reflective vests and use approved road signs to manage active roadways. All flaggers must communicate with the equipment operator and each other to ensure no traffic accidents occur during an unload. Observe all traffic laws and OSHA guidelines when working on an active roadway. When unloading inside the construction site, be observant of other workers and equipment active in the area.

Depending on the available equipment and the specific situation, the rolls can be placed on the sub-base with light machinery such as a Cushman or Gator (or other equivalent light utility vehicle), or by man power with a carpet trolley. No tracked equipment should be allowed to travel across exposed sub-base or turf. When placing the rolls along the field, please take the following into account:

•Start at the correct side (check seaming plan to ensure fibers face home side when rolling out a panel)
•When operating machinery, avoid damaging sidewalks and fences
•Never turn equipment while stationary, wheel movement at a stop can damage the sub-base
•Never allow wheels to spin while operating equipment
•Perform wide turns while operating equipment on sub-base
•Limit the trafficked area of the sub-base while moving rolls to minimize any repairs caused by equipment moving on the sub-base
•All rolls should be rolled out towards one side
•Pay attention to the orientation of the rolls and avoid having to spin their orientation
•If the site requires storage of rolls in a parking lot, do not to stack rolls more than 2 rows high, doing so may result in wrinkling of the panels

[Ledyard High School - Ledyard, CT]



TENCATE

[GEOTEXTILE AND SHOCKPAD]

Depending on the specifications of a job, a geo-textile or Shock pad layer may be installed under the turf. Most commonly used geo-textiles and shock pads are purposed for dividing loads more equally and providing impact mitigation during athletic play. However, in some cases they are meant to form an impermeable layer to ensure that water can't get through and/or is diverted to the designed drainage. Geo-textiles and shock pads can be very delicate – be sure to handle panels with care as there is a calculated amount of material for the field and procuring replacement panels can hinder job progress and quality.

SHOCK PAD

There are several versions of shock pad used with Tencate turf systems. Systems such as Brock © have interlocking grooves or tabs built into them whereas other systems may require special tapes to secure panels together. Always be sure to read the installation manual provided for the specific pad used. It will contain proper installation guidelines as well as tips for proper handling and transport of the material. Tencate recommends staging pallets of pad material in a similar fashion to the field rolls. Have pallets spread across the sub-base to have them ready on an as-needed basis. When cutting pad material, be sure to use a straightedge and sharp blade to ensure a clean cut. Also, be cautious when trimming shock pad into the nailer board or curb system. Ensure the pad is flush with the curb or nailer to ensure no ridges will arise at the edge of the playing surface. Care should also be taken when driving equipment over shock pad. Turning on shock pad can displace individual panels – be sure to correct any shifting or overlapping panels before covering with turf.

GEOTEXTILE

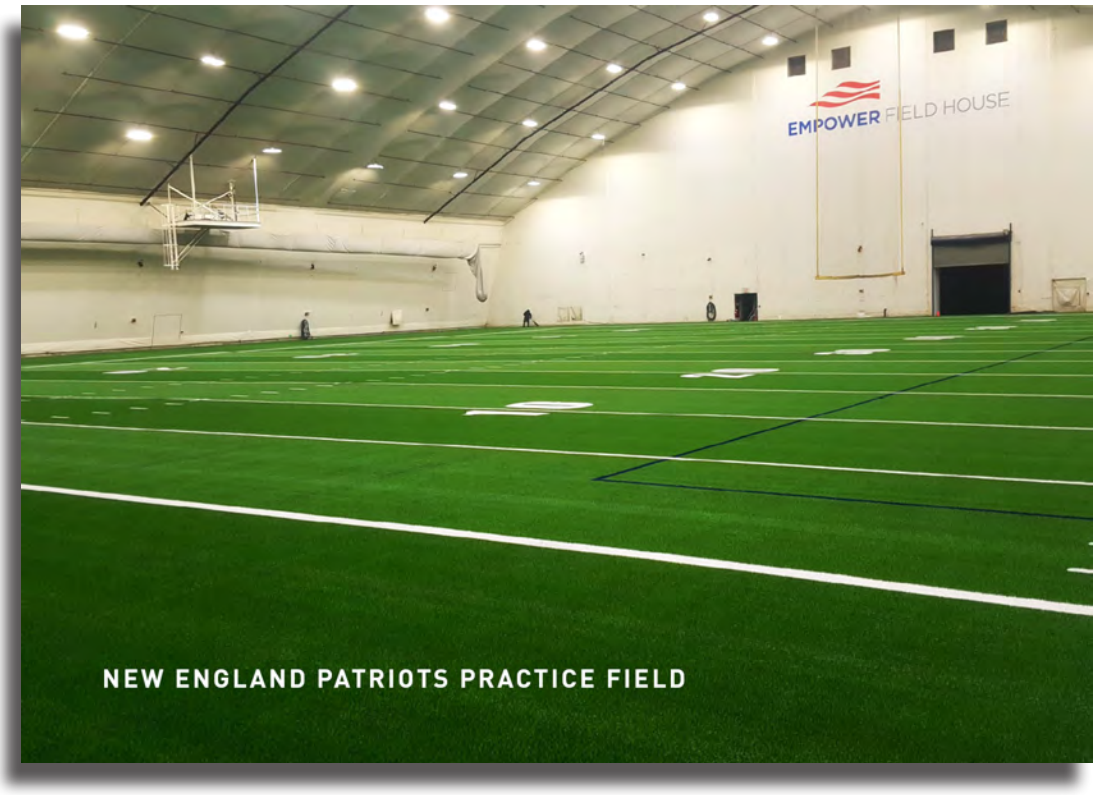
A geo-textile is, in most situations, installed perpendicular to the direction of the turf rolls. **Note:** almost all geotextile is laid from end line to end line to drain water towards the sideline drainage system. Generally, the rolls of geo-textile are about 13 feet width. When unrolling ensure the rolls overlap about 8 to 10 inches. Also take in consideration where to start unrolling the geo-textile. Always start at the other side of the field from where the turf rolls will be unrolled, this will prevent the material from moving during the unrolling of the turf. Check the installation manual for the Geo-textile used for additional guidance on proper installation.

TURF INSTALLATION

[UNROLLING THE TURF]

The first step of installation is to unroll the rolls of turf. Depending on the situation this is done with machinery or manpower. Available machinery is often a small utility vehicle (gator) or tractor. Attention should be given to the equipment used and suitable wide turf tires must be mounted to prevent damage to the sub-base. It is preferable to use an A-frame roller system that pulls to unroll the roll over the field. When unrolling, attempt to roll the panel out as close as possible to the previous panel to minimize any further manipulation of the panel by hand. Note: Some pre-infill wrinkling is common and may move around on the panels depending on the temperature.)

One person with experience should supervise during unrolling and give direction. Be sure, using a team of



NEW ENGLAND PATRIOTS PRACTICE FIELD

installers with carpet clamps, to pull all panels flat and note any wrinkles which may require repair prior to the infill phase.

Starting at center field, unroll the first panel and align the tufted center line with the string line established during initial setup. This will ensure the "50", or center line is perpendicular to the sidelines and correctly bisecting the field. Tencate recommends nailing the initial panel on one side to prevent any movement after it is placed in position. Continue to roll out rolls to one side of the field, placing panels according to their roll number listed on the seaming plan. After all panels to one side have been rolled out, proceed to work the opposite direction – towards the other curb.

TENCATE

[CUTTING THE TURF]

WOVEN

When the rolls are laid out the edges of the roll are turned over, and the additional material at both sides of the first roll can be removed via carpet knife. Woven products contain about 2 inches of waste color that must be removed from both sides of each panel. When cutting woven products, the cut must be made at least ¼" away from the rows of fiber bundles (see Figure 3). With the second and each subsequent roll, not only is the waste color removed but also any additional green turf to ensure the line on the panel falls at the right measurement (using a Long knife, Figure 4). Any extra material is cut at one side (the side of the direction you are working to).

[Figure 3]

[Figure 4]

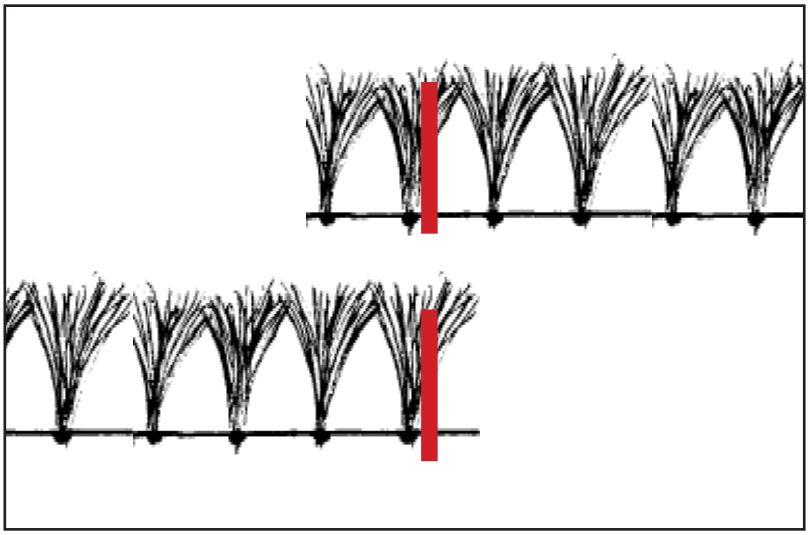
Next, place the rolls in the correct position starting with next panel adjacent to the center line, continuing towards the goal line at the other side of the field. For a football field this would be the 45-yard line. For other sports there will be several panels with no lines tufted in. All green panels require little adjustment as they are simply aligned parallel to the previous panel and not gapped more than ¼". Panels with lines tufted in must be laid out with more attention to detail as the lines within them must fall at a specific measurement. During this process the alignment of the roll with the set marks should be checked continuously. Always measure from the center line to the line in question to verify its final location as per the site plan.

When positioned correctly, rolls can have a small overlap with the adjacent roll. This overlap is removed and the seam is cut straight with the long knife (figure 4). If the field is aligned correctly and all seams are cut, the adhering process can be started.

When overlapping the rolls of grass, be aware of wind conditions and take appropriate measures to prevent the field from wrinkling or being blown away.

Cutting tufted products requires less precision than woven products. Panels are rolled out in the same way, but only the flaps (backing without fiber bundles that protrudes from the edge of a panel) and overlap are removed from the panel. It is important to make the panels overlap in such a way that the back stitches are not positioned above each other!! (figure 5).

** Cutting the additional material**
To cut the additional material at both sides of the roll a special technique should be used. It is very important to cut the line straight and precise, make sure you have good equipment and sharp carpet knifes. Don't cut the seams too wide, as this will stay visible after the installation is completed. Also, do not cut the seams too tight because this can form an elevation on the seam and reduce the strength of the seam. Seam width should be no greater than ¼" and no overlapping should occur.



[Figure 5]

TENCATE

[GLUING SEAMS]

During the adhesive process, one laborer will start by mixing the adhesive. Fold back the edges of each side of the seam to expose a 1 to 2 foot opening and position the adhesive box at the start of the seam. Once the seam is ready to adhere, fill the adhesive box with the adhesive material (figure 6). One person will stay with the adhesive box and guide the seaming tape while the second person pulls the seaming tape through the adhesive in the box in the seam opening. Pay attention that the seaming tape is placed in the middle of the seam. When the seaming tape with adhesive is positioned correctly the turf is carefully closed and pressed in the adhesive. Pressing by hand as well as the use of a water roller are recommended by Tencate. Other methods are available depending on the equipment on site.

[Figure 6: Using the glue box]

After closing the seam, a "foot" (see figure 7 for an example of a foot) is slid through the seam to ensure all fibers are straight and not laying in the adhesive. It is important to press the seam well to ensure solid adhesion. Therefore, put weight on the seams. It is recommended to check if the panels are properly adhered to the backing tape by tugging on the fibers. A correctly glued seam will not budge or pull away from the seaming tape. This process is repeated for each seam.

Ensure there is sufficient adhesive on the seaming tape to guarantee that the backing of the turf is secured. Avoid waiting too long to close the seams during warm conditions the adhesive will harden quickly. Do not open more than one can at a time. Installers should also be weary of the type of adhesive used in conjunction with Tencate turf. Both 2-part and 1-part adhesive are acceptable but manufacturer directions for cure time and any information regarding visual cure cues. Should any questions arise involving glue products, consult your Tencate project manager and reference the approved system components list (See Appendix - p28).

Attention:
Installing below 45° Fahrenheit (ambient temperature) is not recommended by Tencate. Below 45° Fahrenheit, several problems arise due to faults and expansions of the carpet in warmer temperatures and issues with adhesive performance. Installations below 45° Fahrenheit are in the full liability of the installation company and not covered by the Tencate product warranty.

[SEWING SEAMS]

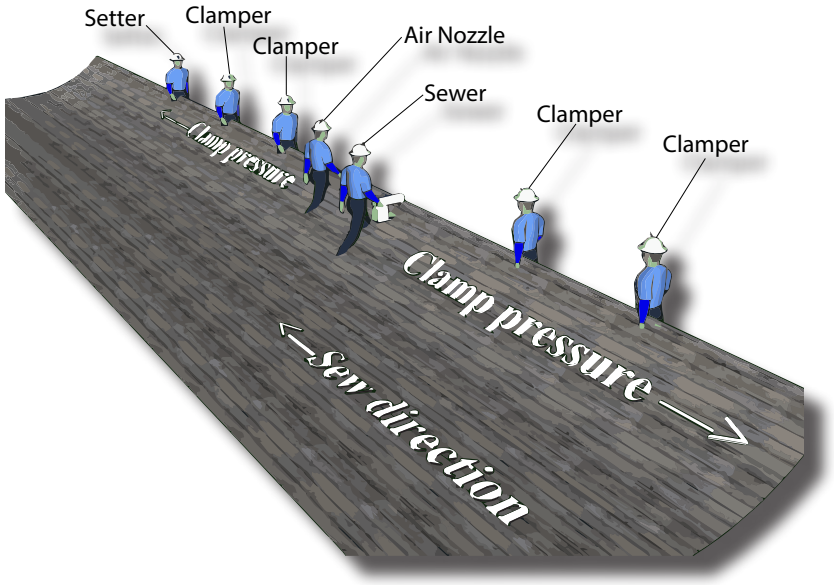
There are two ways to accomplish sewing – both with a sew cart and a hand sewing machine. Hand sewing will be covered in this manual, consult internally for direction on cart sewing. Only Tencate tufted products are capable of being sewn. All woven products must be assembled using the glue seaming process outlined above. When hand sewing panels, one panel is rolled out fiber-side up. After, a second panel is rolled out on top of the first - with the fiber-side facing down and fiber direction identical to the first panel. Then, using carpet clamps the crew will evenly pull the top panel to expose roughly 2 inches of fibers (or 3 rows of tufted product) of the bottom panel. The panels are simultaneously pulled of any offending wrinkles that may exist. Note: When driving the unrolling vehicle across the first panel it is likely that wrinkles will be introduced into the carpet. Be sure to pull the bottom and top panels with at least 4 laborers before sewing to alleviate any wrinkles. Also before sewing, measure the panel to establish where any tufted lines need to fall and prepare to modify the carpet to allow for correct seam placement. If modification is necessary, always cut the panel with green tufts on the edge. NEVER cut the panel with the line on its edge. The waste or salvage material is then cut off and discarded.

Next, the two edges are sewn together with a turf sewing machine capable of sewing a double locking stitch. Seam width is dictated by the line measurement completed during the panel alignment. Hand sewing is a very difficult task to accomplish which requires an immense amount of practice. Quality of the seams is directly affected by the consistency of the sew (straightness) as well as the width of the seam required for line placement. As such, be sure to have an experienced sewer operating the sewing machine.

TENCATE

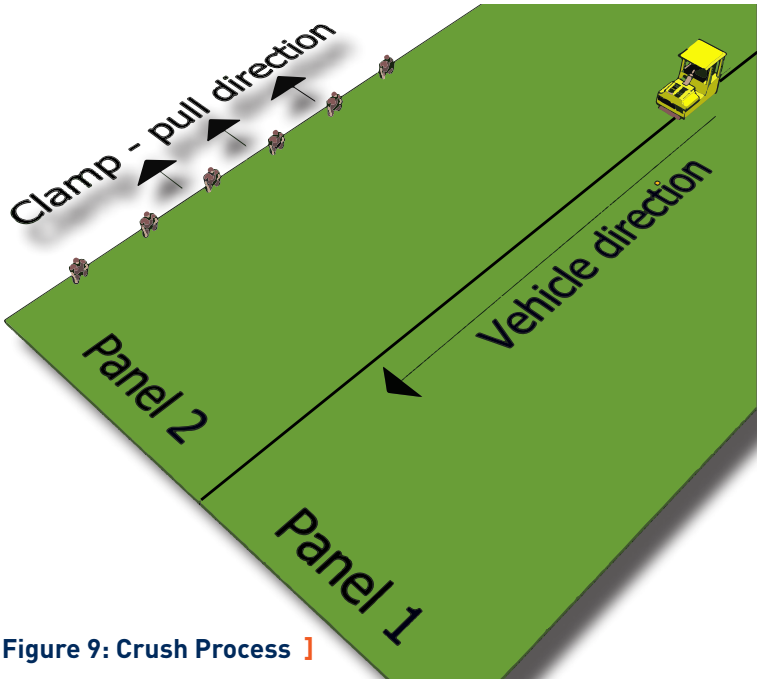
[SEWING SEAMS CONT.]

The average sew crew is comprised of 7 laborers arranged in a line going down the side of the two panels that are ready for sewing. First, a "setter" will lift the two panels of carpet to waist height and place the first row of carpet from each panel adjacent to each other. Next a laborer with a pair of clamps will grab the two panels at the location the setter has lifted the carpet. Two "clampers" will then alternate clamping the carpet as the sewer moves towards them, grabbing on where the setter lifts. Following the front "clampers", a laborer with a compressed air nozzle blows the fibers back away from the sewing needle. Following the "air man" is the sewer, sewing the seam. Ensure seam quality is adhered to and all errors are removed and re-sewn during the process. The final two laborers make up the rear clamp team. They alternate grabbing the carpet as the sewer moves away from them – ensuring a level surface for the sewer. See figure 8 for a diagram of the sewing line procedure. The entire team will work from right to left on a panel until the seam is complete. Be sure to lower the carpet at the beginning and end of a seam to allow any tension wrinkles to fall out towards the edge of the panel. Note: sewing can be completed both on and off of the panels depending on the direction the sewer choses to proceed. It should be noted that the seam may be completed with less fatigue to the crew if all sewing is accomplished whilst standing on the sub-base.



[Figure 8: Sewn Line Organization]

Once the seam has been sewn, the top panel should be flipped over so that the seam is laid flat and the fibers on both panels are facing up. This positioning will allow the crew to flatten out the seam, alleviating seam pinching, wrinkling, or buckling. Starting at the center of the panel, the crew pulls the panel perpendicular to the seam direction in a leap-frog manner while another laborer uses a roller or other piece of equipment to flatten the seam. This is done from the center out to the edges (twice per panel, once each direction) to ensure all wrinkles are forced to the outer edges of the panels. See figure 9 for an example of the crush process. The seam should then be inspected to locate any trapped fibers. Trapped fibers should be picked out by hand with a nail, awl, or other pointed hand tool. Failure to do so will result in a seam that is visible on the playing surface.



[Figure 9: Crush Process]

****Complications or difficulties with performing this process should be immediately reported to the Tencate project manager.****

[INSTALLATION OF INLAY LINES]

SHEARING/CUTTING

[Figure 10: Inlay Installation]

After the field panels have been glued/sewn together, the position of the inlay lines can be marked and installed into the field. Dimensions of sports fields can be found on the shop drawings included in the Site Plan. First measure where the lines will be positioned and mark those points with string line and nails. Inlay lines are then cut with a double cutter (or equivalent cutting device), or the fibers are sheared down to the primary backing. (Be certain the width of the cutter is about ½" wider than the line. This will make it easier to install the adhesive tape material.) When cutting along the string line, pay attention that the cutter is not/slightly touching the string line, as it is easily distorted.

Note: When shearing, be sure to keep the shear cutter level and low to the primary backing of the turf to avoid incomplete cuts on the fibers. These incomplete cuts, known as "short hairs", leave the fibers too short to protrude from the field once infill material is applied. Visually this creates a gap between inlay and surrounding field even though fibers are still attached to the turf.

Note: Woven turf is sensitive to ambient temperature. Ensure that turf is glued into cut locations as quickly as possible. Failure to glue turf into cut locations can lead to growth of the cut area and will create gaps around inlay locations. DO NOT cut inlays for a sport and leave the area unglued overnight/throughout the work day. Scheduling cuts may sometimes be necessary in order to avoid hotter temperatures during the peak of summer (e.g: cut and glue in the morning/evening when temperatures are lower.)

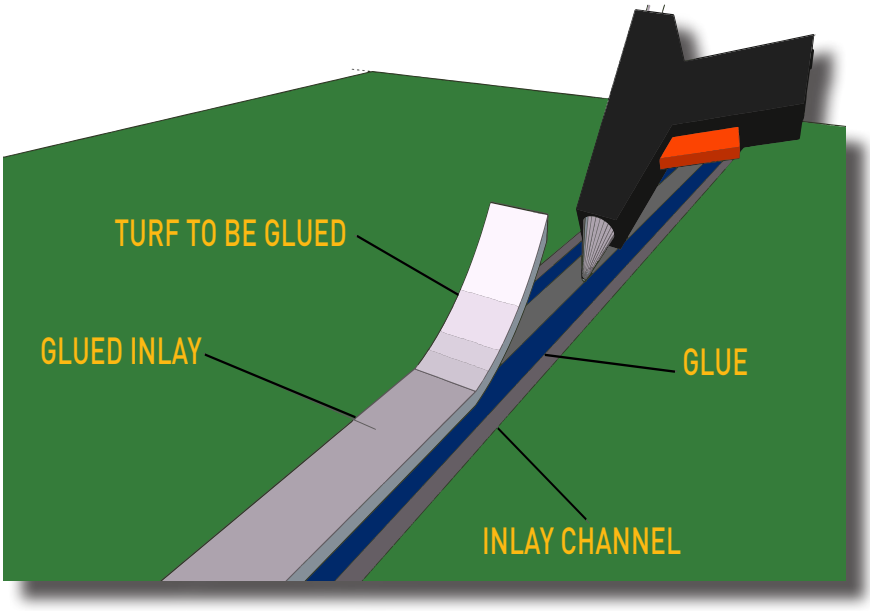
Note: Cutting circles and arcs are a specialist's job that needs to be executed with extreme precision. Always measure radii from the center of the circle and ensure that an experienced installer physically completes the cuts/shears.

GLUING

After the installer has cut or sheared out the lines, the same glue method as the seams can be used. Again, seaming tape should be placed underneath the area where cutting occurred. Be sure to center the seaming tape underneath cut area so that both sides of the turf receive an appropriate amount of tape to secure to. This will ensure that the inlay and the turf are sufficiently secured with the adhesive. The line is then laid into the area using a foot (figure 10). Be sure to press both sides of an inlay line, as well as the green turf adjacent to ensure all intersection points are properly adjoined. Installers must be mindful of fiber direction when laying in sport lines. Ensure the fiber direction of both the inlay line and field panels match to ensure material falls into the turf during infill. This process is repeated for all inlay lines listed on the Site plan, as well as any logos or numbers (football). Refer to the site plan for measurement details.

The use of Hotmelt glue is approved for use with Tencate turf systems. When gluing an inlay line, the following process should be adhered to. First, a ½" to ¾" wide bead of glue should be applied to both sides of the inlay path, about ½" away from the fibers surrounding the glue channel. This will ensure the hot glue does not migrate onto, and destroy, any fibers surrounding the inlay when pressing the colored turf. Next, place the colored turf strip (cut 4" wide from a panel of colored turf) into the glue/inlay path. Ensure the fiber direction of the strip matches that of the turf around it. Note: for arcs and circles the strip must be rotated to accommodate fiber direction. Also, be sure to place the strip about ¼" away from the beginning of the inlay path (this will ensure no gaps exist during the infill phase). Then, one laborer with the glue gun deposits a bead on both sides of the inlay path while another gently rolls the colored strip into the glue, ensuring no fibers come in contact with the glue itself. A third (and ideally fourth) laborer then follows behind and presses both sides of the colored turf into the glue channel – making a complete seal between backing (or seaming tape). "Pressers" act as quality control and must request additional glue if the turf does not completely bond to the backing. This is evident by glue protruding from the colored turf after pressing and the line is visually attached to the backing (tape). See Figure 11 for an example of hotmelt glue application.

[Figure 11: Hot Glue Application]



There are several key factors to consider when using Hotmelt glue systems. First, attempt to be as consistent as possible with the amount of glue deposited on the turf. Too little and a complete bond to the backing will not be achieved. Too much glue and the pressers will inadvertently burn the surrounding turf as they press the glue out from the edges of the colored turf. Second, use lengths of angle iron or tape to hold the fibers back from the glue channel. This will protect the surrounding fibers should glue be pressed too close to the area. Third, ensure the glue machine is operated at a temperature of 350 degrees Fahrenheit (check with adhesive manufacturer for proper operating temperatures). This will ensure proper activation of the glue as well as supplying time for pressing to occur before the glue sets. Note: make sure the glue gun does not advance further than about 5 feet from the rolling/pressing team. If the glue cools before the edges are pressed the strip will not completely adhere to the turf. Greenfields USA does NOT permit using Hotmelt glue to secure turf to concrete curbing. Moisture and concrete dust negatively affect adhesion between turf and curb.

Once the turf is fully assembled, check all seams and inlays and seal with adhesive when necessary*.

****Always make sure the working site is clean. Directly put waste material in the garbage container. At the end of each day, walk over the field to clean up. Don't leave open adhesive cans on the field and throw empty ones directly in the garbage container. The mixing of the adhesive should always be done on top of a layer of plastic to prevent making a mess on the concrete or pavement. Always prevent adhesive from touching the field.****

SECURING THE FIELD

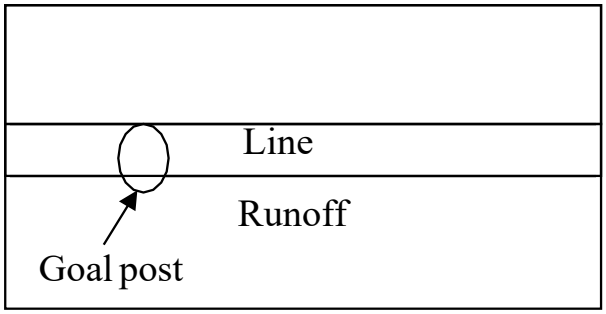
The field must be properly secured at the perimeter to prevent the field from lifting under load or when exposed to high wind conditions. The most commonly used designs are nailer board and concrete curbing featuring a 2" lip to adhere to. A nailer board system requires a specific mounting height to ensure the field falls flush with the curbing. Ensure the nailer board is mounted below the curb at the same depth as the product is designed to be infilled. Use a pneumatic staple or nail gun to accomplish securing the field. While stapling, separate the fibers to expose the backing and avoid hitting fibers with staples. Attachment points should be spaced 4-6" apart around the entire perimeter of the field. Sewn seams can have additional selvedge underneath the turf that must be removed prior to securing the field. Using a knife, cut off additional "flap" from the seam while ensuring the seam thread is not damaged. Failure to do so can cause unraveling of the seam or lifting of the turf due to extra thickness. Always remove all debris and excess backing tape from underneath the turf to be secured.

GOAL AND CORNER FLAGS

Holes must be dug to accommodate the goal and corner pots (figure 12). Measure first exactly where the goals and corner pots will be situated. Depending on the available equipment an auger can be used to dig a hole and install the pot. If there is no auger available, carefully cut open the turf in a U shape and dig the necessary hole for the pot approximately 1 square meter. It is desirable to install all goal post hardware, utility access boxes, and corner flag posts before installation of the turf and will prevent an unnecessary seam that occurs when fixing cuts in the turf. Make sure the pot is standing on stable sub-grade. Prepare the concrete and pour it in the hole around the pot. Carefully insert the goal/corner pole and check if it is standing straight. When the concrete is hardened and the goals are installed the sub-base must be smoothed and made level to the rest of the surface. The cut in the turf is then closed using seaming tape and adhesive.

[Fig. 12: Post Hole Positioning]

****Check carefully that the pot is at the same level as the infill material as the goal height is measured from the infill level to the inside of the crossbar.****



[Fig. 13: Goal Post Typical Installation]

****Often the goal legs are 6 inches wide while the lines are 4 inches wide. Pay attention that the 2 inches of surplus is always positioned outside the playing field (figure 13).****

TENCATE

INFILL APPLICATION

There are several equivalent processes for installing the infill into the turf fabric. This guide will address a commonly used technique. Please note that due to the amount of variation in equipment used during the infill process – guidelines discussed may need to be changed to accommodate the equipment on hand. Before starting with the infill process always check machinery for cleanliness and readiness for safe use. If there are problems with machinery or a breakdown occurs, contact the office immediately. At the beginning of each operational period, make a test run in the filling area to inspect for possible leakage that could cause damage. If any leaks occur, discontinue use of the offending equipment and immediately check field for any damage or stains. Always fill equipment (with fuel and lubricants) off the field and contain any spillage to avoid damage to the field or other surrounding surfaces.

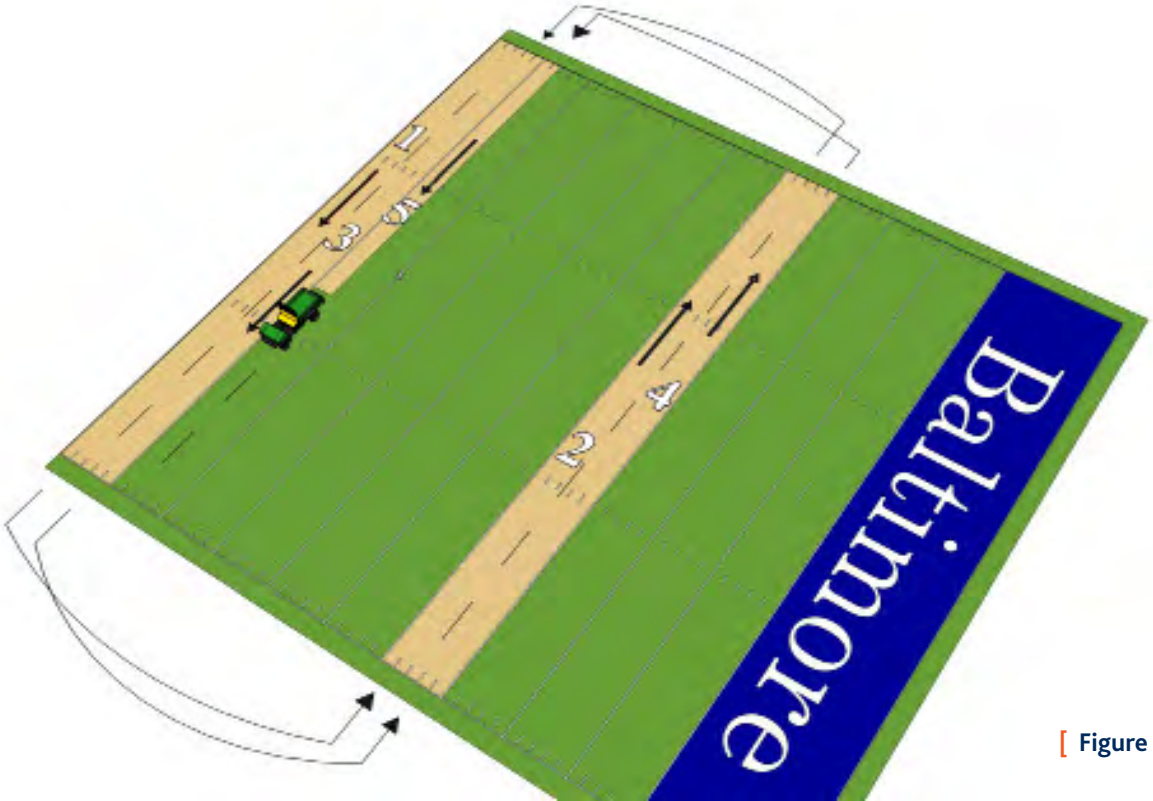
At a general level, infilling is a three-step process – spreading material, brushing material into the field, and leveling/finishing. Starting with the sand, the crew will use the spreading equipment available to deposit equivalent layers on the field. Following each layer, a Laymor brush is used to agitate the spread material into the field and simultaneously affect the fibers to stand vertically. Once all the sand is brushed into the field, the crew will then adjust and begin to spread rubber material into the field. This is done, layer by layer, until all the material is deposited on the field or until the field reaches suitable field height (1.5" on a 2" fiber product). A "leveling" brush treatment is then applied with the Laymor to alleviate any imperfections in infill level (both high and low spots). The aforementioned steps will now be broken down in further detail.

The equipment must first be filled with material to spread. One laborer (certified for operation of skid steer or other equivalent loader equipment) will operate a loader and deposit scoops of sand into the hopper or other spreading equipment. While filling spreading equipment, be sure to keep the filling area clean and always attempt to use all sand delivered. Also, be careful not to overload the spreading equipment as the additional weight can damage the equipment, but also wrinkle the field or leave imperfections in the sub base while spreading. NOTE: filling hoppers with rubber is the same process except a forklift is used to top load a rubber bag into the hopper.

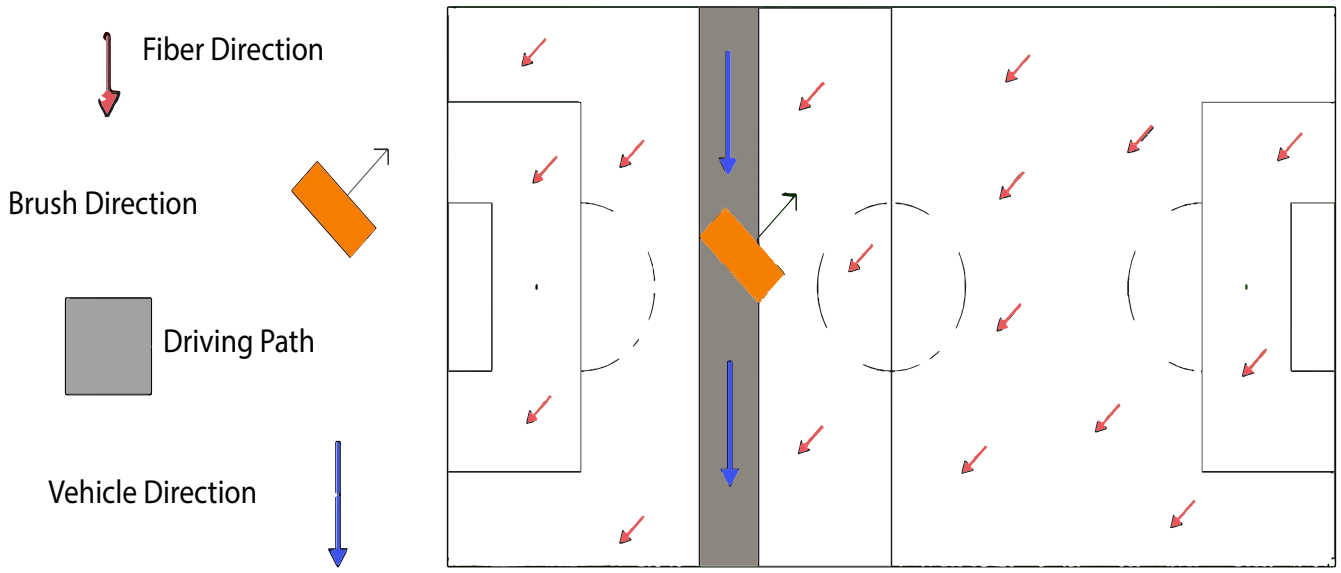
Before spreading, check fuel levels for all equipment and ensure proper running parameters. Examine moving parts on spreaders to ensure no jams or breakages will occur while distributing material. Be certain to fill fuel cells at both the begining of the work day and after returning from lunch to ensure equipment does not break down on the field surface.

[Lane Tech High School]

Another laborer, or “spreader”, will then drive a pattern on the field and sequentially spread an even layer of sand across the field (this will take several full hoppers of material to accomplish depending on field size). See figure 14 for an example of a spread pattern. Ideally, more than one spreader will spread the pass simultaneously (either splitting the field or doubling the pattern) to speed the process. Attempt to avoid any overlapping or missing areas of the field while spreading and always be sure that both pieces of spreading equipment are depositing material equally. This is accomplished by moderating belt speed, vehicle speed, and gate height on the hopper equipment in question. Doing so will reduce the amount of time and effort required to properly brush and level the field as infill progresses. Spreaders should also maintain a speed of no higher than 7 mph when on the field to reduce the possibility of wrinkling or tearing the field. Note: the first few layers of infill should be spread “short”, or parallel to the yard /end lines until the fibers are standing up. Once they are standing, spreading may continue “long”, or parallel to the sidelines (The pattern depicted in Figure 14 can run both “long” and “short”. Following a completed layer, another operator will brush the material into the field using a Laymor or other appropriate mechanized broom equipment. (NOTE: it is possible to infill using only a drag brush but Tencate does not recommend it due to the increased labor time and decreased quality of product)

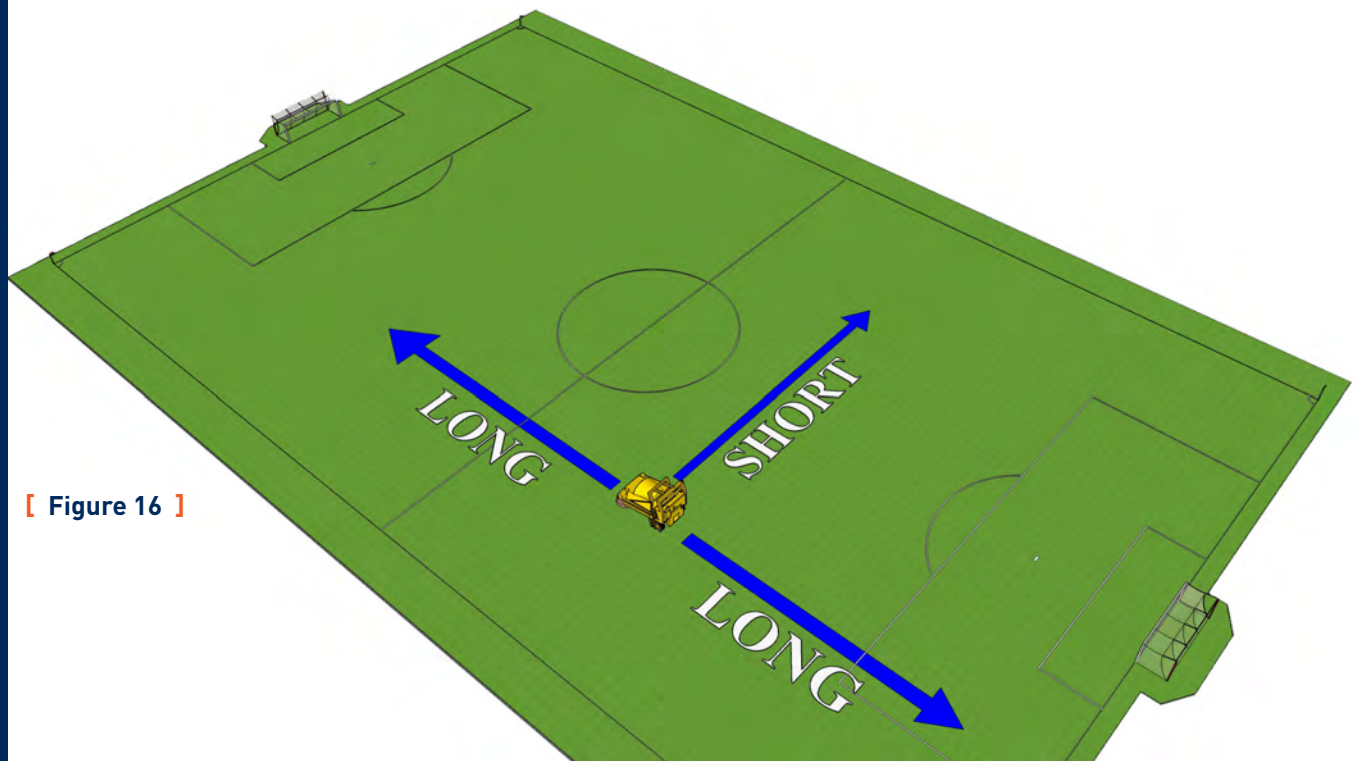


[Figure 14]



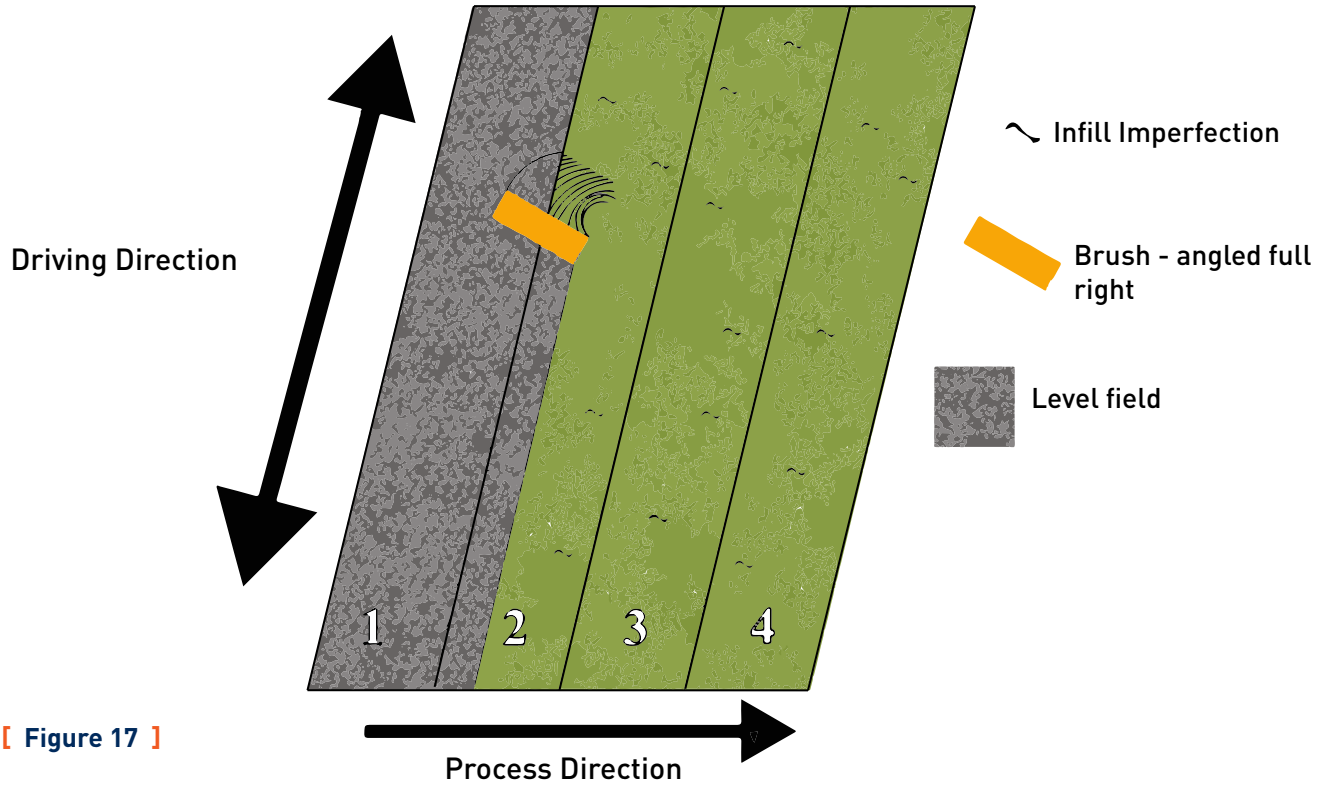
[Figure 15]

Dragging or brushing the infill into the turf is done with two goals in mind. First, to agitate the material into the field. Second, and more importantly, to stand the fibers up into a vertical position and ensure no fibers are trapped under the material. To accomplish this, the Laymor operator drives "stripes", in reverse, against the direction of the fibers (always "short", from sideline to sideline, for the first 3 or 4 passes). See figure 15 for an example of brush operation. The Laymor brush should always be angled opposite of the fiber direction (fibers laying 30 degrees left, brush angled 30 degrees right). As the layers are brushed in, the fibers will start to angle in the direction of the brush. Be sure to change directions on the Laymor every other pass – or as the field demands (based on majority fiber direction). As the field begins to fill with rubber (pass 4 or 5), the Laymor may be operated in a "long" fashion – or in stripes running from end line to end line (Figure 16). Extreme attention to detail in this process will guarantee the sand and rubber level is uniform throughout the surface area. Consistent review of the field after each brushing will identify trapped fibers and highlight potentially problematic areas prior to completion. During the process check frequently the depth of the infill material. Also, be weary of brush height when running a Laymor. Damage to the fibers may occur if the brush is set too low and digging into the field. Similarly, trapped fibers will result if the brush is too high and not efficiently engaging the infill material or carpet.



[Figure 16]

The final step of infill, known as leveling also includes the use of the Laymor brush. Leveling is the process by which the brush is used to bring the infill to a consistent level across the entire field. To achieve this the field must be nearly in finished product state, and not have any low or empty spots. Starting with a section of the field which is nearly perfect (preferably in a sideline panel), the Laymor operator will set the brush height to just barely touch the existing infill level. From here the Laymor will be driven FORWARDS, utilizing half of the brush width – angled fully to the direction of movement, to systematically bring any excess material and simultaneously fill any low spots. The brush height must not be adjusted during this phase to maintain uniformity of infill height. The process may require repetition depending on the uniformity of the infill level. Tencate recommends performing a level once, from sideline to sideline ("short"), then again from end line to end line ("long") to ensure no depressions or high spots exist on the field. See figure 17 for a diagram of leveling.



[Figure 17]

During the spreading and brushing phase, all other crew members should focus attention towards the perimeter edges of the field. Due to equipment and landscape limitations, the perimeter edges of the field will require hand work to apply infill material. A small contingent of laborers, 0using rakes and power brooms, should perform laps around the field applying layers of rubber until the field reaches final height. Areas such as corners should be done at increasing distance from the curb as the Laymor is unable to operate in tight corners. Power brooms are operated similarly to the Laymor, just on a smaller scale. Run the power broom with the brush direction opposite that of the fibers, progressively changing direction to work infill material into the turf. Use a rake to alleviate any trapped fibers (especially those located adjacent to the curbing or border system. Finally, a stiff-bristle broom performs "finishing" and balances the infill level across the perimeter of the field.

NOTE: The Laymor may be operated during the spreading phase of a pass, but must remain behind the spreading progress of the spreading equipment. Also, when working with a fibrillated fiber pay close attention not to fibrillate excessively (brush height). NEVER drive the Laymor with the front tire directly on field lines. Turning while doing so can stretch the turf and damage lines (kink, bend the lines).

As the infill process reaches conclusion, the installation crew leader must schedule a preliminary walk through with the client in order to complete the Punch List form. Signatures from both the client and lead installer are required and this form must be returned to the Tencate project manager with the remainder of the closeout documents.

AFTER INSTALLATION

Following installation, the crew should shift focus to final cleanup and punch list items. Always confirm the planarity of the field is correct, check the dimensions of both the field and sports inlays. Ensure there are no visible seams or wrinkles, and the infill is spread uniformly across the surface. Any damage to the sub-base or turf should be addressed immediately. Sub-base repairs usually require cutting into the field to expose the affected area, this should always be completed by an experienced installer. Crew members must ensure the site is clean and all debris and trash are disposed of in the appropriate container and all punch list items are completed. Install the Tencate warning sign at a visible place around the main entrance of the field. Final grooming may commence after cleanup and inspection. Final grooming consists of trimming seams with shears to alleviate any pile height differences, raking trapped fibers, cutting any stray/long fibers across the field, and running a drag brush across the field. The same pattern used while spreading infill is used when operating a drag brush. Simply perform the "spread" pattern on each side of the field. Perform a full field brush two times, in opposite directions, to stand all the fibers up uniformly. Performing these final tweaks on a field can immensely improve the final product and usually make the difference between an acceptable field and a Tencate field.

Communication should be made with the Tencate project manager when the infill installation process ends and punch list items are addressed. At this point, a Greenfields Quality Control Representative will be dispatched to the site for final QC checks. The QCR will complete a full field evaluation and ensure the field meets specifications and Tencate product standards. As construction and cleanup end, the installer must schedule a final walkthrough with the owner/client. The purpose of the final walkthrough is to confirm all punch list items have been addressed and the field is up to the quality standard of both the client and Tencate while also providing a brief on field maintenance and care. During the walkthrough the lead installer must procure signed copies of the Certificate of Completion, Surplus Materials receipt form, and the Owner Training Maintenance form (see appendix for closeout documents). Tencate recommends that installers supply field owners with surplus materials. While not required, leaving turf for future repairs will help get the field back to playable condition should a failure occur. Tencate recommends leaving turf of all colors present on a field. Colored turf should be left in pieces large enough to cut inlay strips from. Green turf should be left in larger sizes, as it will predominantly be used for patching (4' wide cuts of turf at least). Installers must return all closeout paperwork (including punch list and base quality inspection forms) and site photos, via e-mail, to the Tencate project manager within 14 days of project completion.

Be sure both the owner representative and the local person responsible for care and maintenance of the field are present for the maintenance training portion of the walkthrough. Explain the maintenance manual and explain the requirements to ensure acceptable maintenance and field longevity. If any grooming equipment is on site, provide instruction on how to assemble and attach the grooming equipment to its suitable transport (usually a Gator or other all-terrain work vehicle). Also, perform an example drag of the field to impress the movement pattern on the maintenance staff.

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DEMOBILIZATION

Communicate with the home office regarding demobilization schedule. Make sure the machinery is clean and ready to be used for the next project. Check the air filter, bearings, oil levels etc., so the next crew can work with a functioning machine. If components of the machinery are defect, contact the home office to negotiate if the machinery needs/is possible to be repaired before transport. Always report small defects on machinery and write down the hours of the machinery before the start and when the project is finished. Make sure all accessories are together with the machinery such as remote controls, covers, brushes etc. Pack the machines, so they are ready for transport and fill in the maintenance report that contains the history of the machine. Call off all refuse containers as well as any rental equipment on site. Finally, perform a final visual inspection to ensure the site is in the best possible condition before departing. If any vehicle or property is to be left behind – be sure to communicate logistical details to the site superintendent and Tencate project manager.

REPORT AND PHOTOS

Tencate expects that the installer will complete construction and return with a report and photos of the installation. The report should contain information about the daily activities such as:

- Installation process/progress
- Amount of materials (sand, rubber) and what is left
- Hour registration of machinery and labor
- Problems that occurred
- Agreements that are made with contractor/client

Furthermore, it is expected that the installer takes photos of the installation process. Make photos of the subbase, during the installation of the grass, and from different angles after the installation is finished. Emphasis should be placed on photos of the finished product. Those photos are very important for our communication with customers and for marketing purposes. Remain in close contact with the Tencate office to inform about the progress of the work.

REPAIRS

In some cases, reparations need to be done to return the field to optimal condition. Damage is caused by a variety of factors including normal wear and tear. All repairs should be accomplished by an experienced installer. All repair scheduling is handled by Tencate staff in conjunction with the offices of the installer and client.

It is of critical importance that our customers are satisfied, and we can guarantee delivery of a sports field that complies with the highest quality standard… a Tencate field. Get out there and start installing!

PIVOT

MATERIAL HANDLING

PIVOT is an extremely heavy product, much heavier than any other tufted sports product on the market today. As a result, Tencate recommends using extreme care when unloading and handling rolls. It is recommended to use a carpet pole coupled with a 60' shooting boom telehandler for unloading. When a carpet pole is unavailable, use of load straps to pull rolls out of the transport trailer will be necessary. Take extreme caution not to have personnel near rolls while pulling material out of the trailer. In fact, it is recommended that all personnel exit the trailer during roll extraction to prevent risk of entrapment between rolls and the trailer walls. Additionally, be mindful of the pull angle of the telehandler/straps to ensure rolls do not exert excessive pressure on the roof/walls of the trailer. Rolls that become wedged between the walls/roof are capable of damaging the trailer or damaging themselves due to friction with the trailer walls. When transporting rolls, ensure positioning of the roll on the forklift rack is even to reduce the risk of tilting or dropping a roll. **DO NOT STACK PIVOT ROLLS MORE THAN 2 HIGH during storage.** Stacking rolls more than two rows high can create face distortion in the product and/or damage to the core.

The PIVOT system always includes a shockpad. As such, extreme care must be taken during unrolling and transport operations to avoid disturbing the pad underneath. Tencate recommends unrolling rolls in reverse for all crews using a floating rack assembly attached to a tractor. This will allow the vehicle to travel across turf instead of bare shockpad and reduce the likelihood of disheveling the pad. For those using a trailer assembly for unrolling, Tencate recommends traveling slowly across exposed pad and utilizing extremely shallow turns to prevent movement of the pad. After unrolling panels, it may be necessary to flip the panel back to fix any disheveled pad. Perform these repairs before seaming panels as the repair time and difficulty is increased once the turf is glued together.

SEAMING

PIVOT is constructed with three ends of yarn per needle including a texturized yarn, a semi-texturized yarn, and a slit film face yarn. Due to the increase in face yarn, panel alignment and cutting quality become more important than ever. The overarching goal when seaming PIVOT, as with all other tufted products, is to simulate/recreate the gauge of the carpet itself. PIVOT utilizes a 3/8" gauge, meaning that a perfect seam will have the first row of the next panel on the seam exactly 3/8" away from the first. To accomplish this, Tencate recommends cutting close to but not through the first exposed edge of Panel A followed by a trace cut of Panel B. Trace cuts are best accomplished using a loop-pile cutter or long knife (refer to sectoin 4.2). Installers should be mindful about allowing a seam to be narrower than 1/4" as the fiber splay will cause the white yarn to appear bowed. If this occurs, cut the offending green row away and leave more gap to allow for natural expansion of the fiber. An example of a false bowed line is pictured above.

INLAYS

PIVOT inlays are identical to other tufted products, although extra attention is required to achieve top results. Tencate recommends increased dilligence when cutting and gluing inlays due to the increased stiffness of the product. Ensure that cut placement remains near rows to allow space for the incoming inlay **WITHOUT** overlapping. When gluing, be mindful of corners around inlays as they will be more likely to resist sitting properly in the glue. As with all other Tencate products, ensure that the inlay is sealed around the perimeter with glue pressing out from the seam area.

> PIVOT INLAY: THINGS TO REMEMBER <

- Always ensure cuts are straight and measurements are within tolerance (.375")
- Inlaid 4" lines of PIVOT are equal to **11 TUFTED ROWS**
- Ensure no overlap when gluing inlaid lines and logos
- **THOROUGHLY press** the perimeter of inlays, glue should emit from the edges of the seam area to create a tight seal
- **ONLY** use Tencate approved adhesives and seam tapes

[Brentwood Academy]

APPLICATION OF COOLING ADDITIVE

PIVOT does not require traditional infill to achieve high levels of sports performance. However, GeoCool© cooling additive can be applied to the system to lower overall field temperatures and increase player comfort. Application of GeoCool is achieved in the same fashion as traditional infill, although Tencate recommends several adjustments to the process to ensure success. Spreader units should be configured to apply thinner, lighter lifts of GeoCool to prevent trapped fibers and even application of material. Additionally, spreader units should avoid turns over 5 mph to prevent shifting of shock pad and/or movement of yard lines. To further protect lines and inlays, allow for 2-3 lifts of GeoCool to be applied before using the Laymor to work the material into the surface. The extra buildup of material will decrease the liklihood of turf shifting under vehicle traffic and higher tire pressures of the Laymor. Lastly, avoid brushing perpendicular to field lines until several lifts are applied. Again, this will help reduce any potential shifting that could occur during the operation.

APPENDIX

APPROVED SYSTEM COMPONENTS

> Cleaners

DISINFECTANTS:
- OxyTurf by HGP GLOBAL - UNSCENTED ONLY
- mPerial by mPact
- Benefact by ServPro

ODOR/CLEANING:
- TurFresh by TURF FRESH

> Grooming Equipment

OWNER:
- GreensGroomer by GREENSGROOMER
- LitterKat by GREENSGROOMER
- SportChamp by SMG

PROFESSIONAL:
- GreensGroomer by GREENSGROOMER
- Sweepmaster 300 by LAYMOR
- BW260 by BROCEBROOM
- 400 series Turf Tender by DAKOTA
- Mete-R-Matic series by TURFCO

> Tape

FIELD HOCKEY:
- 150086 Scrim by BRON TAPES

SEAMING:
- Ultrabond Seam Tape by MAPEI
- Tencate Seam Tape by TENCATE
- C130 by XGS
- C145 by XGS

> Glue

FIELD HOCKEY:
- 34N by NORDOT
- 34G by NORDOT

SEAMING/INLAY:
- STA1000 by ADV POLYTECH
- Sportbond DR2000053 by ISOTECH
- Ultrabond PU2k by MAPEI (recommended)
- Ultrabond PU1k by MAPEI
- 34N by NORDOT
- TurfClaw by SYNLOCK
- XGSBond by XGS

> Pad

PLAYGROUND:
- PowerbasePLAY by BROCK
- ProPlay 25, 35, 45, 55 by SCHMITZFOAM
- GeoFlo by TENCATE
- GeoFlo+ by TENCATE

> Infill

ALTERNATIVE:
- Brockfill by BROCK
- TPE by GUARDIAN
- Geocool by TENCATE
- Envirofill by US Greentech
- Safeshell by US Greentech
- All Pro Cork by TTII
- Pro Max TPE by TTII
- Playsafe 65 EPDM by TTII

RUBBER:
- 10-20, 14-30 SBR by CRM (cryo or non)
- 10-20, 14-30 SBR by GENAN
- 10-20, 14-30 SBR by LIBERTY TIRE
- 10-20, 14-30 Nikegrind by NIKE
- 10-20, 14-30 SBR by RUBBERLOGIX

SAND:
- 20-50, 20-40, 30-50 Sportsfield Sand by TTII
- 20-50, 20-40, 30-50 Sportsfield Sand by US Silica
- 20-50, 20-40, 30-50 Sportsfield Sand by Whibco

> Paint

REMOVER:
- Blitz 2.0 by PIONEER
- Blitz Remover by PIONEER
- Mineral Spirits

SPORTS:
- Gameline by PIONEER
- Gameline GPS by PIONEER
- Stripe-X by US SPECIALTY COATINGS
- Durastripe by US SPECIALTY COATINGS

> Pad

SPORTS:
- GeoFlo by TENCATE
- GeoFlo+ by TENCATE
- Ecocept by TENCATE
- ArmaSport by ARMACELL
- Powerbase YSR by BROCK
- Powerbase by BROCK
- SP series by BROCK
- Shockdrain 580, 780 by ENPLAST
- ProPlay Sport 23 by SCHMITZFOAM
- ProPlay Sport 23D by SCHMITZFOAM
- ProPlay Sport 20 by SCHMITZFOAM
- ProPlay Sport 20D by SCHMITZFOAM
- ProPlay HP40li by SCHMITZFOAM
- ProPlay HP23el by SCHMITZFOAM
- Progame by TROCELLEN
- Progame Elayer by TROCELLEN

Ensure ONLY components listed above are utilized with Tencate turf products. Any deviation from this list or use of an unapproved product will void warranty coverage. To apply for product approval, send samples to Tencate manufacturing for system testing and addition to this list. An ISO version of this list is available upon request.

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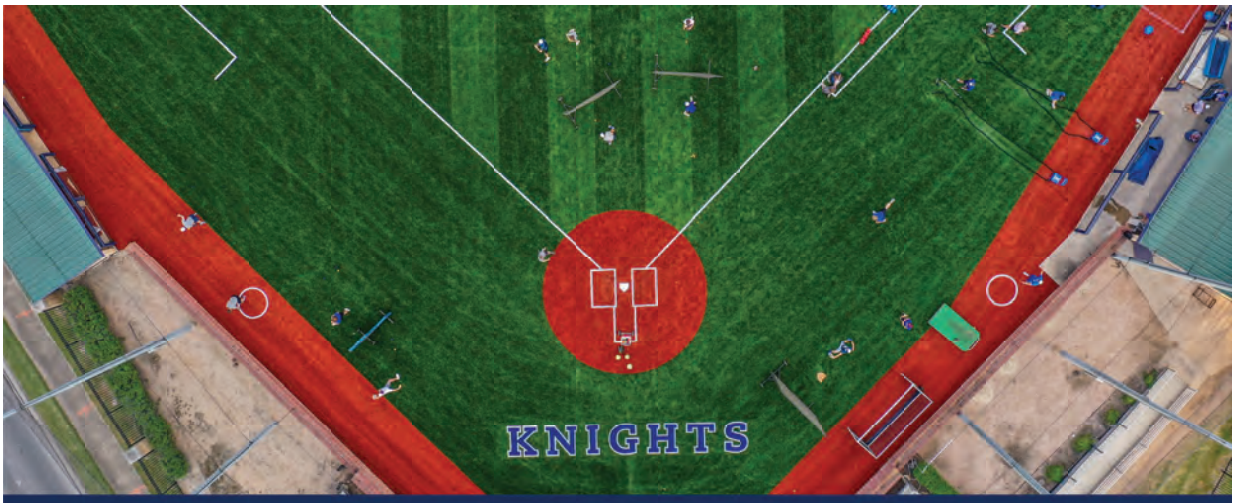

CERTIFICATE OF COMPLETION

This certificate will confirm that the installation of the Tencate product has been completed to the satisfaction of the customer.

Project Name: _____

Address: _____

Sport activities:_____ **Installer:**_____

Owner Information:

Owner:	
Address:	
City, State, Zip	

Owner Representative:

Signature:	
Print Name:	
Organization:	
Title:	

This _____ day of _____, 20___.

Punch list: ☐ Completed

The client acknowledges that in the event that the Product is used for purposes other than the specific activities it was designed for or any other uses for which TENCATE gives its written authorization, TENCATE shall not be responsible for any and all damages incurred and any warranties registered will become null and void. It being understood that TENCATE has tested the Product for use in connection with these activities and may not have tested it for other uses. The TENCATE warranty is deemed engaged upon signature of this document and receipt of final payment.

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Surplus Materials Form

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Owner Training Completion Form

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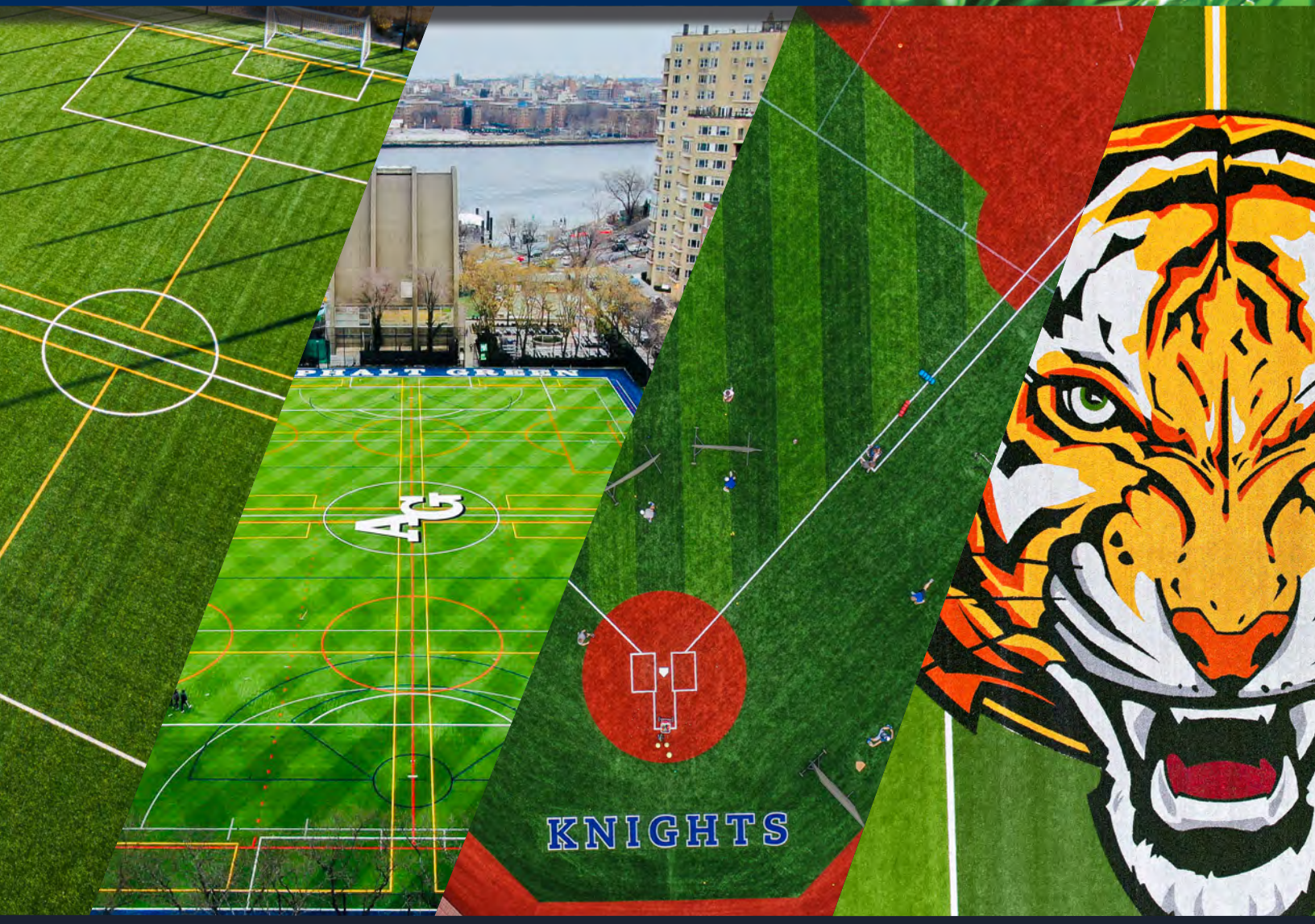
TenCate

Building Healthier More Beautiful Communities

TENCATE

MAINTENANCE MANUAL



At TenCate, we believe in home field advantage. Our maintenance manual is designed to help ensure your field remains as impressive today as the day it was installed. Because a great athlete deserves a great surface.

INTRODUCTION

The Tencate synthetic sports system consists of specifically manufactured artificial turf and can include specified levels of infill sand and/or rubber granules. The combination of high quality turf and infill with the correct installation procedure will provide a safe, comfortable and durable playing facility. A properly maintained field will perform similar to, or better than, that of a natural grass surface. Tencate's main goal within this manual is to ensure the field is always at its optimum playing condition by providing you with the correct information and training.
Tencate strives to provide the highest performance of our turf system from initial construction through weekly use and far into the future years. It is therefore essential that Tencate provides detailed instructions for the use and maintenance of the system to guarantee our product's performance.

Contact your Tencate representative if you would like information or a consultation on a continued maintenance and service plan through Tencate or one of our strategic partners.

CONTENTS

PLEASE DISTRIBUTE THIS MANUAL TO THE PERSONS RESPONSIBLE FOR DAY-TO-DAY MAINTENANCE OF THE FIELD AND ENSURE THAT THEY ARE THOROUGHLY FAMILIAR WITH ITS CONTENTS. GREENFIELDS RECOMMENDS REVIEWING ALL WARRANTY DOCUMENTATION PROVIDED AND FAMILIARIZE YOURSELF WITH THE SPECIFIC PROVISIONS AND LIMITATIONS CONTAINED THEREIN. **FAILURE TO MAINTAIN THESE GUIDELINES WILL VOID WARRANTY COVERAGE.**

DEFINITIONS

> POUNDS PER SQUARE INCH (PSI):

Definition: *Pressure a gas or liquid exerts on the walls of its container. Also called PSIG for pounds per square inch gauge.*

Note: Pressures for man and horse are for standing still. A walking human will exert more than double his standing pressure. A galloping horse will exert up to 500 psi. The ground pressure for a pneumatic tire is roughly equal to its inflation pressure.

Examples:
Human male (5 tall, medium build): 8 psi
M1 Abrams tank: 15 psi
1993 Toyota 4Runner: 25 psi
Adult horse (1250 lb): 25 psi
Passenger car: 30 psi
Wheeled ATV: 2 psi
Adult elephant: 35 psi
Mountain bicycle: 40 psi
Road racing bicycle: 90 psi
Stiletto heel: 471 psi

> 4.1 Synthetic Turf and Infill Contaminants

Failure to follow proper cleaning guidelines will lead to contamination and compaction of the surface. Contamination and compaction of the infill material can have a negative effect on the playability of a field. Negative effects of a hardened (compacted) surface include: poor water permeability, inferior ball behavior, reduced player safety, poor grip for the players footwear and possibly damage to the fibers or fiber loss. Please consider the below parameters to best avoid infill contamination and eventual compaction.

> POSSIBLE CONTAMINANTS:

- Airborne particles from natural rainfall or water sprinkler systems
- Imported foreign bodies as a result of high winds
- Plant and flower debris from seasonal climate change
- Animal waste
- Soil or debris transported onto the field through shoes or tires.
- Ingredients in food and drinks including acids or sugars could influence the composition of the fibers or the quality of the infill
- Food packaging, drinks, or general litter
- Chewing gum can become entangled in the fiber or infill
- Natural wear and tear of the fiber creating residue
- Leakage of oil, fuel, or grease from mechanical maintenance equipment
- Neglecting the maintenance schedule could allow for the growth of weeds, algae and/or moss

> 4.2 Synthetic Turf System Damage

Damage to the system also influences the playability characteristics and the ball behavior of the Tencate artificial turf system.

Damage to the field can be caused by ANY of the following:

- Unsuitable maintenance machinery, or any equipment with inappropriate tires used on to the playing surface
- Damage caused by cigarettes or fireworks can change the specific markings/characteristics of the fiber and infill materials
- Ingredients in food or drinks including acid or sugars could influence the composition of the fibers or could influence the quality of the infill
- Application of unapproved chemicals and cleaners

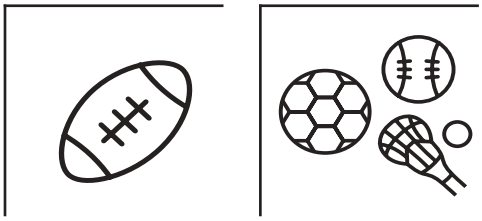
Tencate recommends that warning signs are attached at each entrance to the field, an example of which is featured to the right.

GUIDELINES FOR USERS AND SPECTATORS

The next section will explain aspects which could affect the playability characteristics of a Tencate artificial field, but can be prevented through training and dilligent maintenance. Maintenance is a requirement regardless of the level of usage. Even during infrequent use, the maintenance is required in accordance with this manual.

> 5.1 Normal Athletics

As the owner/manager you are responsible for the general maintenance and up-keep of your field. With the primary goal to maintain optimum playing condition, discipline being the key word. By maintaining the following 'rules' you can contribute in preventing the possible damaging effects previously mentioned.



- **Avoid unnecessary vehicle traffic**
- **Prohibit use of any open flame**
- **Fireworks are prohibited and will cause damage to fibers and infill**
- The field should be only be used for the specific use for which it was designed
- Do not allow the use of inappropriate footwear
- Properly dispose of general waste away from field surface
- Direct traffic routes across the field in such a way as to minimize pollutants being transported onto the field
- Prohibit eatings and drinking on the turf surface
- Use of starting pistols prohibited
- Do not allow animals/pets on to the field
- Clearly display rules of field use at each entrance to the field
- Prohibit smoking on the field
- Prohibit events that involve flames, excessive heat and fireworks

> 5.2 Field Watering

In many instances coaches and players prefer to water the field prior to use in order to lower the surface temperature. This action is recommended by Tencate in periods of very hot weather as a wet field provides evaporation which lowers the temperature of the playing surface. Ideally the temperature of a wet synthetic field should be equal to that of a natural grass field.

Users should remember that evaporation can be very rapid, typically it can be more than 2200 gallons of water per hour on an average size field. Therefore, with sustained periods of use additional watering of the field may be required. If you decide to water the field, distribute the water evenly over the playing area, the aim being to dampen the surface not soak or saturate it. The water used should be free of pollutants so as not to potentially damage the quality of the field and infill products.

> THE IDEAL TIME TO WATER THE FIELD IS 1-2 HOURS PRIOR TO THE START OF THE PLAYING PERIOD.

> 5.3 Special Events

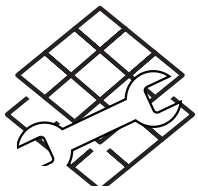
Tencate synthetic surfaces are designed to be multi-purpose, and as such, often become host to numerous non-athletic events such as; assemblies, exhibitions, and concerts. Generally, there are two areas of concern that need to be recognized - weight and ground pressure. Overall weight must be considered when introducing loads to the field surface. As a general rule, avoid storing/positioning any load over 500 lbs. on the field surface. More importantly, ground pressure should be the driving factor when deciding whether or not to introduce a load to the field surface. Driving vehicles onto any Tencate system utilizing road tires will result in damage to the subbase and/or the turf system. Consider the following operational parameters when planning special events.

> 5.3 Special Events (Cont.)

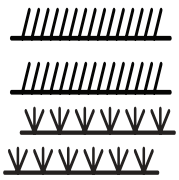
• Special events can introduce heavy static loads on the field that exceed the surface load limit set forth in the Warranty and in the load limits outlined in this Manual
• Large crowds or personnel on the field generally fall outside the "designated uses" for the system and damage of the system can occur unless it is fully protected
• In the case of all non-designated uses of the system, you should be aware that damage to the field is not covered by the GreenFields warranty.
• No static, transient, or dynamic load of more than 15 Psi should be allowed on the field. (See the definitions section for typical PSI ranges). It is therefore good practice to eliminate any unnecessary long-term parking and loading and to keep necessary traffic on the field as minimal as possible. Sheets of ¾" thick plywood typically 4'x 8' in size, exterior grade, are ideal and recommended to assist spreading the loads. It is also recommended to cover the field with white plastic sheeting prior to placing the plywood to keep the field clean, some kinds of plywood contain pollutants that can discolor the field surface, if in doubt please seek advice from your local Tencate office.
• Ensure the field undergoes a full grooming/brushing maintenance program following the event to return it to its original playing condition

MAINTENANCE GUIDELINES

A strict maintenance schedule is essential in providing longevity to your sports field and also ensuring compliance under the Tencate warranty terms and conditions. Additionally, accurate records of all maintenance are required under the warranty and are used to evaluate any potential claims. Utilize the maintenance record form in the appendix of this guide to record maintenance OF ANY TYPE on the field. The maintenance schedule of Tencate artificial sports fields has been divided into the four following sections:



6.1 DAILY Maintenance
6.2 WEEKLY Maintenance
6.3 MONTHLY Maintenance
6.4 ANNUAL Maintenance



> 6.1 Daily Maintenance

Daily maintenance is focused on the safety and security of the users. Begin with a visual inspection of the field, looking for any damage or trip hazards that may have developed through normal use. Walk the field using a consistent pattern to ensure the entire field is viewed. Additionally, the following should be monitored for safety and functionality:

• Goals and nets: Visually inspect all nets and goal posts for damage, repair as required, pay particular attention that no sharp edges are protruding from the goal post structures. Monitor for rust or other degradation of the goal posts.
• Net holders: Stretch the nets using the net tension ties before play begins. Take care that after the game the tension is released from the nets.
• Corner flags: Visually inspect the corner posts for breaks or damaged anchor points. Repair prior to continued use of the field product.
• Artificial turf: Report any damage discovered during the visual inspection as it may be required to suspend play depending on the severity of the issue.

Maintenance, and SUBsequent record keeping, are a requirement regardless of level of usage.
failure to maintain the field PRODUCT in accordance with this manual will lead to premature wear and tear and **void warranty coverage.**

> 6.2 Weekly Maintenance

Weekly maintenance focuses on two major aspects of the field; the condition/direction of the fibers and, in particular, the infill distribution. There are three phases of weekly maintenance - inspection, surface cleaning, and infill re-leveling (High Traffic Areas). In order to accomplish these phases, Tencte recommends the following tools:

- Probe for measuring infill levels
- A wheelbarrow to transport infill material
- A flat, large shovel to replace and spread the infill material
- A stiff bristle floor broom to manually brush the fiber/infill
- A metal rake to remove leaves, foliage and return the fibers to their vertical position
- Leaf blower for removal of debris
- 2-stroke fuel for leaf blower
- Infill material

> Inspection

Includes walking the field for any damage to seams/inlays, measuring infill levels (using an infill probe), and monitoring the health of the base for depressions and/or drainage issues. Use an infill probe to measure infill levels in high traffic areas. Tencate recommends .5" fiber reveal (1.5" of infill height on a 2" product).

> Surface Cleaning

Using a rake or leaf blower, remove all debris from the field. A clean field surface will prevent natural growth (on the perimeter) and contamination of the infill. Avoid directing the blower directly at the field to prevent removal of infill.

> Re-Level Infill (High Traffic Areas)

Infill distribution and level are of critical importance when maintaining a field. Inspect high traffic areas paying close attention to the infill level and distribution. All areas with low infill should be dressed and areas with high infill brushed to be level with surrounding areas. Be aware that high traffic areas of the field will require particular attention. These areas tend to occupy small square footages and it is advisable to check them by hand. To accomplish re-leveling the following actions should be adopted:

- Using of a gardening rake or stiff bristle sweeping brush, scrape/brush the area until the fiber returns to its vertical position
- If new infill material is required, use a shovel to spread the new infill over the required area
- Work the infill into the required area, this can be done by hand or gently by the use of a stiff bristle sweeping brush/rake
- Use a rake in a popping motion to adjust fibers. Pay attention to areas where field panels and inlays meet. Work the fiber/infill until gaps in the inlays are no longer visible
- Finishing can be accomplished by using a stiff bristle broom to level the infill with the surrounding area
- Ensure no "dark", or high, spots exist in the area creating a constant color hue in the area

> 6.3 Monthly Maintenance

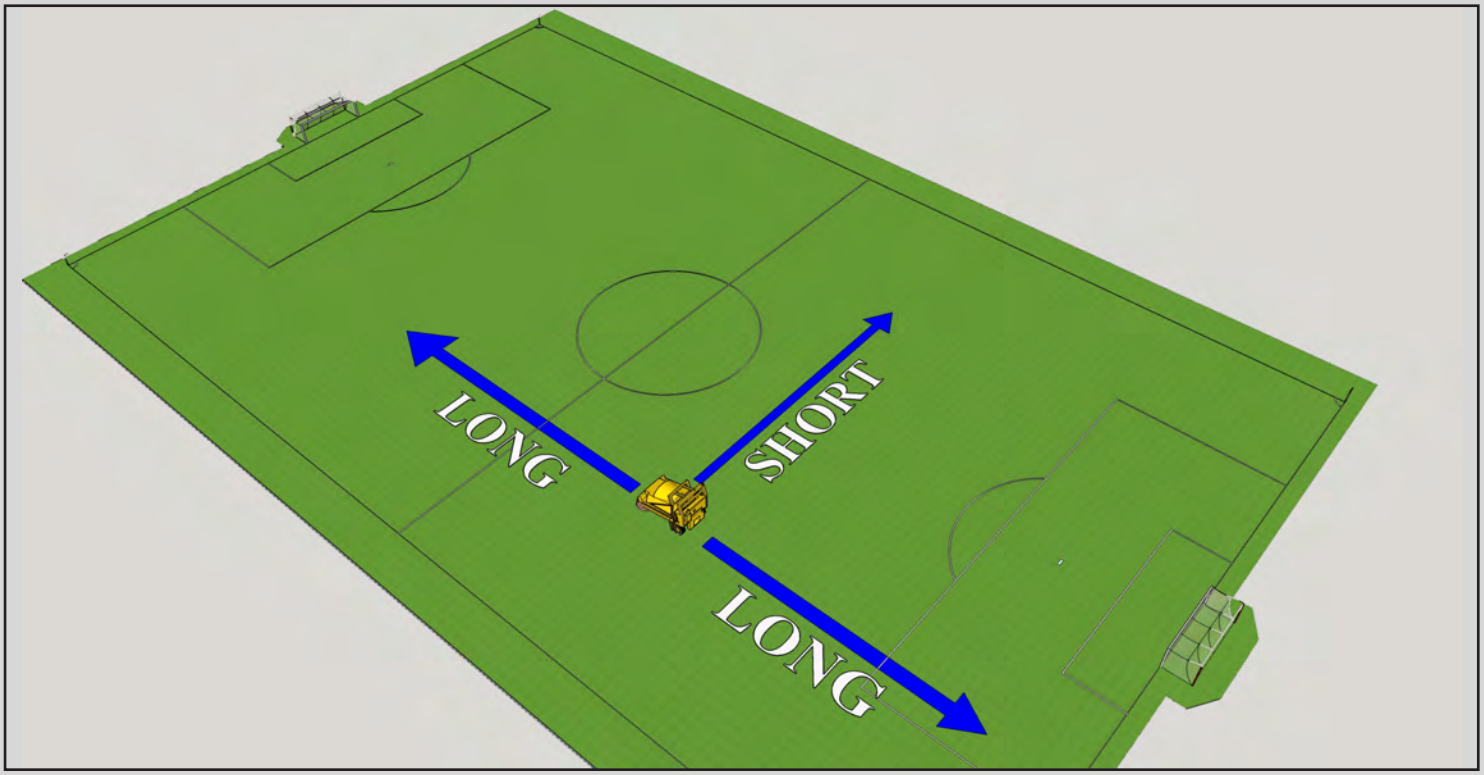
Monthly maintenance consists of 3 actions: inspection of seams and inlays. grooming/brushing, and removal of weeds/natural growth. Inspection of seams and inlays occurs exactly as it would for weekly maintenance. Walk the field paying attention to any damage or disturbed areas. Simultaneously monitor Infil levels as well as the quality of connection between inlays and the field. All inlays coming up will require immediate repair to prevent further damage and maintain a safe playing surface. See the repairs section for instructions on repairing inlays.

For monthly maintenance, the following machines are recommended:
- A light lawn tractor or **UTV** on load spreading low tread profile tires
- A groomer with **medium poly brushes** as recommended by GreenFields
- A sweeper as recommended by Tencate (monthly)
- A piece of artificial grass 6ft x 6ft in size with a draw-beam
- A powered leaf blower or drag mat

> Grooming/Brushing

Every 4-6 weeks the field requires both sweeping and grooming using a UTV or light lawn tractor with the appropriate attachment. Sweeping is accomplished first to remove debris and contaminants from the field. Grooming, more importantly, occurs second and allows for more consistent infill distribution and prevents compaction across the field. It is important that the field is groomed in varying directions to return the fibers to a vertical position, thus providing a natural grass look. **Greenfields recommends grooming the field** twice per session, in opposite directions. Furthermore, the brush pattern should be alternated between brushing sessions.

For example, in the first month the field should be brushed twice going "short", or sideline to sideline. One treatment is accomplished while driving clockwise around the field while the second occurs driving counter-clockwise. Four weeks later, the field will be brushed twice using a "long" pattern, or end line to endline. See below for an example of long versus short brushing.



During the brushing phase particular attention should be paid to the following:

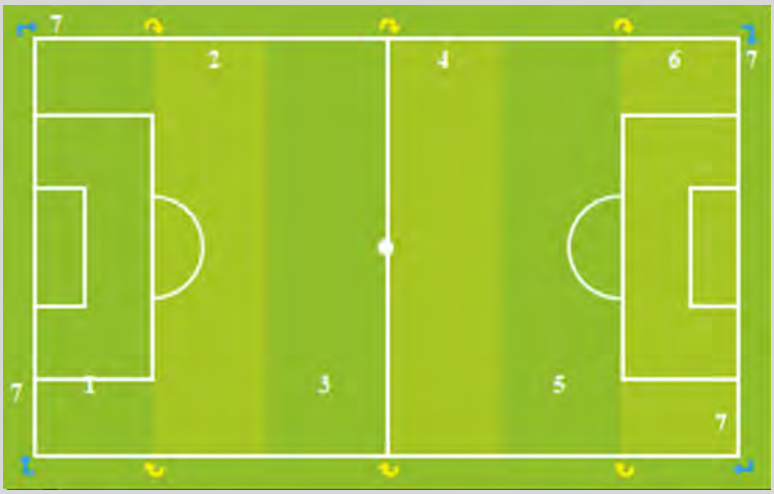
- Always accelerate and decelerate the grooming vehicle gradually
- Speed of the vehicle should never exceed of 9 mph. Recommended speed is 6 mph.
- Always turn the tractor in wide loops
- Ensure that the speed is reduced during GENTLE turning.
- Where possible avoid turning on the seams (yard lines, hash marks, numbers, inlaid lines)
- Ensure the drag brush is flat and level to avoid uneven brushing or even potential damage to the surface
- If it is found that the infill has not been revitalized you may consider placing small weights, typically two 50lbs weights maximum on the brush to increase penetration
- Refueling of the machinery should always be carried out a safe distance from the field (gasoline, diesel fuel, motor oil will instantly damage the field)
- Always reduce the speed slowly and avoid heavy braking.
- Avoid operating near perimeter surface drains. Do not allow infill to migrate into drains.
- DO NOT TRAVEL IN 4-WHEEL DRIVE MODE

> 6.3 Monthly Maintenance (Cont.)

> Grooming/Brushing (Cont.)

The following instructions describe the recommended driving program for both grooming and sweeping. The below sweeping pattern may be used both "long" and "short". When performing the "long" pattern, merely adjust lanes to run parrallel to the sidelines.

Brushing and Sweeping Program:
• Divide the field between the goal lines into 6 sections
• Brush one lane in section 1 from sideline to sideline ensuring a straight line is maintained
• Turn slowly in a wide loop outside the sideline
where possible and drive to section 2 (yellow arrow)
• Clean brush after each lane
• Brush one lane in section 2 until you reach the side- line
• Turn slowly outside in a wide loop the sideline where possible and drive to section 1 again (yellow arrow)
• Repeat until whole of sections 1 and 2 have been brushed
• When sections 1 and 2 have been completed, move on to sections 3 and 4 and repeat the same process
• When sections 3 and 4 have been completed, move on to sections 5 and 6 and repeat the same process
• When sections 1 to 6 have been completed, complete the process by brushing the length of the side and goal lines (section 7, blue arrows)



For reference, a full-size field should take approximately 2-3 hours to groom.
Infill material can appear higher in level if the field is dry due to static within the infill and ambient heat. This does not affect the playability of the field. However, to reduce visual impact on the field, it is advised to brush the field further with a spare piece of synthetic grass turned upside down with a light weight on top of it and towed behind the tractor to remove static. If a Laymor is available, it is also possible to apply a water and fabric softener solution (Downey) via the use of the machine's spray jet system.

> Removal of Weeds, Algae, and Moss

If weeds, algae or moss are detected they must be removed immediately to prevent the spreading of seeds and or the creation of streaks. Therefore, Tencate recommends the following procedures:

• By hand: The recommended procedure for the removal of weeds is by hand, this ensures complete and careful removal of the weed and roots. Knifes and sharp objects should not to be used to avoid puncturing or damage to the field.

• By chemical: Tencate does NOT recommend the use of chemicals. Please contact your Tencate representative if recurring growth occurs on a field. Chemical applications to the field are to be performed ONLY by Tencate certified installation and maintenance teams.

Once the weed, algae or moss has been killed ensure that the debris is removed by hand carefully ensuring that none is left behind to regrow.

> Inspection of Seams

Your field is constructed from rolls of manufactured synthetic grass, these rolls, typically 15 feet in width are sewn or glued together. While the seams cannot be seen without removing the infill they require checking monthly. Look for separation and lifting. Special attention should be paid to yarn line markings as these are usually the location for the seams during construction. Any damage found to the seams should be reported to your local maintenance contractor immediately for repair.

> 6.4 Annual Maintenance

Despite the fact that weekly and monthly maintenance will remove most pollutants it is also recognized by Tencate that there may be a requirement to engage a specialized contractor to provide specific services outside normal maintenance procedures. Some pollutants may remain in the grass and infill material after routine maintenance and a specialized contractor will have the required machinery to clean the field safely.

Such machines are designed to remove, sieve, clean and re-install the infill thus removing such damaging pollutants. Tencate recommends annual professional maintenance be completed by a Tencate certified installer. Treatments can include, but are not limited to: decompaction, top dressing, base repair, decontamination. Please contact your Tencate representative to learn more about annual maintenance solutions.

SPECIALTY STIUATIONS AND MAINTENANCE

> 7.1 Cleaning the Drainage System

All synthetic fields require some form of drainage system. It is essential that the drainage systems are maintained.
A system that contains drainage pipes running underground may collect residue that will require flushing. If access to these pipe ends is available, Tencate recommends that a pressure washer be used to clear residual dirt and refuse. Some fields feature a surface drain running around the circumference of the field. This type of design may collect residue and infill from the field. These drains should be cleaned by hand or by the use of a pressure washer. If in doubt, please contact your Tencate representative.

> 7.2 Removal of Stains

No food or drink should be permitted on to the field. However, Tencate products are constructed using polyethylene fibers which are extremely resistant to absorbing stains as they do not absorb moisture. It is therefore relatively easy to remove stains as they will not be absorbed into the fiber. Staining should be dealt with as soon as possible and before the offending contaminant has chance to dry or harden. Most stains listed below can be removed by the use of hot water mixed with dish washing detergent as required. If scrubbing is required for stubborn stains the use of paper towels, a sponge or soft plastic scrubbing brush is recommended to avoid damage to the fiber. The area should be thoroughly rinsed with clean water to wash away any detergents used. Please seek advice from your local Tencate office if a stain is not removable with soap and water.

> Persistent or Oil Based Stains

If any of the products listed below are spilled on the field seek immediate assistance from your local Tencate office.

- Crayons, furniture stain, lipstick, metal polish, cooking oil, rubber cleat marks, shoe polish, tanning oil, ink
- Oil paints (Do not use for field markings)
- Nail Polish
- Paraffin Wax
- Tar or Asphalt
- Gasoline, Diesel fuel, Motor oil, Alkaline (Caustic) cleaners

> Typical Water Borne Stains

- Acid
- Alcohol/Beer
- Alkali
- Blood
- Chocolate
- Coffee
- Cola
- Dye
- Food Coloring
- Fruit Juice
- Paint
- Mustard
- Tea
- Ketchup
- Urine
- Milk

> 7.3 Animal Waste

Animals should not be allowed on the field surface, to include pets. Obviously, not all wildlife can be prevented from access to the surface (birds, deer, other migrant animals) and as such it is inevitable that animal waste will need to be removed. First, remove the solid element(s), then wash that area with a mixture of water and dish-washing detergent. If the waste is liquid only simply wash the area immediately with dish-washing detergent/water and rinse with clean water afterwards. For more serious waste contaminations, Tencate recommends the use of Turf Fresh antibacterial treatment for the field - available at Synthetic Grass Warehouse. Turf Fresh is applied in the same fashion as the water/soap mixture used for cleaning. Tencate recommends following the mixture instructions on the rear of the Turf Fresh container.

> 7.4 Chewing Gum

Chewing gum is prohibited on Tencate turf products. If gum does contaminate the turf, gently rub the area with ice until the chewing gum is frozen. Then, scrape the frozen gum with a plastic scrapper to remove. If this technique is unsuccesful, a mixture of dish soap and water can be attempted. As a last resort, mineral spirits may be used to attempt removal. This technique should be the final approach to cleanup and must be performed carefully. Contact your Tencate representative for detailed instructions.

> 7.5 Fungus or Mold

Generally fungus and mold do not develop on the surface of the turf product although it is possible for conditions to develop that promote growth below the surface of synthetic surfaces. Dirt and soil contamination, along with a constant presence of water can create a suitable condition for mold growth. This can indicate a more serious drainage issue with the subgrade or area surrounding the field product and should not be taken lightly. If you suspect mold or fungus growth, contact your Greenfields representative immediately. While further issues are being investigated, Tencate recommends the following procedures:

- Use a ONE percent solution of hydrogen peroxide in water.
- Gently wipe on to the affected area and flush thoroughly with water following application
- DO NOT use a high-pressure washer, or steam cleaner as this can severely damage the field
- If in doubt please contact your local GreenFields office for assistance

> 7.6 Removal of Snow and Ice

Tencate does not recommend snow removal or plowing unless performed by a trained professional. If use of the field is absolutely necessary, plowing may continue **EXTREMELY CAREFULLY**. Do not use common salt, rock salt, calcium, chloride, ammonium nitrate or other corrosive or toxic chemicals to melt snow and ice on Tencate surfaces. Their presence can be harmful to players, mechanical equipment and possibly damage the field itself.

Tencate expressly prohibits the use of metal street plows and any form of road going vehicle. Lightweight tractors using specially configured buckets are the ONLY approved, mechanized, equipment for Tencate athletic products. Lugs, chains, and studs are damaging to the synthetic surface and should not be used. Do not park equipment on the field overnight or for extended periods of time. Please contact your Tencate representative for information on professional plowing services.

Tenacte prohibits the removal of ice as remnants can be dangerous to players and the general public. Further, improper removal can result in damage to fibers and/or primary backing of the product. It is not advised to use a tarpaulin cover on the field during freezing weather, as covers can freeze to the surface through condensation and thus damage the fibers during removal.

REPAIRS

It is recommended that the field is inspected closely prior to the start of any sports season for any damage that may require repair. Additionally, Tencate stresses the importance of dilligent inspection during daily and weekly maintenance. Ensure any findings are reported to Tencate, whether repaired by ownership staff or a Tencate certified installer. If Tencate assistance is necessary to carry out repairs, try to allow for as much notification time as possible as mobilization may not be immediately available. As gluing of the seams and the installation of infill is difficult in wet conditions, professional repair visits will be weather permitting and dependent on warranty conditions. We strongly advise that damaged areas of the field be immediately corrected no matter how small to avoid further damage. Owners should be aware that small seam repairs or cuts to the field are to be expected during the life of the field, such failures less than 1 foot in length could be repaired by the owner to reduce financial costs, advice for such repairs are provided below.

> 8.1 Seam and Inlay Repairs

Damaged seams must be repaired immediately to prevent tripping hazards and further damage to the turf system. Seam repairs 1' in length and below are easily repaired by ownership staff, as are minor inlay repairs. A minor inlay repair is characteriezed by a 1' (or less) inlay coming up from the corners and NO damage to the turf itself. Please contact Tencate regarding more serious repairs (wherein size is greater than 1' or damage is present on the turf). To repair minor seam and inlay failures, Tencate recommended the following procedures:

- Remove/vacuum ALL the infill from the affected area
- Ensure the area to be repaired is free from loose rubber, dirt, old adhesive and any other foreign material, and is thoroughly dry
- Cut any excess glue from the turf which may interfere with the turf and its ability to sit flat
- Remove the old seaming tape from underneath the carpet seam and replace with new tape
- Apply a bead of glue (roughly 1/4" wide) to each side of the seam, roughly 3/8" in from the edge. Add additional glue underneath each panel to promote a consistent bond
- Press the carpet into the adhesive evenly and ensure a smooth joint is achieved
- Weigh down the repaired area and allow it to cure for at least 24 hours (bricks or cinder blocks are best). Be certain the glue is not being pressed up and into the fibers
- Spread the sand/rubber infill on the repaired area and hand brush into the turf thoroughly until it is even with surrounding playing area
- Seam repairs should be undertaken in dry warm conditions where practically possible

> 8.2 Painting Field Markings

Most synthetic fields require line markings. Some fields have lines inlaid at the time of installation, while some owners choose to paint temporary lines for removal and reapplication at a later date. Please contact Tencate for approved paint products and removers. If painted lines are desired, Tencate recommends the following procedures:

- Only apply paint when the field or fibers are totally dry and clean from pollutants. Avoid overspray to promote ease of removal
- The recommended temperature for best results is 60 F to 90 F
- Only use recommended specifically designed paint
- Remove all old lines and markings if possible AFTER seeking advice from your local Tencate office
- Artificial turf fibers will not absorb paint – use a paint designed for artificial turf fields
- Paint should be applied per the manufacturer recommendations.
- Do not use paint thinner or turpentine for removal of paint lines
- Paint should be allowed to cure properly before opening the field for use. Consult the paint manufacturer for cure times

CONCLUSION

With the many advances of synthetic turf plus the innovations and developments of the past years, Tencate products require a less intensive maintenance program than ever before. However, your Tencate product will perform, look and feel better for a longer period of time if the maintenance schedule outlined in this manual is adhered to. Tencate products rely, in part, on the infill system which has influence on the life and playability of the field. It is therefore critical to maintain a sufficient level of infill material that is uniformly distributed throughout the field. Special attention must be paid to high usage areas such as mid fields, goal lines and mouths, corner spots and penalty spots. You should periodically inspect these areas for infill displacement and infill thickness and carry out the required action if found to be below standard. **Ensure records of maintenance are maintained throughout the warranty period** as claims will be evaluated using these records. Failure to maintain the field and records of operation WILL VOID WARRANTY COVERAGE. This manual is designed to provide guidance for correct use and maintenance of your product. If you have any further questions please feel free to contact your local Tencate office.

> Prohibited On Greenfields Products

- Storage of materials on the field
- Vehicular traffic other than lawn tractors and ATV's
- Unauthorized sports such as golf, shot putt, javelin or discus throwing or similar
- Use of inappropriate footwear (metal cleats of ANY type)
- Open flame, fireworks, welding, etc.
- Use of wire brushes
- Any load in excess of 25 PSI
- The use of any unauthorized cleaning equipment, methods or materials
- High pressure washers or water sprayers
- Vehicles with non-pneumatic tires
- Introduction of sand or infill's that vary from GreenFields specifications
- Application of cleaners or chemicals that cause a chemical reaction with the turf product

> Key Points

- Control access to the field
- Keep the field clean and sweep the field as recommended within this manual
- Provide sufficient litter bins on site for public use
- Keep vehicular traffic off of the field
- Prohibit SMOKING on or around the field perimeter
- MAINTAIN PROPER PILE REVEAL AND INFILL LEVEL (.5" ON INFILLED PRODUCTS)
- MAINTAIN ACCURATE MAINTENANCE RECORDS THROUGHOUT THE LIFE OF THE FIELD
- Maintain the field as described at all times, even if the field is not used regularly
- IF IN DOUBT SEEK ADVICE FROM YOUR LOCAL TENCATE OFFICE
- Use plywood and fabrics to protect the field if special events are scheduled
- Carry out minor repairs as soon as possible, report major repairs or concerns to your local Tencate office

TENCATE

Maintenance Report

Weather Condition						Temp:

Project Name:	Address:			
Date of Maintenance:				
Maintenance performed by:				
Fiber Length:				
Field Refuse			Status	Removed
	Organic:			
		- Weed	none/ little/ a lot	yes/ no
		- Foliage	none/ little/ a lot	yes/ no
		- Algae	none/ little/ a lot	yes/ no
		- Moss	none/ little/ a lot	yes/ no
	Non Organic:			
		- Litter	none/ little/ a lot	yes/ no
		- Glass	none/ little/ a lot	yes/ no
Playing area				
General field condition	good/ reasonable/ bad			
Measurement*	Fiber length	Infill Height		
		Sand	Rubber	
Penalty spot				
Center circle				
Corner spots				
Goal areas				
*make several measurements and note down the average				
Loose seams	yes/ no	repaired	yes/ no	
Straight lines	yes/ no	repaired	yes/ no	
Loose penalty spot(s)	yes/ no	repaired	yes/ no	
Damage (e.g. burn spots, tears, stains)	yes/no	repaired	yes/ no	
*if yes, describe damage				
Maintenance carried out				
Brushed	yes/ no			
De-compaction	yes/ no			
Wet Drag	yes/ no			
Surface cleaning(Sportchamp)	yes/ no			
Weed removal	yes/ no			

TENCATE

Maintenance Report

Infill	Field		Surrounds		Center Circle		High Traffic Areas	
	OK	NOK	OK	NOK	OK	NOK	OK	NOK
			Notes/ advice					
Edge Secure	OK	NOK						
Nailer boards	OK	NOK						
Planarity	OK	NOK						
Seams	OK	NOK						
Lines	OK	NOK						
Fencing	OK	NOK						
Goals	OK	NOK						
Moss	Yes	No						
Weeds	Yes	No						
General Condition	OK	NOK						

	Yes/ No	Notes/ advice
Minor Maintenance		
Major Maintenance		
Sweeper-vacuum		
Dragged with rubber mat		
Spray for fungus/mold		

Other work carried out/ extra work/ supply/ notes/ advice
Work carried out by:
Date:

> Approved System Components

> Cleaners

DISINFECTANTS:
- OxyTurf by HGP GLOBAL - UNSCENTED ONLY
- mPerial by mPact
- Benefact by ServPro

ODOR/CLEANING:
- TurFresh by TURF FRESH
- Logic by PROVET

> Grooming Equipment

OWNER:
- GreensGroomer by GREENSGROOMER
- LitterKat by GREENSGROOMER
- SportChamp by SMG

PROFESSIONAL:
- GreensGroomer by GREENSGROOMER
- Sweepmaster 300 by LAYMOR
- BW260 by BROCEBROOM
- 400 series Turf Tender by DAKOTA
- Mete-R-Matic series by TURFCO

> Tape

FIELD HOCKEY:
- 150086 Scrim by BRON TAPES

SEAMING:
- Ultrabond Seam Tape by MAPEI
- Tencate Seam Tape by TENCATE
- C130 by XGS
- C145 by XGS

> Glue

FIELD HOCKEY:
- 34N by NORDOT
- 34G by NORDOT

SEAMING/INLAY:
- STA1000 by ADV POLYTECH
- Sportbond DR2000053 by ISOTECH
- Ultrabond PU2k by MAPEI (recommended)
- Ultrabond PU1k by MAPEI
- 34N by NORDOT
- TurfClaw by SYNLOCK
- XGSBond by XGS

> Pad

PLAYGROUND:
- PowerbasePLAY by BROCK
- ProPlay 25, 35, 45, 55 by SCHMITZFOAM
- GeoFlo by TENCATE
- GeoFlo+ by TENCATE

> Weed Control

- Weed and Grass Killer by SPECTRACIDE
- Weed and Grass Killer by ROUNDUP

> Infill

ALTERNATIVE:
- Brockfill by BROCK
- TPE by GUARDIAN
- Geocool by TENCATE
- Envirofill by US Greentech
- Safeshell by US Greentech
- All Pro Cork by TTII
- Pro Max TPE by TTII
- Playsafe 65 EPDM by TTII

RUBBER:
- 10-20, 14-30 SBR by CRM (cryo or non)
- 10-20, 14-30 SBR by GENAN
- 10-20, 14-30 SBR by LIBERTY TIRE
- 10-20, 14-30 Nikegrind by NIKE
- 10-20, 14-30 SBR by RUBBERLOGIX

SAND:
- 20-50, 20-40, 30-50 Sportsfield Sand by TTII
- 20-50, 20-40, 30-50 Sportsfield Sand by US Silica
- 20-50, 20-40, 30-50 Sportsfield Sand by Whibco

> Paint

REMOVER:
- Blitz 2.0 by PIONEER
- Blitz Remover by PIONEER
- Mineral Spirits

SPORTS:
- Gameline by PIONEER
- Gameline GPS by PIONEER
- Stripe-X by US SPECIALTY COATINGS
- Durastripe by US SPECIALTY COATINGS

> Pad

SPORTS:
- GeoFlo by TENCATE
- GeoFlo+ by TENCATE
- Ecocept by TENCATE
- ArmaSport by ARMACELL
- Powerbase YSR by BROCK
- Powerbase by BROCK
- SP series by BROCK
- Shockdrain 580, 780 by ENPLAST
- ProPlay Sport 23 by SCHMITZFOAM
- ProPlay Sport 23D by SCHMITZFOAM
- ProPlay Sport 20 by SCHMITZFOAM
- ProPlay Sport 20D by SCHMITZFOAM
- ProPlay HP40li by SCHMITZFOAM
- ProPlay HP23el by SCHMITZFOAM
- Progame by TROCELLEN
- Progame Elayer by TROCELLEN

Ensure ONLY components listed above are utilized with Tencate turf products. Any deviation from this list or use of an unapproved product will void the warranty. To apply for product approval, send samples to Tencate manufacturing for system testing and addition to this list. An ISO version of this list is available upon request.

PIVOT MAINTENANCE

PIVOT is a non-infill product and requires significantly different maintenance protocols to ensure top level performance and durability. Comprised of 3 different fibers, the product is designed to mat down to improve performance. The matting process requires normal use and time (depending on use levels) to achieve the top performance state. Assuming daily use, matting should require 12 to 16 months and will be visually shorter in pile height once achieved. As such, grooming using drag brush or Vertitop should **NOT** be conducted on PIVOT for the first 18 months of ownership. Tencate recommends regular removal of debris and trash from the field. Please perform this action weekly using a LitterKat or similar equipment, as with a standard product. Tencate also recommends recording the pile height using an infill probe to track the matting process over time. The measurements should be recorded on the Tencate maintenance form to ensure compliance with the warranty. Again, maintaining accurate maintenance records is **REQUIRED** for continued warranty coverage. Once the product has matteded to roughly .5" lower than the starting pile height, please resume drag brush grooming of the product. NEVER use tines to groom a PIVOT field. This will reverse the matting process and create uneven performance on areas of the field. Tencate recommends grooming the field quarterly once the matting process is concluded. Please refer to the grooming section of this document for more detailed information regarding grooming patterns.

> High Traffic Areas

Similar to tufted products, PIVOT will exhibit faster wear and tear in areas of high traffic. These areas are common to both PIVOT and standard tufted products. Depending on the sport in question, Tencate recommends weekly monitoring of areas like:

- Corner Kicks (soccer)
- Penalty Inlays (all sports)
- Extra Point Inlays (football)
- Turf Adjacent to 2nd and 3rd base (slide paths of baseball)
- Home Plate Area (baseball)

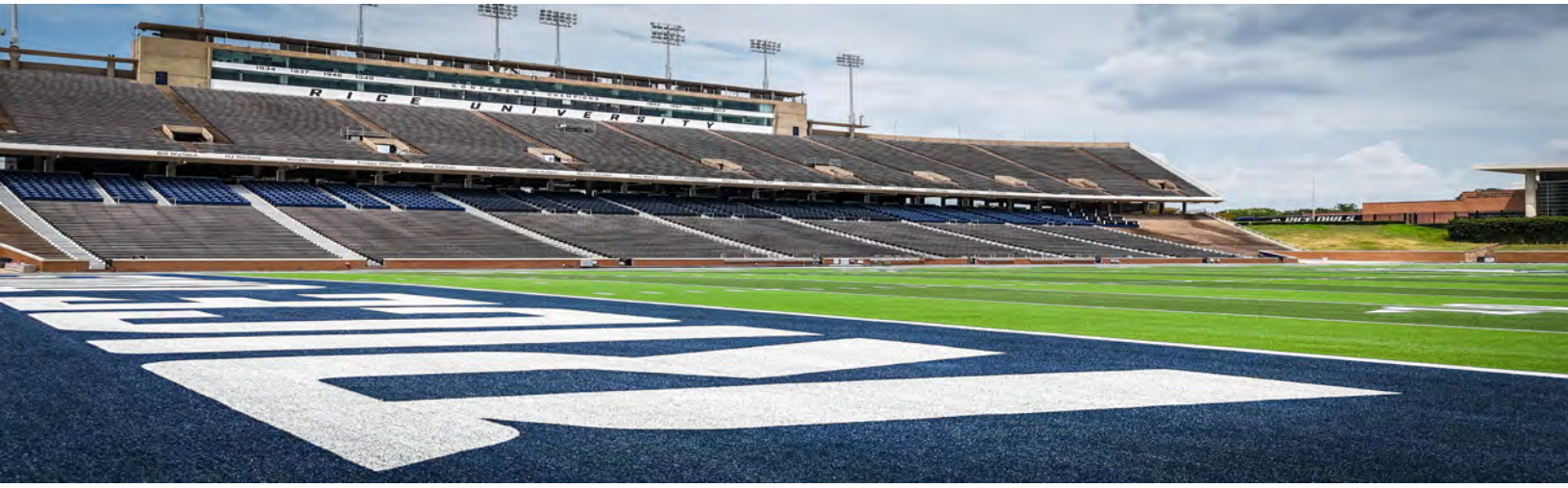
While unlikely, it may be necessary to introduce additional cooling additive (GeoCool) to high traffic areas. Using a probe, measure the GeoCool depth to determine the level of material in the area. Once a high traffic area is .25" lower than the surrounding area, use a 5 gallon bucket filled with GeoCool to add material to the high traffic area. The material should be worked in with a rake or by hand, until it is the same height as the surrounding areas. Tencate recommends performing this maintenance once per month, or once cooling additive levels in high traffic areas vary more than .25" from the surrounding area of the field.

> Plowing

Tencate does not recommend snow removal or plowing unless performed by a trained professional. If use of the field is absolutely necessary, plowing may continue **EXTREMELY CAREFULLY.** Do not use common salt, rock salt, calcium, chloride, ammonium nitrate or other corrosive or toxic chemicals to melt snow and ice on Tencate surfaces. Their presence can be harmful to players, mechanical equipment and possibly damage the field itself. PIVOT contains only cooling additive and must be treated more carefully than a standard, infilled product. Tencate recommends leaving 2-5" of snow on top of the field after plowing, followed by snow shovels or Laymor to gently brush the remaining snow from the surface. NEVER dig a Laymor brush deeply into the field to help remove heavier snow. Doing so may damage seams and/or the PIVOT material itself.

Tencate expressly prohibits the use of metal street plows and any form of road going vehicle. Lightweight tractors using specially configured buckets are the ONLY approved, mechanized, equipment for Tencate athletic products. Lugs, chains, and studs are damaging to the synthetic surface and should not be used. Do not park equipment on the field overnight or for extended periods of time. Please contact your Tencate representative for information on professional plowing services.

Tenacte prohibits the removal of ice as remnants can be dangerous to players and the general public. Further, improper removal can result in damage to fibers and/or primary backing of the product. It is not advised to use a tarpaulin cover on the field during freezing weather, as covers can freeze to the surface through condensation and thus damage the fibers during removal.



> Stains/Odors/Contaminants

PIVOT cleaning and disinfection procedures are identical to other Tencate products. **Only use APPROVED CLEANERS and DISINFECTANTS.** Please reference the approved system components appendix for a list of all approved cleaners and disinfectants. For pet odor and/or waste, Tencate recommends TurfFresh cleaning solution. Please follow all directions on the product to prevent damage to the surface. For blood and other contaminations, please utilize OxyTurf or mPerial to ensure removal of any harmful bacteria or disease.

> IF CONTAMINATION OCCURS

- RINSE the affected area with water using a hose
- Apply the approved cleaner as per instructions
- Only use cleaners from the approved system component list
- DO NOT use a high-pressure washer, or steam cleaner as this can severely damage the field
- If in doubt please contact your local Tencate representative for assistance

WHEN IN DOUBT, CONTACT YOUR TENCATE REPRESENTATIVE

TenCate

Building Healthier More Beautiful Communities

TENCATE AMERICAS | 1131 BROADWAY ST. DAYTON, TN 37321 | (855) 773-6668 | TENCATEGRASS.COM | VERSION 2024 V1.1

TENCATE GRASS

July 13, 2022

Team Dayton,

I am pleased to inform you that today we have been recommended for our ISO 9001:2015 certification. The certification review process will take several weeks and then we will receive our certificate from our registrar, who is NSAI. ISO 9001:2015 is a globally recognized certification of quality management system standards.

This achievement demonstrates Tencate Grass's commitment to develop processes ensuring consistency, reliability, and accountability across our business operations. By achieving this certification, we continue to confirm our competence and desire to effectively and efficiently provide a quality management system while continuously improving our products, services, and internal processes.

This accomplishment was a TOTAL TEAM effort. A lot of hard work, communication, and dedication from the whole of the team went into implementing this quality management system.

This is a huge first step on our journey from being a good company to a great company. Our business processes have been standardized and stabilized by implementing this system. This foundation will allow us the platform to continuously challenge ourselves to improve our business to provide products that meet or exceed the needs and expectations of our customers.

I am proud of our team for their collective commitment to constant improvement, which has led us to this achievement.

ONE TEAM, ONE MISSION

Sincerely,

Seth Brickner

EVP Operations - Americas

TENCATE GRASS

CHALLENGER TURF
PREMIUM SYNTHETIC GRASS

ENVY LAWN
Always Green with Envy

April 27, 2022

Team Dalton,

I am pleased to inform you that today we have been recommended for our ISO 9001:2015 certification. The certification review process will take several weeks and then we will receive our certificate from our registrar, who is NSAI. ISO 9001:2015 is a globally recognized certification of quality management system standards.

This achievement demonstrates Challenger Turf's commitment to develop processes ensuring consistency, reliability, and accountability across our business operations. By achieving this certification, we continue to confirm our competence and desire to effectively and efficiently provide a quality management system while continuously improving our products, services, and internal processes.

This accomplishment was a TOTAL TEAM effort. A lot of hard work, communication, and dedication from the whole of the team went into implementing this quality management system.

This is a huge first step on our journey from being a good company to a great company. Our business processes have been standardized and stabilized by implementing this system. This foundation will allow us the platform to continuously challenge ourselves to improve our business to provide products that meet or exceed the needs and expectations of our customers.

I am proud of our team for their collective commitment to constant improvement, which has led us to this achievement.

ONE TEAM, ONE MISSION

Sincerely,

Seth Brickner

EVP Operations

Certificate of Registration of Environmental Management System to ISO 14001:2015

The National Standards Authority of Ireland Inc. certifies that:

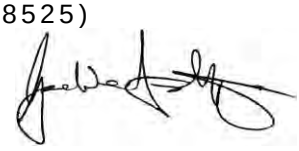
Challenger Turf
Tencate Grass Dalton
2640 Abutement Road
Dalton, GA 30721
USA

has been assessed and deemed to comply with the requirements of the above standard in respect of the scope of operations given below:

Design, Manufacturing, Distribution of Artificial Turf Products for Sports and Landscaping

Additional sites covered under this multi-site certification are listed on the Annex. (File No. 14.8525)

Geraldine Larkin
Chief Executive Officer



Lisa Greenleaf
Technical Operations Officer

Registration Number: 14.8525
Certification Granted: August 02, 2023
Effective Date: August 02, 2023
Expiry Date: August 01, 2026

National Standards Authority of Ireland Inc., 20 Trafalgar Square, Nashua, New Hampshire, NH 03063, USA T +1 603 882 4412

Annex to Certificate Number: 14.8525

Scope of Registration:

Design, Manufacturing, Distribution of Artificial Turf Products for Sports and Landscaping

Activity	Location
Central Function, Management, Administration, Support, Purchasing, Customer Service, Design, QC, HR, Production	Challenger Turf Tencate Grass Dalton 2640 Abutement Road Dalton, GA 30721 USA File No.: 14.8525
Production, Warehouse	Challenger Turf Tencate Grass Dalton 743 Hill Road Dalton, GA 30721 USA File No.: 14.8525/A

Verified by:
Technical Operations Officer

Certificate of Registration of Environmental Management System to ISO 14001:2015

The National Standards Authority of Ireland Inc. certifies that:

Tencate Grass North America
1131 Broadway Street
Dayton, TN 37321
USA

has been assessed and deemed to comply with the requirements of the above standard in respect of the scope of operations given below:

Design and Manufacturing of artificial turf components and products for use in the Landscaping and sports field markets.

Geraldine Larkin
Chief Executive Officer

Lisa Greenleaf
Technical Operations Officer

Registration Number: 14.8526
Certification Granted: October 04, 2023
Effective Date: January 05, 2024
Expiry Date: October 03, 2026

National Standards Authority of Ireland Inc., 20 Trafalgar Square, Nashua, New Hampshire, NH 03063, USA T +1 603 882 4412

Certificate of Registration of Environmental Management System to ISO 14001:2015

The National Standards Authority of Ireland certifies Inc. that:

Tencate Grass North America
1131 Broadway Street
Dayton, TN 37321
USA

has been assessed and deemed to comply with the requirements of the above standard in respect of the scope of operations given below:

Design and Manufacturing of artificial turf components and products for use in the Landscaping and sports field markets.

Additional sites covered under this multi-site certification are listed on the Annex. (File No. 14.8626)

Geraldine Larkin
Chief Executive Officer

Lisa Greenleaf
Technical Operations Officer

Registration Number: 14.8526
Certification Granted: October 04, 2023
Effective Date: October 04, 2023
Expiry Date: October 03, 2026

Annex to Certificate Number: 14.8526

Scope of Registration:

Design and Manufacturing of artificial turf components and products for use in the Landscaping and sports field markets.

Activity	Location
Headquarters, Administration, Design, Engineering, Manufacturing, Warehousing	Tencate Grass North America 1131 Broadway Street Dayton, TN 37321 USA File No.: 14.8526
Warehouse	Tencate Grass North America 255 Kraft Drive Dalton, GA 30721 USA File No.: 14.8526/A

Verified by:
Technical Operations Officer

Certificate of Registration of Occupational Health and Safety Management System to ISO 45001:2018

The National Standards Authority of Ireland Inc. certifies that:

Challenger Turf
Tencate Grass Dalton
2640 Abutement Road
Dalton, GA 30721
USA

has been assessed and deemed to comply with the requirements of the above standard in respect of the scope of operations given below:

Design, Manufacturing, Distribution of Artificial Turf Products for Sports and Landscaping

Additional sites covered under this multi-site certification are listed on the Annex. (File No. 18.8525)

Geraldine Larkin
Chief Executive Officer

Lisa Greenleaf
Technical Operations Officer

Registration Number: 18.8525
Certification Granted: August 02, 2023
Effective Date: August 02, 2023
Expiry Date: August 01, 2026

National Standards Authority of Ireland Inc., 20 Trafalgar Square, Nashua, New Hampshire, NH 03063, USA T +1 603 882 4412

Annex to Certificate Number: 18.8525

Scope of Registration:

Design, Manufacturing, Distribution of Artificial Turf Products for Sports and Landscaping

Activity	Location
Central Function, Management, Administration, Support, Purchasing, Customer Service, Design, QC, HR, Production	Challenger Turf Tencate Grass Dalton 2640 Abutement Road Dalton, GA 30721 USA File No.: 18.8525
Production, Warehouse	Challenger Turf Tencate Grass Dalton 743 Hill Road Dalton, GA 30721 USA File No.: 18.8525/A

Verified by:
Technical Operations Officer

Certificate of Registration of Occupational Health and Safety Management System to ISO 45001:2018

The National Standards Authority of Ireland Inc. certifies that:

Tencate Grass North America
1131 Broadway Street
Dayton, TN 37321
USA

has been assessed and deemed to comply with the requirements of the above standard in respect of the scope of operations given below:

Design and Manufacturing of artificial turf components and products for use in the Landscaping and sports field markets.

Geraldine Larkin
Chief Executive Officer

Lisa Greenleaf
Technical Operations Officer

Registration Number: 18.8380
Certification Granted: January 23, 2020
Effective Date: January 05, 2024
Expiry Date: October 03, 2026

Certificate of Registration of Occupational Health and Safety Management System to ISO 45001:2018

The National Standards Authority of Ireland Inc. certifies that:

Tencate Grass North America
1131 Broadway Street
Dayton, TN 37321
USA

has been assessed and deemed to comply with the requirements of the above standard in respect of the scope of operations given below:

Design and Manufacturing of artificial turf components and products for use in the Landscaping and sports field markets.

Additional sites covered under this multi-site certification are listed on the Annex. (File No. 18.8380)

Geraldine Larkin
Chief Executive Officer

Lisa Greenleaf
Technical Operations Officer

Registration Number: 18.8380
Certification Granted: January 23, 2020
Effective Date: October 04, 2023
Expiry Date: October 03, 2026

National Standards Authority of Ireland Inc., 20 Trafalgar Square, Nashua, New Hampshire, NH 03063, USA T +1 603 882 4412

Annex to Certificate Number: 14.8380

Scope of Registration:

Design and Manufacturing of artificial turf components and products for use in the Landscaping and sports field markets.

Activity	Location
Headquarters, Administration, Design, Engineering, Manufacturing, Warehousing	Tencate Grass North America 1131 Broadway Street Dayton, TN 37321 USA File No.: 14.8526
Warehouse	Tencate Grass North America 255 Kraft Drive Dalton, GA 30721 USA File No.: 14.8526/A

Verified by:
Technical Operations Officer

Certificate of Registration of Quality Management System to ISO 9001:2015

The National Standards Authority of Ireland Inc. certifies that:

Challenger Turf
743 Hill Road
Dalton, GA 30721
USA

has been assessed and deemed to comply with the requirements of the above standard in respect of the scope of operations given below:

Design, MFG, Distribution of Artificial Turf products for Sports and Landscaping

Additional sites covered under this multi-site certification are listed on the Annex (File No. 19.8525)

Geraldine LarkinChief
Executive Officer

Lisa Greenleaf
Technical Operations Officer

Registration Number: 19.8525
Certification Granted: July 13, 2022
Effective Date: July 13, 2022
Expiry Date: July 12, 2025

Annex to Certificate Number: 19.8525

Scope of Registration:

Design, MFG, Distribution of Artificial Turf products for Sports and Landscaping

Activity	Location
Central Function, Administration, Design, Manufacturing	Challenger Turf 743 Hill Road Dalton, GA 30721 USA File No.: 19.8525
Warehouse	Challenger Turf 2640 Abutement Road Dalton, GA 30721 USA File No.: 19.8525/A

Verified by:
Technical Operations Officer

Certificate of Registration of Quality Management System to ISO 9001:2015

The National Standards Authority of Ireland Inc. certifies that:

Tencate Grass North America
1131 Broadway Street
Dayton, TN 37321
USA

has been assessed and deemed to comply with the requirements of the above standard in respect of the scope of operations given below:

Design and Manufacturing of artificial turf components and products for use in the Landscaping and sports field markets.

Geraldine Larkin
Chief Executive Officer

Lisa Greenleaf
Technical Operations Officer

Registration Number: 19.8526
Certification Granted: November 30, 2022
Effective Date: January 05, 2024
Expiry Date: November 29, 2025

National Standards Authority of Ireland Inc., 20 Trafalgar Square, Nashua, New Hampshire, NH 03063, USA T +1 603 882 4412

Certificate of Registration of Quality Management System to ISO 9001:2015

The National Standards Authority of Ireland Inc. certifies that:

Tencate Grass North America
1131 Broadway Street
Dayton, TN 37321
USA

has been assessed and deemed to comply with the requirements of the above standard in respect of the scope of operations given below:

Design and Manufacturing of artificial turf components and products for use in the Landscaping and sports field markets.

Additional sites covered under this multi-site certification are listed on the Annex (File No. 19.8526)

Geraldine LarkinChief
Executive Officer

Lisa Greenleaf
Technical Operations Officer

Registration Number: 19.8526
Certification Granted: November 30, 2022
Effective Date: October 04, 2023
Expiry Date: November 29, 2025

Annex to Certificate Number: 19.8526

Scope of Registration:

Design and Manufacturing of artificial turf components and products for use in the Landscaping and sports field markets.

Activity	Location
Headquarters, Administration, Design, Engineering, Manufacturing, Warehousing	Tencate Grass North America 1131 Broadway Street Dayton, TN 37321 USA File No.: 19.8526
Warehouse	Tencate Grass North America 255 Kraft Drive Dalton, GA 30721 USA File No.: 19.8526/A

Verified by:
Technical Operations Officer