# The World Leader In Artificial Turf



THE ULTIMATE SURFACE EXPERIENCE

## THE GREATEST TURF ON EARTH.



## How The Legend Was Born

FieldTurf comes from humble beginnings. Its debut in the sport surfacing industry was in 1988 with the introduction of a synthetic grass system for tennis courts and a synthetic grass surface used to minimize wear and tear around golf practice tees. The company then began developing synthetic turf surfaces for other sports installations including soccer, lacrosse, football and baseball. FieldTurf focused on perfecting a sports field system with a sand and rubber infill, which provided superior athlete safety, high performance and extreme durability. The infilled artificial turf industry was born when, in 1994, FieldTurf installed its first full size soccer field.

# The Installation That Changed The Industry

As the story goes, Tom Osborne, Nebraska Cornhuskers coaching legend, travelled to a high school installation in Pennsylvania with a recently installed FieldTurf field and walked across the field to meet FieldTurf representatives. "So, where is this stuff everyone's talking about," he asked. The truth was he had just walked across it. Osborne thought he was walking on natural grass. Upon recommendation from Osborne, Nebraska's athletic department installed FieldTurf at one of their practice facilities in 1999. Husker players were so enthusiastic that the school decided to install FieldTurf in its stadium a year early. The Huskers finished with an incredible 12-1 record and a virtually injury-free season their first year on FieldTurf. It was the Nebraska installation that propelled FieldTurf forward, as top teams from around the world began to play on FieldTurf.





University of Nebraska - Memorial Stadium

## The Sports World Chooses FieldTurf

Since the installation at Nebraska, FieldTurf has grown exponentially. Throughout the last decade our engineered, infilled artificial turf systems became the first to host two Super Bowls, the World Series, the World Baseball Classic, a Major League Soccer Cup final and College Bowl games from coast to coast.

Today, FieldTurf continues to thrive as the global market leader in synthetic sports fields with more than 7,000 fields installed. Cities and schools have been benefitting from our ability to provide the very best value for the short and long term, allowing organizations at all levels to be able to forecast the amount of money they will save by installing FieldTurf, the safest, longest lasting and highest performing artificial turf system.

## The Future Of Artificial Turf

With the best and most exclusive fiber manufacturing technology in the market today, FieldTurf has become one of the most vertically integrated companies in the industry. All four of FieldTurf's manufacturing facilities are ISO certified and state-of-the-art. FieldTurf also has permanent R&D centers set up at Penn State University and at each and every one of FieldTurf's manufacturing plants across the globe. At FieldTurf Headquarters, our Innovation & Performance Center has already led to some promising new discoveries that will once again revolutionize the artificial turf industry.





# Heritage

## **PREMIUM PRICE. BEST VALUE.**



## What Separates FieldTurf From All The Rest?

### Here are the Top 10 Benefits:

- 1. FieldTurf has the most innovative product offering.
- 2. Independent testing has proven that FieldTurf is the safest turf system when compared to natural grass.
- 3. FieldTurf is one of the most vertically integrated companies in the world.
- 4. When it comes to playability and performance, FieldTurf is the clear market leader.
- 5. No other long pile, artificial turf system has lasted longer than FieldTurf.
- 6. FieldTurf may be priced higher, but it costs less.
- 7. For peace of mind, FieldTurf provides clients with the best insured warranty in the business.
- 8. FieldTurf is the clear choice of the pros.
- 9. FieldTurf offers First Class Customer Service.
- 10. When combining all these benefits it's clear that FieldTurf is simply ...the best investment.

These are not empty marketing claims, they are backed by science and facts. **Keep reading to find out more...** 

## FieldTurf Is The Best Investment

When compared to natural grass and competing turf systems, FieldTurf has time and again proven to be the better investment. It's all about long term savings.

### FieldTurf may be priced higher but it costs less

FieldTurf vs. Competing Artificial Systems: Best Value Analysis

	Competition	FieldTurf
Base Preparation	\$320,000	\$320,000
Materials*	\$4.00 per sq ft = \$320,000	\$4.75 per sq ft = \$380,000
Maintenance**	\$10,000 x 8 yrs = \$80,000	\$5,000 x 10 yrs = \$50,000
Total Cost	\$720,000	\$750,000
Turf Life*	6-8 years	8-10 years
Average Cost Per Year	\$90,000	\$75,000

\*Material per square foot price difference and turf life figures are based on the last 10 years of industry data. For calculations, 8 years was used for 6-8 yrs range and 10 years was used for 8-10 yrs range. \*\* Yearly maintenance cost is an average figure based on the last 10 years of industry data - cost difference mainly due to increased infill work and repairs associated with competitor fields.

All figures based on average sized fields of 80,000 square feet.

### A guaranteed return on your investment FieldTurf vs. Natural Grass: Costs Over 10 Years

	Natural Grass	FieldTurf
Base Preparation	\$150,000	\$320,000
Materials	\$2.75 per sq ft = \$220,000	\$4.75 per sq ft = \$380,000
Maintenance	\$20,000 x 10 yrs = \$200,000	\$5,000 x 10 yrs = \$50,000
Total	\$570,000	\$750,000
Scheduling Possibilities	25 hrs x 25 wks x 10 yrs = 6,250 hrs	68 hrs x 44 wks x 10 yrs = 29,920 hrs
Average Cost Per Hour of Use	\$91.20	\$25.07

Figures based on 80,000 square foot fields and average costs and usage rates across North America.

## **A Positive Contribution**

When it comes to carbon footprints, there's simply no comparison between natural grass and FieldTurf fields.

## By choosing FieldTurf, you're becoming part of an environmental movement that not only saves clean drinking water, but also:

- Eliminates impact on water resources, saving billions of gallons of water each year
- Eliminates the use of billions of pounds of chemicals
- Removes millions of tires from landfill sites each year
- Significantly lowers the use of natural gas and other fossil fuels
- Eliminates fuel-powered mowing, aerating, and re-seeding
- Eliminates grass clippings
- Can contribute toward numerous Leadership in Energy and Environmental Design (LEED) credits

### **Did You Know?**

A typical full size FieldTurf field saves 1 million gallons of water per year, utilizes 20,000 recycled tires, and eliminates the use of over 8,000 pounds of chemicals per year.





### Largest artificial turf project in the world.

Golden Eagle Regional Park - Sparks, NV 1,400,000 sq ft

"We chose FieldTurf because of the combination of value and quality associated with the FieldTurf product and company. It was a 2-year evaluation process of studying artificial turf products and companies. We visited fields all over the West Coast and spoke with numerous Athletic Directors and Parks & Recreation Directors. It was a consensus among those that we spoke with that FieldTurf had the best product and the best value."

Stan Sherer -Director of Parks & Recreation, City of Sparks



# **Costs Less**

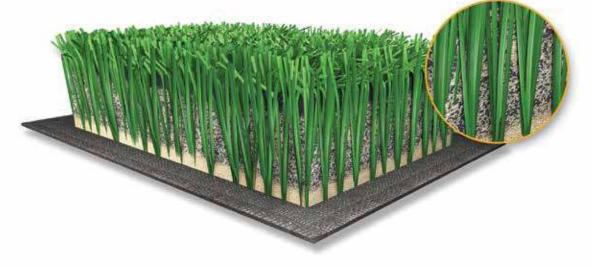
## THE MOST INNOVATIVE TURF OFFERING.





## The FieldTurf Elite System Difference.

When it comes to safety, performance and durability, nothing compares to the FieldTurf Elite system.



### **Patented Infill Layering System:**

Often imitated, but never equaled, FieldTurf's patented infill mixture delivers unmatched player safety with published peer-reviewed studies to prove it!

### **Highest Quality Materials:**

Not all materials are created equal. FieldTurf uses the best ingredients – round, clean and durable silica sand coupled with the cleanest and roundest cryogenically processed rubber.

### **Heavyweight System:**

Don't be fooled by pile weight – focus on the total system weight. With FieldTurf's heavyweight infill system the total carpet weights of most Elite systems eclipse 1300 oz/sq yd.

### **Most Durable Fibers:**

When it comes to durable fibers, FieldTurf's Elite systems feature some of the most durable fiber systems available in the market today. Just ask us for the testing!

### **Unmatched Drainage:**

FieldTurf's patented finger coating system provides 40% more porosity than competing perforated turf systems.



### **THE FIBERS**

### The Most Durable Fibers - for Longest-Lasting Performance

The ideal turf fibers should provide grass-like aesthetics and unmatched durability. FieldTurf's systems have done just that. FieldTurf has the most innovative fiber options to choose from. Here are the fiber options for the Elite system:

**FieldTurf Revolution** - Manufactured in FieldTurf's own fiber plant, FieldTurf Revolution features a proprietary polymer formulation that reduces splitting and degradation and includes a leading ultraviolet inhibitor technology. A state-of-theart extrusion process provides intricate concave and ridged construction to eliminate breaking points.

**Classic HD** - The gold standard in slit-film durability and technology, Classic HD is the ideal combination of softness and stiffness, designed to be the most player-friendly and resilient slit-film fiber in the marketplace. Its unique extrusion and inline precision cutter eliminates excess splitting, for longer-lasting performance.



FieldTurf Revolution

Classic HD

### **THE INFILL**

### A Patented Infill System - for Superior Playability

FieldTurf's infill is installed in 3 layers – a base layer of sand for ballast, a middle layer of silica sand / cryogenic rubber, and a top layer of larger sized cryogenically processed rubber particles. This patented system is the secret behind the safety and playability of FieldTurf. While fiber provides aesthetic value, it is the infill that delivers what the athlete needs to perform. FieldTurf infill is made of the highest quality materials. Unlike ambient rubber, FieldTurf uses only cryogenic rubber, the cleanest and highest grade of rubber granule. Similarly sized particles of washed silica sand and rounded cryogenic rubber hold each other in suspension - compress and expand to provide stability, long life resiliency and proper energy restitution. A top layer of rubber particles provides athletes with a non-abrasive cushion. FieldTurf's Elite systems offer the heaviest infill systems in the industry – with up to 9.2 lbs of infill per sq. ft.





Cryogenic Rubber

### **THE BACKING**

### SureLock Coating - for the Most Durable Product

When designing the ideal turf backing three aspects must be considered – tuft bind strength, stability, and drainage. FieldTurf's SureLock Coating delivers the ultimate in all 3 categories. Tuft bind is the strength of the attachment of the yarn to the backing material. FieldTurf's industry-leading tuft bind is achieved by using strong fibers secured with the SureLock Coating System. The fibers are tufted into a backing of permeable woven and non-woven polypropylene fabrics at a patented row width of 3/4" for optimal cleat interaction. Our patented finger unit seals only the row of fibers, leaving the backing 40% porous, for unmatched drainage. Our competitors coat the entire backing, then burn holes into the turf to allow drainage.



SureLock Coating





## THE MOST INNOVATIVE TURF OFFERING.





## FieldTurf Prestige Systems

FieldTurf's world class technology ...with less of the cost.

### **THE FIBERS**

### Natural Aesthetics - for a Grass-Like Surface

FieldTurf XM6 - developed with strict adherence to the 3 pillars of fiber development - Polymer, Process, and Geometry (PPG). The result is a resilient fiber that has been designed to provide excellent long-term durability.

**FieldTurf XT** - High performance slit-film fibers are fibrillated to encapsulate infill and provide a dense fiber appearance.

### THE INFILL

### **Two-Layered Infill System - for All Sports and Ages**

This traditional two-layer infill is comprised of ballast layers of sand and top layers of recycled ambient rubber granules for proper shock absorption and world class performance. Prestige systems also include alternative infill options such as Nike Grind, TPE, and Cork.

### THE BACKING

### **Durable Coating - for Trustworthy Drainage**

Prestige series systems feature a traditional two-layer, dimensionally stable backing, coated and perforated at FieldTurf's manufacturing facility. The result is exceptional tuft bind strength along with excellent drainage.



XM6 XT



Silica Sand

Ambient Rubber



## FieldTurf CoolPlay: High Performance. Low Temperature.



FieldTurf's exclusive cork top dressing performs just like the very best FieldTurf Elite system, found in the world's most famous stadiums.

The CoolPlay system delivers the same behavior and overall stability as FieldTurf's patented layered system.

CoolPlay takes nothing away from performance ...except the heat!

# Alternative Infill Offering

In addition to our standard crumb rubber infill, FieldTurf also offers a complete line of turf systems with the following alternative infill options:

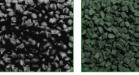
**Nike Grind**: Consists of recycled athletic shoes and Nike manufacturing scrap which are ground up and turned into infill crumb. Nike Grind is also a non-marking rubber, leaving balls, shoes and uniforms clean from any markings.

**TPE**: Produced by using prime raw materials which offer a stable shock absorption for synthetic turf fields. FieldTurf offers an innovative high grade, high performance TPE option.

**Cork**: Cork, a totally organic product harvested from cork oak trees, is 100% recyclable with no waste by-products. Due to its natural structure, cork's low thermal conductivity will allow the turf to remain cooler.

## **FieldTurf Fire Fighters**

FieldTurf's revolutionary fire retardant materials and systems can meet and exceed any indoor or outdoor flame test or building code. FieldTurf's fire retardant offering includes a fire retardant fiber (FieldTurf FR), along with two infill options (FlameGuard and FlameGuard Green).

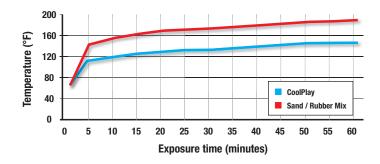


FlameGuard

Laboratory tested to be 35°F cooler than traditional sand/ rubber systems.

FlameGuard Green







Nike Grind Rubber



**TPE** Granules



Cork

### oid You Know?

FieldTurf was one of the first companies in the world to use TPE infill and has over 25 FIFA recommended fields using the material.





## THE SAFEST TURF SYSTEM.





## The Ultimate In Safety, Performance And Durability

The most important attributes of a turf system are Safety, Performance, and Durability. FieldTurf is proud to be at the top of the class in all 3 categories. Independent testing proves its safety; player preference confirms its performance; and its durability is proven day in and day out at thousands of installations around the world.

## What makes FieldTurf the safest system?

### The answer is simple. FieldTurf works just like natural grass.

On a natural grass field the athletes cut, plant and release in the earth – not in the blades of grass. On an artificial turf field, the infill is the earth. FieldTurf's infill provides the same biomechanical properties as natural grass, as athletes cut, plant and release. Like in natural grass, athletes play in the infill, not on the turf fibers.

FieldTurf's infill system contains up to 9.2 lbs. per square foot. It's the "heavyweight" in the turf industry. All other turf systems contain a lightweight infill system, typically no more than 6 lbs. per sq. ft.

Stitch "gauge" refers to the distance between the rows of fibers in a turf carpet. FieldTurf is a "wide gauge" turf system. The rows of fiber are 3/4" apart for ideal cleat interaction. This spacing allows for proper cleat penetration of the infill. Proper penetration enables the athlete to plant, twist and release just like they do on natural grass – without undue torque transmitted to the knees and ankles. As a result, chances of injuries are greatly reduced.

All other turf systems use a very "narrow gauge" usually 3/8" or 1/2". This narrow gauge results in turf that is overly dense, preventing the same penetration and positive biomechanical functions found on FieldTurf and natural grass.

The result is that the athlete plays on or in the fibers - not in the infill. This causes the fibers to wear faster and makes it more difficult for the athlete to get solid footing, causing slippage. We call this "The Skate Effect."

FieldTurf was built by athletes for athletes. Our team has taken the time to design and produce a patented turf system that is engineered and quite unlike any other. The combination of our heavyweight infill system and our wide gauge turf spacing are two unique inventions that set FieldTurf apart from the rest. The result is proven player safety and performance that is simply unmatched.

## FieldTurf's performance enhancing artificial turf provides a surface that allows athletes to focus on skill and execution.

### Did You Know?

FieldTurf's heavyweight infill system is constructed using up to 9.2 lbs of infill material per square foot, which is quite similar in weight to the root zone of a high quality natural grass field.

## **Playing In The Safety Zone**

## Long term study of FieldTurf fields provides evidence of the proven safety of the heavyweight infill system.

Data collected from 11 FieldTurf fields located in California confirmed the long term safety of FieldTurf fields as it relates to field hardness (Gmax).

FieldTurf fields with heavyweight infill systems maintain safe Gmax ratings over time, dispelling any myth of field compaction. In accordance with MSP (Maximum Safety and Performance) fields must be within a Gmax range of 120-180 to be considered safe. All the FieldTurf fields analyzed were in this range. Published reports have indicated that lightweight turf systems can achieve Gmax levels above 200.

Heavyweight infill systems have a minimum of 8 pounds of infill per sq. ft. while lightweight systems typically have a high face weight (high fiber density) a term commonly described as "Fiber Loading" and only 3 to 6 pounds of infill per square foot.

School	Field Age	Gmax
Francis Parker High School	7	127
Sycamore Valley Park	6	165
Mission Hill Middle School	6	149
Riverside Comm. College	6	131.9
Piner High School	7	136
Montgomery High School	7	122

School	Field Age	Gmax
Tamalpais High School	7	128
Granada High School	6	142
Andrew Hill High School	7	134
Piedmont Hills High School	7	143
Milpitas High School	7	163

## Independent Testing Proves FieldTurf's Safety

With FieldTurf, safety is not an empty claim or marketing jargon. We've put our product to the test in the most accurate testing possible – real life epidemiological testing of athletes. Here are the highlights of two published, peer reviewed studies:



FieldTurf was proven safer than natural grass in a 5-year high school football safety study:

- 44% Fewer Concussions
- 33.4% Lower ACL Trauma
- 26.6% Fewer Severe Injuries
- 33.4% Fewer Ligament Tears

Source: American Journal of Sports Medicine

HIGH SCHOOL FOOTBALL SAFETY STUDY: FIELDTURF VS. NATURAL GRASS, A 5-YEAR PROSPECTIVE STUDY

**Safe** 





## FieldTurf was proven safer than natural grass in a 3-year college football safety study:

- 12% Fewer Concussions
- 40% Lower ACL Trauma
- 20.6% Fewer Severe Injuries
- 31.4% Fewer Ligament Tears

Source: American Journal of Sports Medicine COLLEGE FOOTBALL SAFETY STUDY: FIELDTURF VS. NATURAL GRASS, A 3-YEAR PROSPECTIVE STUDY

FieldTurf's heavyweight infill system and wide gauge design result in fewer concussions and reduced lower extremity injuries.

## THE LONGEST LASTING TURF. PERIOD.





## **Longest-Lasting Performance**

Since its inception, FieldTurf has proven to be the most durable turf system in the world, with more fields that are 8 years or older than all other competitors combined. All of FieldTurf's components are made from the highest quality materials. FieldTurf fields are manufactured and installed with a level of attention to quality control that has changed the industry forever. No other artificial turf manufacturer in the world can measure up.



### NUMBER OF FIELDS IN DAILY USE

### **Detroit Country Day School Selects FieldTurf Again,** After First Field Lasts Thirteen Years!

Detroit Country Day School also chose to install FieldTurf in their impressive new indoor athletic complex that will serve the football, boys and girls soccer, boys and girls lacrosse and field hockey teams.

"We looked at many different products in the industry and the same holds true today as it did more than a decade ago - nothing in the marketplace compares to what the FieldTurf product offers in terms of safety and playability. When we originally decided to install FieldTurf on our Stadium Field, we expected an excellent level of service and product and that is exactly what we experienced over the last 13 years. We are excited to continue our longstanding relationship with the world leader in artificial turf."

Glen Shilling - Headmaster, Detroit Country Day School



Mike Drass - Athletic Director and Head Football Coach, Wesley College

## **Keys To A Long-Lasting Turf System**

There are 4 keys to a long-lasting turf system - a durable fiber system, high quality infill materials, proper infill depth and strong seam technology.

## **1** Durable Turf Fibers

While an artificial turf system's infill performs well for up to twenty years, it is the fiber system that wears first. Finding a durable fiber system is key when selecting your turf system. Independent testing on the durability of various fiber types is available at Penn State University. For more information on the study, contact your FieldTurf representative.

## 2 High Quality Infill Materials

Low grade rubber materials can cause premature wear of a turf field. There are two types of rubber material – high grade cryogenic rubber and low grade ambient rubber. Cryogenic rubber works to promote effective and consistent drainage by eliminating the potential for migration caused by water. The cryogenic rubber's smooth and rounded shape facilitates a consistent flow of water through the infill without raising and displacing any rubber. The loose and jagged rubber strands found in ambient rubber make it vulnerable to migration and floatation caused by the air bubbles in water.

## **3** Proper Infill Depth

Infill depth will ensure proper playability and longevity of the fiber, while also maintaining a grass-like appearance. The infill is the athlete's source for cutting, planting, shock absorption and energy restitution. The critical mistake regardless of the type of infill used, is the under filling or over filling of the turf system.

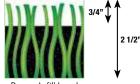
**Proper Infill Level**: Infill at approximately 2/3 (two-thirds) depth of the fiber height will provide the necessary fiber support for a longer lasting field along with less maintenance and a very minimal amount of infill displacement.

**Over Filled**: Too much infill depth in a turf system leads to rooster tails following ball roll and running, along with the potential for severe infill displacement.

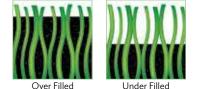
**Under Filled**: An infill level that is too low can cause wrinkling and/or buckling of the turf surface and fails to protect the turf fibers from premature wear and abrasion.

## 4 Strong Seam Technology

When it comes to the longevity of field seams, there is only one answer – FieldTurf's heavy duty sewn seams. Simply put, glued seams will not stand the test of time. The number one maintenance problem associated with synthetic fields is that of loose unglued turf seams. Glued seams may be easier to install and less expensive as they require no special equipment or expertise. But sewn seams are the only way to ensure a trouble-free seam and a long lasting, safe field. FieldTurf's problems because FieldTurf settles for nothing less than the best materials and most thorough seam installation.











## THE #1 CHOICE FOR FOOTBALL.





## **Designed For Football**

FieldTurf is clearly the #1 choice of football. Whether it is at the professional level where 22 of 32 NFL teams have selected FieldTurf, or the NCAA where over 100 universities play their home games on FieldTurf, or even at the high school level where dozens of state champions have played on our surface.

FieldTurf's safety, performance and durability levels are far superior to any other system. As the world's largest synthetic turf company, FieldTurf is installed in most major stadiums. But there is no difference between a high profile FieldTurf field and one installed in a small town. For every pro or college field we build, we install the same quality field at 150 schools and municipal facilities.

## **NFL Players Prefer FieldTurf**

When it comes to surface preference, NFL Players have voted FieldTurf as the top artificial surface. Every two years, the NFL Players Association conducts a survey of its players where all of the league's playing surfaces are rated and ranked on many performance-based factors. In 2010, the NFL Players voted FieldTurf as the best artificial surface in the league - for the 10th year in a row! A total of 1619 active NFL players from all 32 teams completed survey forms.

### 2010 Artificial Turf Surface Rankings

- 1. Indianapolis (FieldTurf)
- 2. New York Giants/Jets (FieldTurf)
- 4. Seattle (FieldTurf)
- 6. Atlanta (FieldTurf)
- 7. New England (FieldTurf)
- 8. Detroit (FieldTurf)
- 10. Cincinnati (FieldTurf)

## Players perform with more confidence on FieldTurf - not only because it is a safer surface - but because it is the most consistent, stable and athlete friendly artificial turf system in the world.

## FieldTurf is the Fastest Surface

In addition to its renowned safety benefits, the FieldTurf system has gained a reputation across the industry for its high performance and speed.

At the 2008 NFL Combine, Chris Johnson ran a record 4.24 40-time on FieldTurf. Since 2000, nine of the fastest twelve times at the NFL Combine have been on FieldTurf.

"I like it (FieldTurf) a lot... just because the footing is so good and you can really push off and drive the ball, and the receivers can cut really well. I think everybody really likes the surface."

**Tom Brady** - QB, New England Patriots

### Below are just some of the teams that have chosen FieldTurf:

### NFL

- Atlanta Falcons
- Denver Broncos
- Detroit Lions
- Green Bay Packers
- Indianapolis Colts
- New England Patriots
- New York Giants
- Oakland Raiders
- San Diego Chargers
- Seattle Seahawks
- Tennessee Titans
- Washington Redskins

- NCAA
- Air Force Falcons
- Boise State Broncos
- Cincinnati Bearcats
- Fresno State Bulldogs
- Illinois Fighting Illini
- Kansas Jayhawks
- Louisville Cardinals
- Michigan Wolverines
- Minnesota Gophers
- Mississippi Rebels
- Missouri Tigers
- Navy Midshipmen
- Nebraska Cornhuskers
- Nevada Wolf Pack

- Northern Illinois Huskies Ohio State Buckeyes
- Oregon Ducks
- Oregon State Beavers
- Rutgers Scarlet Knights
- Syracuse Orange
- Texas Longhorns
- Texas Tech Red Raiders
- Tulsa Golden Hurricane

- **High School**
- Bergen Catholic (NJ)
- Blue Springs South (MO)
- Celina (TX)
- Colerain (OH)
- Don Bosco Prep (NJ)
- Jenks (OK)
- Lake Oswego (OR)
- Loyola (CA)
- Mater Dei (CA)
- Memphis University (TN)
- Plano (TX)
- St. Peter's Prep (NJ)
- St. Thomas Aquinas (FL)
- Torrey Pines (CA)
- Valley Christian (CA)
- Wayzata (MN)
- Wheaton-Warrenville South (IL)
- Wimberley (TX)
- Xaverian Brothers (MA)

New England Patriots - Gillette Stadium

Seattle Seahawks - CenturyLink Field



Detroit Lions - Ford Field



In 2012, Super Bowl XLVI This was only the second time that a Super Bowl has been played on a

- Utah Utes Washington Huskies
- Washington State Cougars
- West Virginia Mountaineers
- Wisconsin Badgers

## THE WORLD CLASS SOCCER SURFACE.







## **Designed For Soccer**

The FieldTurf product was designed for soccer by focusing on four key soccer-related requirements: Ball Performance, Energy Restitution, Shock Absorption and Playability. FieldTurf is ideal for soccer because of its fiber technology (ball performance), heavyweight infill system (energy restitution and shock absorption) and wide gauge tufting (playability).

## Why Is FieldTurf The Best Surface For Soccer?

## Most Grass-Like Playability

The 2012 study conducted by Prozone, an independent consulting firm specializing in soccer performance, confirms that there are "No Major Differences" in playability on FieldTurf or natural grass.

Prozone installed a player tracking system on 2 fields – one at Luzhniki Stadium (FieldTurf) and the other at Khimki Arena (natural grass). Since 2006 Luzhniki has had FieldTurf installed for their pitch and the results in key playability categories indicate FieldTurf is equal to natural grass when it comes to playing soccer.

- Distance run during match was 113.9 km on FieldTurf vs. 112.1 km on grass, indicating teams are confident to play very similar styles on both surfaces.
- Ball touches per player were 2.01 on FieldTurf vs. 2.06 on grass, indicating players are just as comfortable with the possession of the ball on FieldTurf as on natural grass.
- Passes played forward increased on FieldTurf, indicating more offense and more entertaining games are played on it.
- Tackles per player rose by 0.70 on FieldTurf, illustrating that players are just as comfortable defending on FieldTurf and do not feel a greater risk of playing on the surface.

## **The Soccer Reference**

With over 3,000 FieldTurf soccer installations, FieldTurf has the most FIFA Recommended fields in the world! Some of the most prestigious clubs worldwide practice or play on FieldTurf, including Real Madrid, FC Barcelona, and Manchester United. In the U.S., FieldTurf is the choice for 16 MLS teams for practice facilities, with New England Revolution, Portland Timbers and Seattle Sounders picking FieldTurf for their stadiums as well.



New England Revolution - Gillette Stadium

### Did You Know?

Over 75% of all teams in the English Premier League, Spain's 'La Liga' and France's 'Ligue de Football Professionnel' train on FieldTurf systems.

## Soccer-Smart System Design

FieldTurf has invested in developing the ideal system for soccer with the following soccer specific attributes:

**The Most Natural Ball Performance:** The knock on synthetic turf has been unrealistic ball roll. On competitors' fields, fibers have laid over or become matted within just 1 or 2 years, causing the ball to roll too rapidly - informally referred to as "quickroll". FieldTurf has solved this problem with the introduction of our FieldTurf Revolution fiber. With unmatched memory to return each fiber to the upright position, ball roll remains natural, even over time.

Ball bounce on an artificial turf field is another concern that only FieldTurf has been able to properly address. Ball bounce is linked to the infill composition of the turf system. FieldTurf's patented layered infill system provides the right amount of softness to absorb the ball's impact in a natural way for the life of the field.

**Optimal Energy Return:** Energy restitution is the amount of energy that goes back into your legs when running on a surface. FieldTurf's layered system of sand and rubber provides the optimum level of energy restitution. Other all-rubber or lightweight surfaces are spongier which accelerate fatigue and muscle / joint stress. This effect is magnified on fields that will be used for both training and matches.

**Proven Safety:** During the Men's 2007 FIFA U20 World Cup in Canada, where the majority of the matches on artificial turf were played on FieldTurf, medical officer Dr. Rudy Gittens noted... "There were an average of 2.8 injuries per game through the first 48 games - 3.3 per game on natural grass and 2.4 on artificial turf. From these particular figures it would appear that artificial turf might be safer."

**FIFA Preferred Producer:** FieldTurf is a select member of the FIFA Preferred Producer Program having met the rigid obligations and reporting requirements. A FIFA Preferred Producer goes beyond the traditional supplier / installer scenario by continually improving the quality of their product and assuming responsibility for the production, installation and maintenance of the turf from inception to completion.



Seattle Sounders - CenturyLink Field



Portland Timbers - Jeld Wen Field

### **Did You Know?**

FieldTurf surfaces have played host to Champions League matches, Euro Cup qualifiers, MLS Cup finals, an MLS All-Star game, the Men's and Women's FIFA U20 World Cup final, UEFA Cup qualifiers, World Cup qualifiers and NCAA D-I League finals.



## **BASEBALL'S HOME RUN.**



## Did You Know?

The 2008 World Series was played on FieldTurf while over 25 NCAA D-I teams continue to play and / or practice on FieldTurf baseball systems.



## **Designed For Baseball**

FieldTurf is far and away the industry leader in artificial turf systems designed specifically for baseball – at all levels of competition. What better proof is there than the reduction of error rates? Many Division I baseball programs have reported a reduction of up to 50% in fielding errors after switching to FieldTurf.

## Why Is FieldTurf DoublePlay The Best Surface For Baseball?

The launch of FieldTurf's DoublePlay baseball systems signify the greatest technological advancement in baseball surfacing in decades. FieldTurf combines the beneficial biomechanical properties of natural grass, with the best attributes of a durable synthetic system - all weather playability, low maintenance, safety and high performance.

## FieldTurf DoublePlay Systems

### DOUBLEPLAY CLASSIC

- Patented infill
- Extremely durable slit-film fiber
- Ball pace mimics the best real grass fields
- Over 20 NCAA Division I installations

### DOUBLEPLAY

- SBR Rubber and Silica Sand infill mix
- Extremely durable slit-film fiber
- Fastest ball pace of any SBR Rubber/Silica Sand baseball system
- Different pile heights for infield and outfield

### **DOUBLEPLAY LASER**

- SBR Rubber and exclusive Flexsand infill mix
- Fiber is an extremely durable slit-film
- Fastest ball pace of any baseball-specific infill system
- Different pile heights for infield and outfield









## **Tuning The Speed Of Play**

FieldTurf offers its clients the ability to 'tune' the speed of play of the infield and outfield to slow, medium, or fast - depending on preference. The speed of play is set through a combination of infill materials, infill depth and underlying base materials. Each of these components are tailor-made to meet the pace of play required by each client.

### Here are the five (5) pillars of FieldTurf baseball-specific product development:

### **1** Penn State Comparative Testing

Coefficient of Restitution (COR) is defined as a ratio of two velocities: the velocity of a baseball after impact with the surface divided by the velocity of the ball prior to impact. The COR value is the only way to accurately measure and compare ball speed levels on different types of surfaces. The higher the COR value, the faster the surface.

Penn State University tested over 20 different surfaces, including natural grass and the top competitive artificial turf surfaces. The objective was to find which surfaces delivered slow, medium or fast ball pace. Here is a snapshot of the results.

### **2** Natural Grass Playability & Aesthetics



<sup>\*</sup>Data taken from an NCAA Division I game field.

For DoublePlay and DoublePlay Laser systems, a taller

fiber blade height is used for the green-colored areas on the baseball field – outfield, foul areas, and green infield area. A slightly shorter fiber blade height is used for all basepath areas. This small fiber height difference allows for a perfect replication of grass and clay area transitions on natural ball fields. FieldTurf also offers its clients the option to use colored infill to match the color of a natural field and the turf installed. In green areas, the infill will be dirt-colored. In rust areas, the infill will be rust-colored. Should the basepaths be a tan color, the infill will be tan-colored.

## **3** Warning Track Technology

FieldTurf warning tracks are installed with a special, durable lavarock infill. This ensures there is a distinct difference in feel and sound, for a player who is tracking a ball near the fence, without having to look down.

### **4** Coach Approved

During a FieldTurf installation, coaches have a chance to validate the performance of the surface. This is our way of ensuring that the field is tailored to the speed and performance that meets each customers' needs.

### **5** Removable Bases

Our 'ExtraBase' program ensures that high wear areas on a FieldTurf field are taken care of for the long-term. FieldTurf offers its clients the option of having removable or serviced replacement home plate and base areas. The replacement of these high-traffic areas can be done periodically as a simple 'do-it-yourself' option, with easy fastening and removal methods, or by one of FieldTurf's experienced local installation crews.





University of Oregon - PK Park

University of Texas - Disch-Falk Field





## THE ULTIMATE MULTI-USE SOLUTION.





## **Turf For All-Reasons & All-Seasons**

With over 2500 municipal and county installations, the FieldTurf system has proven to deliver the best value when compared to all other artificial turf systems – and even to the very best natural grass fields. This is thanks to FieldTurf's ability to deliver a pro-caliber and world-class playing surface that provides many measurable benefits to communities across the nation.

FieldTurf continues to transform previously inefficient municipal properties into long-lasting and lush playing fields that make positive environmental contributions. FieldTurf fields help municipalities save enough money, resources and time in order to re-invest in other areas of the community that are lacking.

### Below are just some of the larger multi-field projects FieldTurf has completed:

Golden Eagle Regional Park - Sparks, NV 13 Fields - 1,400,000 sq. ft.

Medford Sports Park - Medford, OR 11 Fields - 968,000 sq. ft.

Starfire Sports Complex - Tukwila, WA 8 Fields - 632,000 sq. ft.

Ripken Experience Myrtle Beach - Myrtle Beach, SC 6 Fields - 630,000 sq. ft.

Chino Hills Community Park Field - Chino Hills, CA 6 Fields - 615,000 sq. ft.

Regional Athletic Fields - Lacey, WA 6 Fields - 552,000 sq. ft.

Warhill Sports Complex - Williamsburg, VA 6 Fields - 510,000 sq. ft.

Mass Youth Soccer Association - Lancaster, MA 5 Fields - 445,000 sq. ft.



City of Medford, OR



Warhill Sports Complex, VA



Chino Hills, CA

"A few of us went on trips to view turf fields in Southern California. We went to college sites, a few parks, and some recreation sites. We knew by our research that FieldTurf was considered to be the premier turf on the market and we wanted the best turf available. As advertised, FieldTurf was the best. The surfaces look great, and from other sites we visited, FieldTurf held up under significant use. The athletes that use our field love it, the city staff loves it, it drains well, it is generally low maintenance, all while being environmentally sound. It's a consistent surface day in and day out compared to natural turf after heavy usage."

Peter Rogers - Mayor, City of Chino Hills

## **Military Projects**

FieldTurf is the turf of choice for the military. Among others, FieldTurf has numerous high profile installations for the U.S. Military Academy, U.S. Naval Academy and U.S. Air Force Academy, making us the most trusted name in turf for military projects.

### Below are just some of the larger military field projects FieldTurf has completed:

- Fort Huachuca Army Base
- Fort Lee Military Reserve
- Fort Lewis Army Base
- Great Lakes Navy Base Constitution Field
- Great Lakes Navy Base Softball Field
- Guantánamo Bay Naval Base 3 Fields
- Hanscom Air Force Base
- Miramar Air Station MCAS & MCRD
- MWR Miramar Sports Complex (4 fields)
- Sasebo Naval Base
- U.S. Air Force Academy Baseball Field

- U.S. Air Force Academy Football Stadium
- U.S. Air Force Academy Indoor Practice Field
- U.S. Air Force Academy Soccer Field
- U.S. Merchant Marine Academy
- U.S. Military Academy Baseball Field
- U.S. Military Academy Howze Stadium
- U.S. Military Academy Michie Stadium-Blaik Field
- U.S. Military Academy Rugby Field
- U.S. Naval Academy Baseball Field
- U.S. Naval Academy Halsey Field House
- U.S. Naval Academy Jack Stephens Field

Organizations can now obtain FieldTurf through the federal government's General Services Administration (GSA) program without having to endure the lengthy and at times misleading bid process.

Visit www.gsaadvantage.gov and enter the FieldTurf contract holder number in the search box:





Guantánamo Bay Naval Base

U.S. Naval Academy - Jack Stephens Field

"When we saw FieldTurf's latest technology, FieldTurf Revolution, we knew we had to have it on our stadium field. We felt that upgrading to FieldTurf Revolution and having the absolute best in turf technology was the right thing to do for our program. This represents another first-class upgrade for Navy athletics."

Chet Gladchuk - Athletic Director, Naval Academy



## **VERTICAL INTEGRATION = QUALITY ASSURANCE.**





## The Quality Standard

FieldTurf, the worldwide leader in quality, remains focused on three pillars, all of which are supported by our triple ISO certification.

- 1 Better Materials
- 2 Manufacturing Excellence
- 3 World Class Installations

## **Better Materials**

Better materials make better fields. It's that simple. The two main materials in a turf system are fiber and infill and FieldTurf has invested heavily in selecting only the highest grade materials.

### Fiber

For years, the belief throughout the industry has been that the shape of the fiber dictates its performance and durability. While this is partly true, the real key to fiber performance is a combination of Polymer, Process, and Geometry. This is FieldTurf's PPG philosophy. FieldTurf has spared no expense in using the best – and now exclusive – polymer and processing technology available on the market today.

### Here are the three keys to producing high quality artificial turf fibers:

Polymer Proprietary polymer formulation to resist splitting and degradation, complete with an industry leading ultraviolet inhibitor technology.
 Process State-of-the-art extrusion process for precision manufacturing that ensures the production of an exceptionally strong fiber with a radical reflection feature built into each artificial grass blade.
 Geometry Intricate concave and ridged construction eliminates breaking points and provides the most natural looking fiber.



### Infill

Cryogenic rubber is a rare grade of clean and finely rounded rubber. For improved safety and performance, cryogenic rubber is the only grade of rubber that FieldTurf uses in its Elite system fields. Others use ambient rubber, a cheaper grade of mass produced rubber. Ambient rubber is a jagged grade of particle and has the propensity to migrate resulting in low filled areas which can be more dangerous to athletes and contribute to premature fiber wear.

While most turf companies use low grade sand products, FieldTurf uses a more expensive washed silica sand. This silica sand has the ideal shape and hardness to ensure proper performance and long term durability. Before being installed, our washed silica sand and cryogenic rubber is tested for shape, size, safety, consistency and durability.



## **Manufacturing Excellence**

During the manufacturing process there are three aspects to turf construction – Fiber Production, Tufting, and Coating. What's important to know is that FieldTurf controls all three aspects of the value chain. Nothing is left to a third party. Nothing is left to chance. This provides FieldTurf clients with a level of quality assurance that simply cannot be matched.

**Fiber Production**: FieldTurf's fibers are produced at our very own facility in Germany. This state-of-theart facility was opened in 2010 and as a result has turned FieldTurf into one of the most vertically integrated companies in the world. The quality control process at the facility includes stringent testing of the yarn properties (tensile strength, uniformity, color verification).

**Tufting and Coating**: Once the fiber is produced it is ready for tufting and coating which takes place at FieldTurf's 500,000 square-foot facility in Calhoun, Georgia. Our triple ISO certification ensures rigorous quality control and inspection under World Class Manufacturing (WCM) principles.



## **World Class Installations**

In the turf industry, good materials aren't enough. A world class installation team is needed to assemble the materials properly. FieldTurf ensures the longevity and overall quality of our surfaces by taking the following measures:

**Experienced Installation Crews** - By using only crews who have experience with the FieldTurf product, FieldTurf is able to assure its customers that only those who fully understand the product and its construction requirements handle the installation.

**Sewn Seams** - With so much riding on the quality of the seam construction job, FieldTurf has chosen to invest in sewn seams rather than the cheaper glued alternative. FieldTurf's panel seams are sewn with a double lock stitch and FieldTurf has a proven record for fields without seam problems.

When it comes to the quality and safety of your field, you can be certain that FieldTurf settles for nothing less than the best materials and most thorough seam installation around. There is no compromise for quality.

Quality



## Make sure that your supplier meets the following criteria:

- Self performs all fiber
- manufacturing, tufting, and coating Is ISO 9001, ISO 14001, OHSAS
- 18001 certified
  Sews all turf seams



FieldTurf Fiber Production Plant Absteinach, Germany



FieldTurf Tufting & Coating Plant Calhoun, GA

## THE WORLD LEADER IN ARTIFICIAL TURF.



## Why Do Customers Choose FieldTurf?

Doing business with FieldTurf is more than just about a high end product. It's about dealing with a company that goes above and beyond to provide its clients with a service and peace of mind that is unmatched by any other company in the industry. This is achieved through:

- Financial Strength
- The Best Warranty Protection
- A Strong Commitment to the Environment
- Leadership in Innovation
- First Class Customer Service
- Turf Purchasing Made Simple

## Financial Strength

With one of the strongest equity bases in the industry, there is no better partner than FieldTurf. Through Tarkett, in operation since 1872, FieldTurf enjoys a bonding capacity of over \$75,000,000 and has the financial strength of a company with over 130 years of experience in the surfacing business. In 2008, renowned investment firm KKR (Kohlberg, Kravis, & Roberts Co.) purchased 50% of Tarkett. KKR, with over \$60 billion in assets, is known in all circles of the world as a company that is among the world's elite in strengthening businesses and creating value.

## The Best Warranty Protection

Even though you'll probably never need to use it, you can rest easy knowing that you're protected by the industry's best third-party insured warranty in the unlikely event something goes wrong with your field. It's peace of mind that sets FieldTurf apart.

- Yearly Aggregate Claim Limit of \$32,000,000
- Per Claim Limit of \$32,000,000
- All fields are automatically covered upon issuance of the Warranty Certificate
- Pre-Paid for 8 years

### "After having FieldTurf for 10 years, we can

honestly say that this is the best turf system on the planet. FieldTurf obviously spends a lot of time on R&D as their newest product that will be installed on our field is expected to last even longer than the previous field we had which is incredible. In our minds FieldTurf is the safest and most durable turf on the market."

Brother Murphy - President, Bergen Catholic High School

### "

"All the savings in time and money that were promised to us from the start continue to remain true today. Even after 10 years we continue to see a return on our investment as we maximize usage out of our all weather FieldTurf field. We have gone from a philosophy of keeping people off our field to save the grass, to a philosophy of putting everything on the field that we can."

**Tex Nolan** - Longtime Athletic Director, Amarillo ISD

### **Did You Know?**

FieldTurf was the first artificial turf company in the world to fully recycle a turf field. It happened in 2010 at War Memorial Stadium in Arkansas.

## Strong Commitment to the Environment

The environmental benefits of artificial turf have been well documented for years. Hundreds of studies have been completed to discover the truth about any potential risks of artificial turf. In every case, new generation artificial turf has been found to be completely safe.

FieldTurf was one of the first companies to introduce "lead free" products and to this day continues to use only lead free fibers.



## **FieldTurf Recycles**

FieldTurf is 100% recyclable. When a FieldTurf installation finally comes to the end of its long life – it continues to help our planet. FieldTurf was the first company in the industry to remove entire turf systems and recycle them. After removal, old turf fields can now be turned into new turf infill and backing, as well as other products, such as crude oil, custom bi-products and artificial lumber.

FieldTurf proudly offers a "Take Back" program for both sports fields and landscape applications, whereby FieldTurf will provide customers with the option, in writing, that fields will be recycled at the end of their useful life when replaced with another FieldTurf system.

### FieldTurf's 3-step recycling process



Field Removal

Grinding

Pelletizing



# Commitment

## THE WORLD LEADER IN ARTIFICIAL TURF.



Leadership In The Field Of Innovation

It's no secret that FieldTurf pioneered what is now commonly accepted as "artificial turf." What started with our invention of long pile, infilled artificial turf has continued with numerous industry-changing innovations. FieldTurf has introduced engineered products that are tailor made for each segment of the business and owns more than 30 patents that protect the company's product offering for sporting and non-sporting applications.

All of FieldTurf's systems are tested using the latest equipment in our Innovation and Performance

and new systems set superior standards for performance in their respective classes.

Center. Located at the company's headquarters the center ensures that any and all of FieldTurf's existing

## $\bigcirc$ FieldTurf<sup>®</sup>

INNOVATION AND PERFORMANCE CENTER



## Penn State Center for Sports Surface Research

FieldTurf Innovation & Performance Center

FieldTurf & Penn State University joined forces to mark a historic industry first in sports surface research. The Center for Sports Surface Research is an intercollegiate program managed within the Department of Crop and Soil Sciences in Penn State's College of Agricultural Sciences. It is headed by Dr. Andrew McNitt, who is regarded as a pioneer in the world of sports surface research, particularly as it relates to natural and synthetic turf. For more information on the Penn State Center for Sports Surface Research, please visit: ssrc.psu.edu

## First Class Customer Service

Providing a high quality product and outstanding customer service has been a part of FieldTurf's successful business model since day one. Our customers are our number one priority, which is why we have taken the time to assemble an experienced and dedicated customer service department. We follow up with each and every one of our customers to ensure complete and consistent satisfaction.

In addition, our customer service department has assembled a comprehensive manual that covers all field care issues. Each FieldTurf customer receives a main guide that covers everything from field maintenance to field protection. Our devotion to our customers and their fields can be further confirmed by the extensive line of field care products and equipment designed and catered specifically for a FieldTurf field.



### FieldCare

The 'FieldCare' national maintenance program is geared towards making our synthetic turf field systems perform at their optimal level for even longer. The FieldCare program is comprised of complete field inspections and regular maintenance done by FieldTurf authorized maintainers. The company's large network of skilled maintainers has enabled us to focus on longer lasting fields, greater savings and an expanded potential for our customers to generate revenue from their fields.



"Using the SmartBuy Purchasing Program was a big time saver for our staff. We did not have to use our time to write specifications and do all the extra research. We got the Beynon running track and FieldTurf field we wanted and saved time."

Janice Essenberg - Director of Administrative Services, David Douglas School District

## Turf Purchasing Made Simple

Aside from finding the right products for our customers, we've also taken the necessary steps to make the turf purchasing process as easy as possible.

### Just follow the 4 key steps to our Simplified Purchasing Program:

**SmartBuy Purchasing Program:** With our SmartBuy purchasing program, our customers get what they want without the expensive and time-consuming bid process.

**Experienced Project Administrators:** FieldTurf's in-house project administrators take responsibility for guiding our customers through the construction process.

**On-Site Construction Managers:** With over 4,000 fields worth of experience, our construction team is responsible for building your field of dreams.

**Exceptional Customer Service:** Contrary to how some of our competitors operate, we pride ourselves on being a partner with our clients for the life of their field.



School and municipal improvement projects can be a very long and costly process, with many unforeseen delays. Organizations have to go through the hassle of advertising, investigating, obtaining designs, writing specifications, conducting bid meetings and dealing with potentially inexperienced contractors – all while managing and coordinating the installation process. Due to the countless steps associated with the bid process, it is not unusual for six months to go by before even breaking ground on a facility improvement project.

Our objective has not only been to make the best sports surfaces in the world, but also to improve the purchasing process. With that in mind, we are proud to introduce The SmartBuy Purchasing Program. This program encompasses the highest quality sports surfacing products in the industry from FieldTurf and Beynon. Whether it's artificial turf, running tracks or court surfaces, it has never been as simple or cost-effective to obtain the highest quality sports surfacing products.

## Hundreds of organizations have chosen to purchase through one of the cooperatives under the SmartBuy Purchasing Program because it:

- Simplifies the ordering process
- Prevents duplication of the bid process
- Carries the industry's best products
- Guarantees the best value
- Satisfies bid laws in many states
- Provides owner with project control
- Provides turnkey product solutions
- Offers preferential pre-negotiated pricing



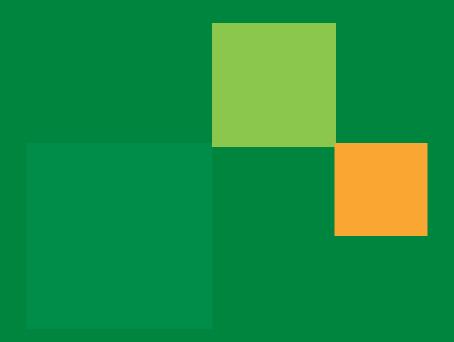
# Service



Osseo Senior High School, MN



Bergen Catholic High School, NJ



## The World Leader In Artificial Turf.



(800) 724-2969 info@fieldturf.com www.fieldturf.com



THE ULTIMATE SURFACE EXPERIENCE