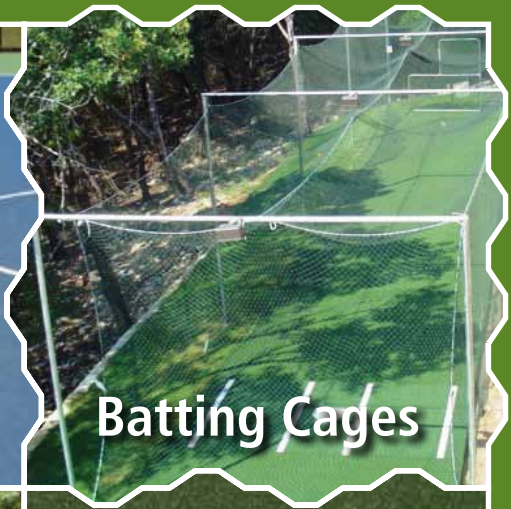
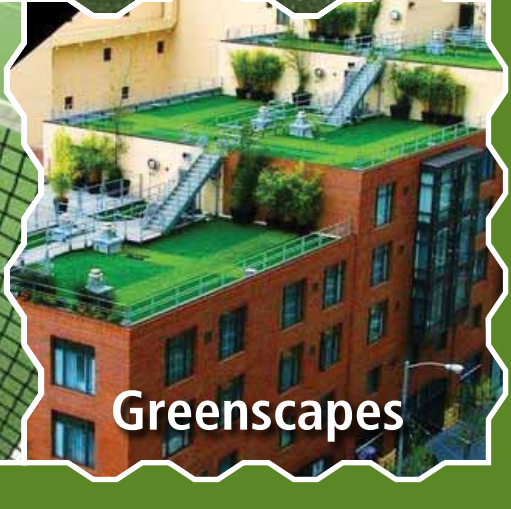
UltraBaseSystems™

Simply Better From The Ground Up!





The Dawn Of A New Era In Synthetic Turf Installation

The facts are simple: UltraBaseSystems™ will minimize installation time and save you money by dramatically reducing sub base preparation, creating a ready to play super structure unlike anything on the market today. In many cases UltraBaseSystems™ will eliminate time consuming and expensive base work all together, while creating a SAFER, more environmentally friendly synthetic turf play area. Imagine retrofitting an existing grass field into a state of the art synthetic turf showplace in days, not months. With UltraBaseSystems™ it is no longer an industry dream, it is a reality.

As the originator of interlocking sub base panel technology to replace compacted stone for synthetic turf applications, IBT has more experience in simplifying installation and saving time and money than any other company. We should: We invented and patented the technology over ten years ago. The global success of the Tour Links® putting green system and the millions of square feet in use today made the leap to developing our industry changing technology for athletic field and recreational applications a natural progression.

Unlike flimsy drain mats and shock pad systems, UltraBaseSystems™ is a solidly engineered, easy to assemble STRUCTURE that replicates the feel of a natural grass field while delivering superior GMAX, HIC and Drainage Flow numbers, exceeding tough industry standards while reducing the need for excessive turf pile height and infill quantities, with no negative effect on athletic performance. Once installed, the system stays put and will not shift, separate or blow away during installation or as a result of aggressive play or vehicle traffic. That's a fact! Build your base today and return to install the turf a month later, if need be. Don't worry about your base hardening over time. With UltraBaseSystems™ engineered polymers, the panels will not harden with age. The panels weigh less than 2 pounds per square foot (9,766 kg per sq meter), and are capable of supporting loads over 1000 pounds per square inch (70,31 kg/cm^2), a perfect system for rooftop or interior environments where weight is an issue.

A new era in synthetic turf installation has arrived. UltraBaseSystems™ is tough enough to stand up to the everyday pounding delivered by Mother Nature and pro athletes, yet easy to install and maintain, saving you and your customer valuable time, materials and money.

Now You Know The Facts!

The Game Changed: Shouldn't The Way You Build Your Fields?

Is your installation team stuck in the stone age? For close to 45 years, athletic facility designers and installers have continued to accept the limitations of rock and gravel as the primary base material for the construction of synthetic turf fields, play areas and putting greens. Yet in that same time span, handmade wooden baseball bats and golf clubs have been out performed by those made from space age metals, training methods that were once reserved for astronauts are the norm for middle school athletes and flimsy, athletic protective gear has been replaced by state of the art body armor.

Every industry must change, grow and improve. UltraBaseSystems™ technology is a quantum leap forward for the synthetic turf industry! STRONGER, SAFER, FASTER AND MORE COST EFFECTIVE THAN ROCK. Move out of the stone age and into the future with UltraBaseSystems™.

State of the art molding equipment insures consistent engineered quality.

7,000 pound aluminum mold produces 9 pound (4,08 kg) parts 24/7.

Polymers are injected into the two part mold under high pressure producing finished panels in minutes.

Panels are trimmed, inspected and ready for shipping.

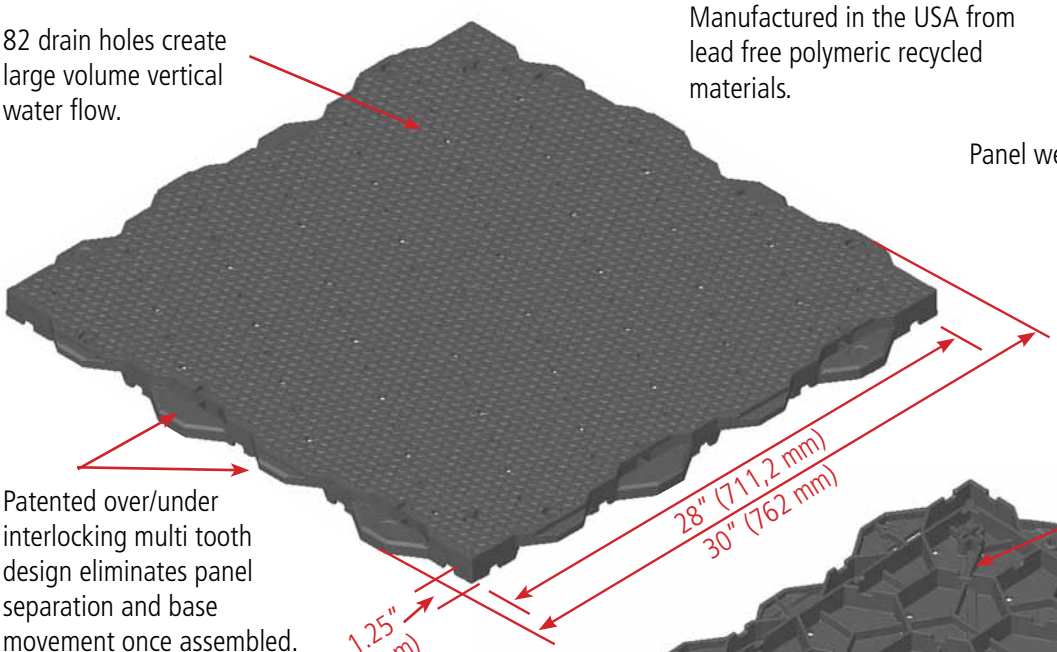
A newly produced load of panels heading out to a field.

Engineered Excellence

82 drain holes create large volume vertical water flow.

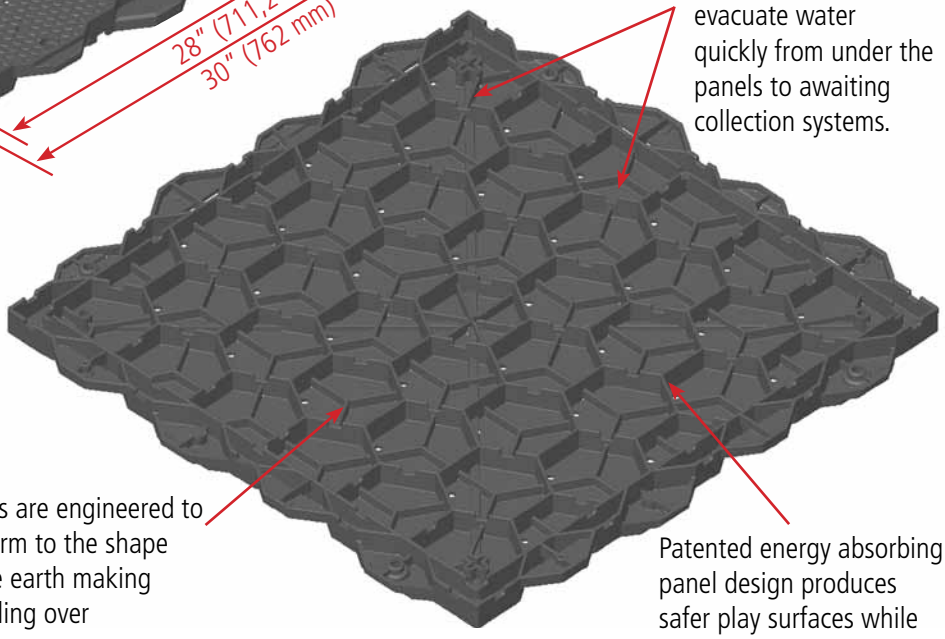
Manufactured in the USA from lead free polymeric recycled materials.

Panel weight approx 9 pounds (4,08 kg).



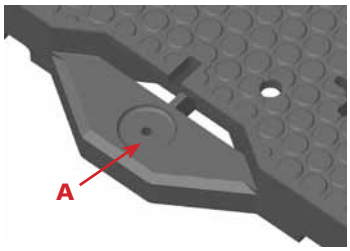
Patented over/under interlocking multi tooth design eliminates panel separation and base movement once assembled.

Multi directional horizontal drain slots evacuate water quickly from under the panels to awaiting collection systems.



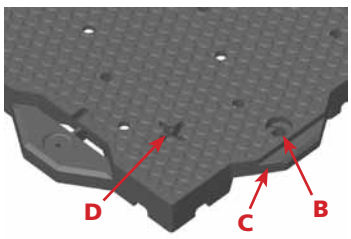
Panels are engineered to conform to the shape of the earth making installing over contours or uneven earth a snap.

Patented energy absorbing panel design produces safer play surfaces while decreasing turf heights and fill amounts saving material and installation time.



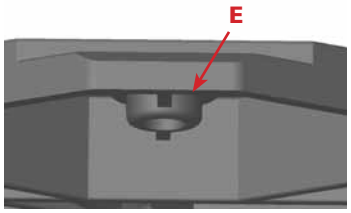
Patented interlocking design creates positive engagement while allowing for expansion and contraction caused by the elements without heaving or lifting

A Female locking dish



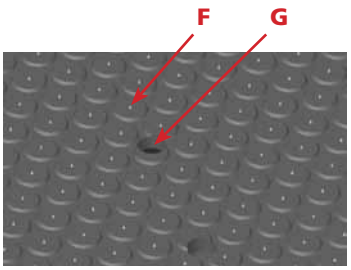
B Optional screw fastening holes are not necessary on most installations but are useful when fastening partial panels along perimeter of installation.

C Patented male locking teeth fit securely into female receptor creating a level top surface for perfect panel alignment



D Optional ground mounting stake locations for securing panel to the existing sub base

E Male locking post



F Thousands of turf barbs prevent turf from slipping during installation and play

G Deck drain holes allow water to pass quickly through the panel keeping turf dry

US Patent # 7,516,587
Additional US and International Patents Pending

Technically Advanced

G-MAX/ HIC Performance

Due to the manufacturing methodology of UltraBaseSystems, GMAX and HIC can be dramatically altered by changing the blend of the panel polymers as well as the turf height and infill amounts. For example, a Polypropylene, 20% talc filled panel with a 110 oz non filled turf when tested over concrete may produce GMAX levels higher than desired. However, by altering the chemical makeup of the panel, the same turf on a different panel blend will produce a GMAX of 120. In essence GMAX and HIC can be controlled by the panel with no negative effect on athlete performance.

Impact Attenuation of Surface Systems Under and Around Playground Equipment.

UltraBaseSystems™ passes fall heights of up to 7 ft. (2,1336 m) utilizing non filled turf systems on both concrete and rock sub bases. Additional thin foam pad systems may be required under some turfs to achieve greater fall heights depending upon turf construction and density. Turfs with rubber infilled systems will also increase fall heights. Pour and play rubber can also be used in combination with UBS panels to achieve easy installation reducing excavation time.

Permeability Testing

Vertical water flow through 2.5 inch (63,5 mm) pile height turf with full infill = 175 inches (4 445 mm) per hour. Horizontal water flow under the panels = 96.4 inches (2 448,6 mm) per hour. Water flow through panel alone = 341.1 inches per hour. Storage capacity under each panel = 3.56 gallons per 5.44 sq ft. (13,48 liters per 0,5054 sq m)

Load Performance

Panels are able to withstand loads of 1000 pounds per sq. inch (70,31 kgf/cm^2) = 144,000 pounds per sq ft. (703 068,84 kgf/m^2) Panel strength far exceeds requirements needed for commercial vehicles, equipment and heavy crowd traffic

Athlete Impact Attenuation

Under relatively low energy loading conditions simulating those produced by an athlete running on the surface, UltraBaseSystems™ DOES NOT affect the impact, stiffness or energy return of the surface to an extent that would negatively influence athletic performance.

Consequently, the potential benefits of enhanced high energy impact attenuation are provided without affecting the playability of the surface.

STC/ FIFA Testing

Recent lab testing as well as actual field testing on a completed UBS system achieved outstanding results. The result for all of these tests performed met the requirements for a STC Stadium Field. The requirements for a STC Stadium field are the same as those specified in the FIFA 2-Star Standard.

Insulation

Laboratory tests certify UltraBaseSystems™ with an R factor value of 3.4. This is equivalent to 38 inches (965,2 mm) of sand and gravel or 17 inches (431,8 mm) of concrete insulating the earth, resulting in reduced earth movement as a result of frost heave. Additional factors such as the selection of pervious vs. impervious geotextile material, the use of UltraBaseSystems™ cell containment material and proper drainage will also help to reduce frost heave.

Truck Quantities

20 ft. container:	1,446 panels = 7,866 sq. ft./730 sq. m. per truck
40 ft. high cube:	3,384 panels = 18,408 sq. ft./1710 sq. m. per truck
53 ft. truck:	4,512 panels = 24,545 sq. ft./2280 sq. m. per truck

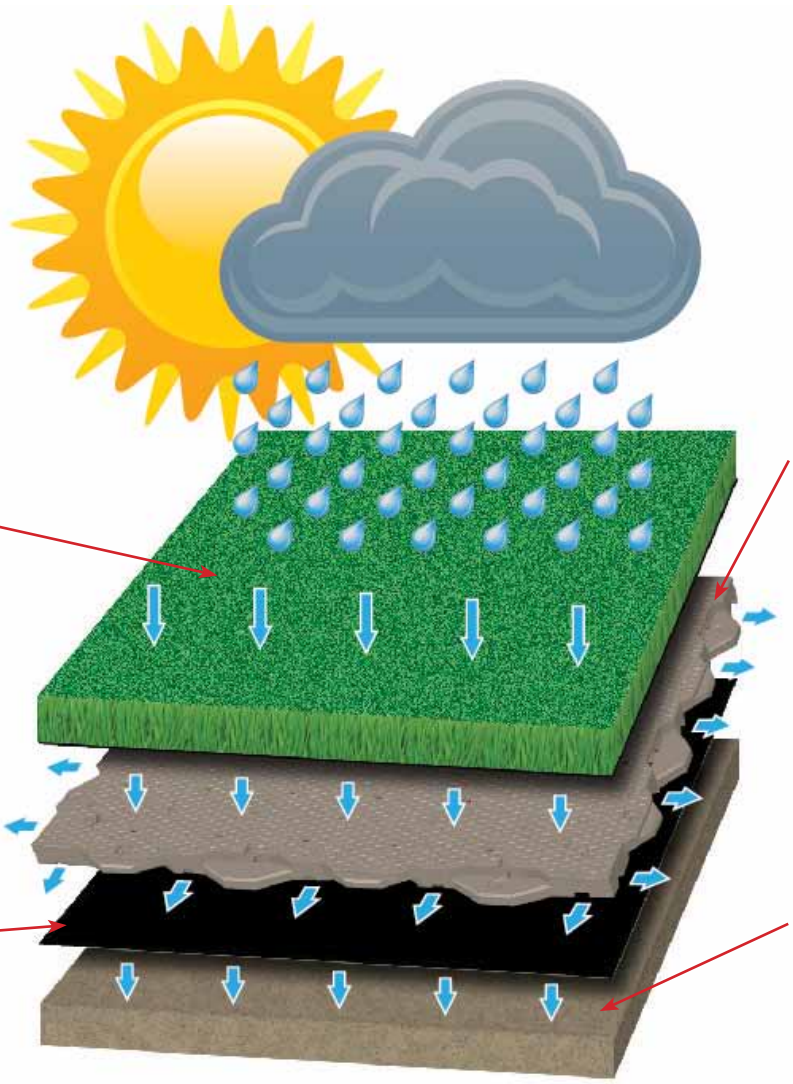
Structurally Superior

From maintenance trucks to emergency vehicles, UltraBaseSystems™ stands up to the heaviest of loads. Try parking a 35,000 pound (15 876 kg) fire truck on other sub base systems with no deformation or damage. Now that's structurally superior!

Rain or shine it is Game On with UltraBaseSystems™

Concentrate On Winning, Not The Weather.

Artificial Turf Applications



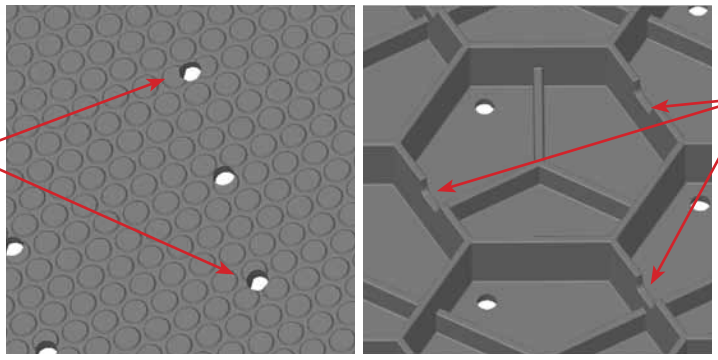
Patented energy absorbing panel design results in safer play surfaces while decreasing turf height and infill amounts saving installation time and money.

UltraBaseSystems™ is a solid feeling structure with superior drainage and playability.

Permeable or impermeable geotextile cloth directs water out from under panels or allows water to flow into the ground while improving under foot stabilization.

Minimal preparation to existing ground for many installation scenarios.

TOP SIDE **BOTTOM SIDE**



Abundant drain holes allow for large volume vertical water flow keeping synthetic turf play areas dry.

Super sized multi directional horizontal drain slots evacuate water quickly from under the panels without clogging or flow restriction.

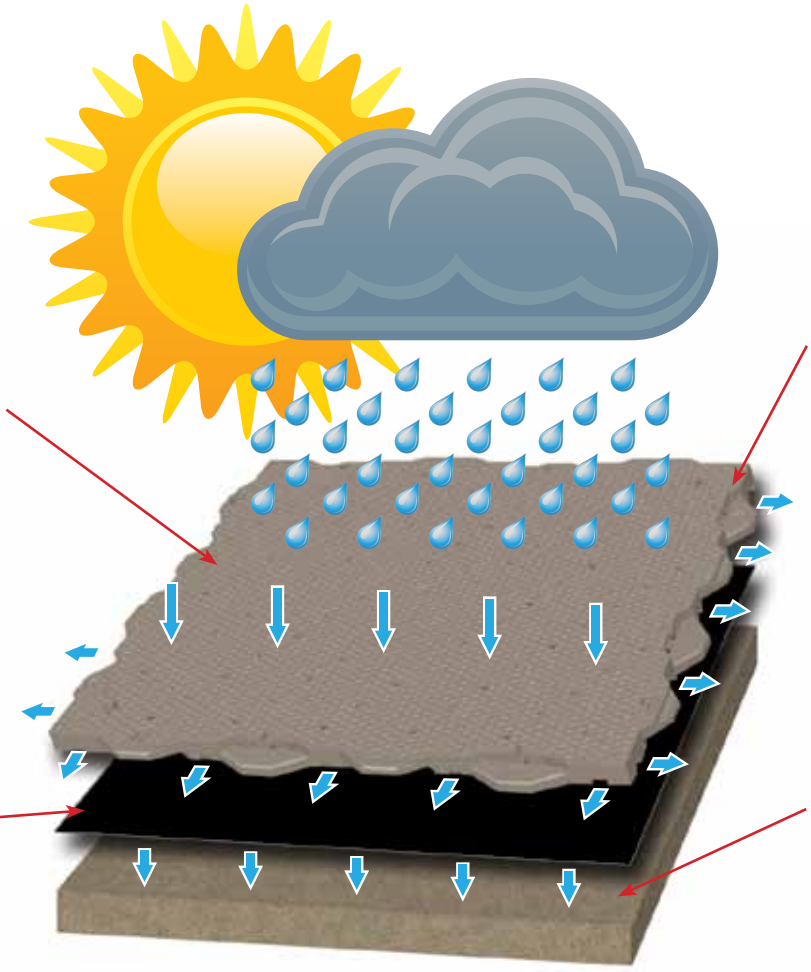
Underside panel design capable of temporarily storing up to 3.56 gallons (13.48 liters) of water.

Flow rates tested at 179 inches (4546,6 mm) per hour vertical and 96.4 inches (2448,6 mm) per hour horizontal flow. Use of a permeable geotextile will also increase under panel water evacuation.

Concentrate On Winning, Not The Weather.

Non Turf Applications

Patented energy absorbing panel design results in a solid structure underfoot with safer play surfaces while providing superior drainage.



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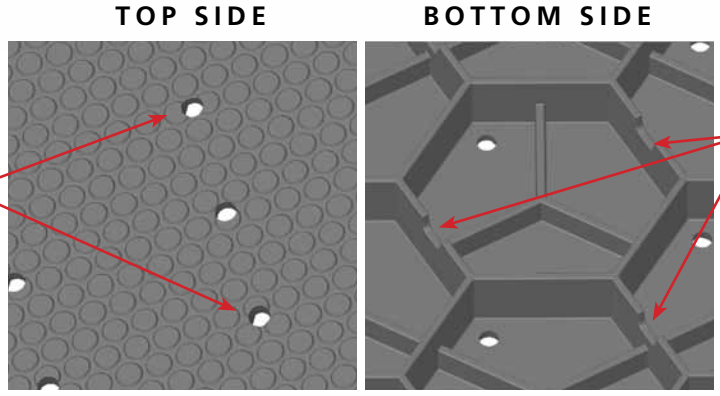

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Super sized multi directional horizontal drain slots evacuate water quickly from under the panels without clogging or flow restriction.

Underside panel design capable of temporarily storing up to 3.56 gallons (13.48 liters) of water.

Flow rates tested at 341.1 inches (8663,1 mm) per hour vertical and 96.4 inches (2448,6 mm) per hour horizontal flow. Use of a permeable geotextile will also increase under panel water evacuation.

No Delay Of Game With UltraBaseSystems™ Easy Installation

Standard Installation

Eliminate the organic material and smooth the area to create the desired pitch. Use fill material where needed. Roll the prepared ground to 95%compaction. The entire area is covered with permeable or impermeable geotextile material depending upon drainage conditions. UltraBaseSystems™ geotextile also acts as a panel stabilizer. Simply slide the patented panels together and our structural interlocking system creates a super strong instant sub base anywhere. Synthetic turf is placed over the panels using traditional installation equipment and seaming methods. No need to worry about the panels moving or vehicle weight during installation: UltraBaseSystems™ can handle the load and is designed to stay put in all conditions. Perimeter or under panel drainage can be used to help direct storm water away from the playing area.




Hard Surface Installation

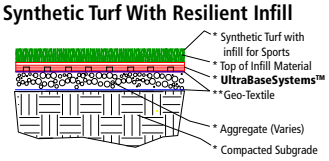
In a school yard, parking lot, roof top, or hotel ball room, trust UltraBaseSystems™ to turn your next project into reality. With less money, time and effort the results will amaze even the toughest critics: providing the feel of natural grass and the safety features and drainage the industry demands. The panels are so easy to install over concrete and asphalt a child can do it. The results are a school yard soccer area built in time for recess. So whether you are building a synthetic grass play ground on a roof top, or a soccer field in the middle of a metropolitan asphalt lot, UltraBaseSystems™ has you covered!



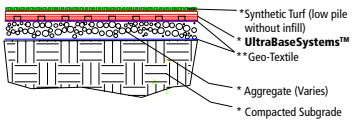

Poor Soil Conditions And Cold Climate Installations

Due to varying installation locations, soil types, and climates around the world, additional ground stabilization may be necessary. Unlike outdated traditional methods, UltraBaseSystems is designed to produce a solid, long lasting structure with minimal excavation and fill material. However, in extreme conditions the UltraBaseSystems™ panels may require a shallow rock base to replace the existing organics. The selection of a permeable of impermeable geotextile fabric as well as the storm water management system will also help determine the depth of rock that may need to be included in the sub base. In either case the UBS panels will create a solid feeling sub grade, perfect for any turf to install smoothly and solidly with the least amount of labor the industry has ever experienced. The results are a stable sub base, capable of supporting tremendous loads while minimizing frost heave and panel movement. A complete geo/civil engineering report is available at www.ultrabasesystems.com

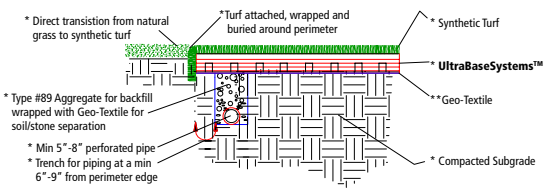
Synthetic Turf With Resilient Infill



Low Pile Synthetic Turf Without Infill



Perimeter Drainage Detail

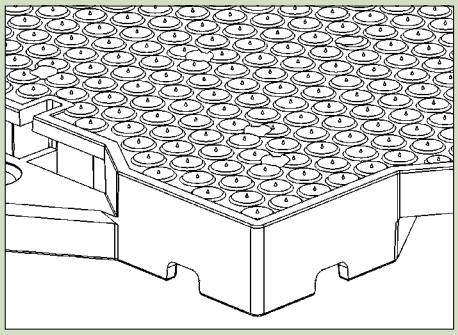


Simply Better

Eliminate Nailer Boards

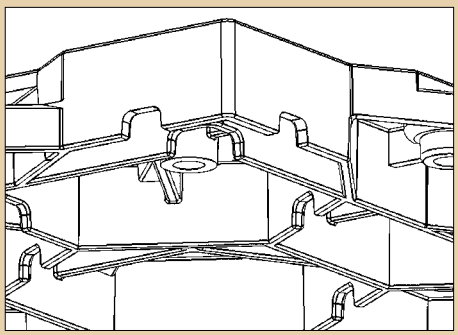
Unlike stone bases that require the installation of a nailer board around the perimeter of the turf area, UltraBaseSystems allows for turf to be anchored directly into the rigid panel top and edge, creating a strong attachment to the base perimeter and eliminating time consuming and expensive nailer board construction.

Reduce Unwanted Turf Movement



Thousands of pointed turf barbs are strategically placed on the top surface of the panel system to dramatically reduce turf slippage that occurs with other base substitution systems on the market. These patent pending barbs allow for normal turf and panel expansion as well as turf positioning during installation but dramatically reduce turf movement that occurs as a result of aggressive athletic play or vehicle traffic that is necessary during installation or maintenance. No infill, no problem. Our turf barb system stops turf in its tracks regardless of infill quantities, resulting in less infill expense and labor required to assure proper footing.

Easy Flow Drain Slots



Super sized multi directional horizontal drain slots evacuate water quickly from under the panels without clogging or flow restriction. Our 3/8 inch (9,5 mm) high by 5/8 inch (15,9 mm) wide drain slots are designed to remain clear of any foreign debris that could clog drainage keeping your play surface dry even in the worst of weather.

Rain water is stored under the panel until evacuated by gravity to awaiting storm water management systems. The turf is elevated away from the water keeping your play area high and dry and ready for fun.

Simply Better

Reduce temperature, reduce load, reduce moisture and you reduce frost heave distortion

Superior to existing base replacements, the patented UltraBaseSystems design eliminates the effects of frost heave in cold climates by providing the following:

- Ground insulation to increase earth temperature
- Providing a low panel weight of under 2 pounds per sq ft (9,766 kg per sq meter)
- When coupled with a non permeable geotextile the superior drainage of our system starves water from entering the ground from the top reducing moist soil conditions.

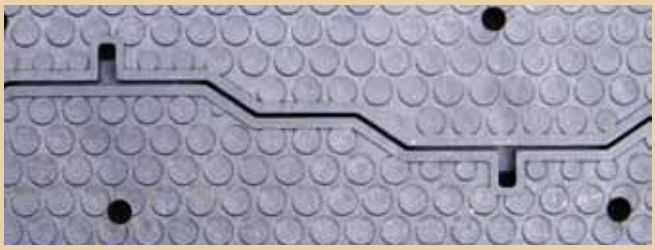
Same Panel, Different Material, Unlimited Applications

By altering material selections, UltraBaseSystems can adapt to many markets from playgrounds to courts, athletic fields to pet runs by adjusting material specifications. From rigid to flexible, soft to hard, one system does it all. Now that's simple!

Positive Panel To Panel Alignment

UltraBaseSystems patented locking feature allows for positive alignment from panel to panel by forcing the front of the male tooth to engage firmly under the deck of the corresponding panel, insuring a smooth transition between every panel on flat or contoured terrain. The results are a smooth turf installation every time and the elimination of a trip hazard from panel to panel even when turf is not used.

Engineered Expansion Joints Between Panels



Most all materials expand or contract due to temperature changes. These expansion tolerances have been engineered into every panel eliminating heaving or field distortion due to temperature changes. Any expansion occurs within the floating engineered gap between the panels keeping the play area flat and solid under foot.

Securing the Panels

UltraBaseSystem panels are manufactured to accept attachment screws which lock the panels together. Although screws are NOT required, some technicians lock the perimeter panels in place when the turf is not being attached directly to the panels outer top surface and left free floating, such as a putting green display or exhibit demo area. The panels are also equipped with slots for optional ground spikes which act as a deterrent for vandalism or minimize horizontal movement in small sq. ft. areas.

Simply Better

Environmentally Responsible

Since the inception of our panel base technology nearly ten years ago, incorporating recycled polymers in to the panels has been an important part of our corporate culture. In fact since 2001 every panel made by our sister company, Tour Links Putting Greens, has been produced from 100% recycled materials. Nearly 5 million pounds of recycled post consumer and post industrial waste has been processed into sub base panels so far and growing rapidly with UltraBaseSystems. In fact we are now recycling old synthetic turf, converting it in to usable material to be made back in to UBS panels. A perfect circle of life. Old fields become new fields.

This environmentally intelligent approach to manufacturing coupled with the dramatic decrease in CO^2 Emissions due to huge reduction of excavation equipment fumes, stone transportation trucking emissions and earth moving equipment pollutants, makes UltraBaseSystems the responsible solution for your customers and the planet.

Economically Smart

The versatility of the UltraBaseSystems™ panel manufacturing process allows for changing the polymeric blends used to create our panels, which means the feel of the field underfoot can be manipulated by simply changing the hardness or softness of the UBS panels to create the playability and safety your athletes demand while providing more options for turf, infill and site preparation for customers and contractors alike.

Use a non-filled system or a full infill system, low pile height or tall fiber grass, concrete sub base or compacted earth, UBS has got you covered one panel at a time and you will never compromise drainage or safety performance from installation to installation.

Change Your Game With UltraBaseSystems™

Superior Drainage

Ten Year Warranty Against Manufacturers Defects

Safer Fields With Less Infill

Panels Will Not Crack, Break Or Warp Even Under The Toughest Climates Or Athletic Playing Conditions.

Made In The USA With Lead Free Recycled Materials

Reduced Construction Cost

Easy To Install With Unskilled Labor From Stadiums To Rooftop Installations

Less Invasive Installation Allows For Return To Original Environment If Necessary

Reusable, Modular Panels Insure You Never Lose Your Investment. Build It Today, Remove It Tomorrow

Engineered To Conform Over Required Pitches And Slopes

Build A Permanent Or Temporary Field Almost Anywhere In Days Not Months

Supports Emergency Vehicles And Heavy Foot Traffic Without Panel Deformation

Perfect For Field Leasing Programs, Tournaments And Events

Year Long Installation Season

Athletes Performance Uncompromised

Ships Easily Worldwide

Assembled Panels Do Not Move

Reduced Carbon Footprint

Other Uses

Base System For Synthetic Ice Installations

Temporary Flooring

Event Flooring

Hot Tub And Spa Bases

Shed Flooring

Temporary Walkways

Staging Area For Construction Equipment

Pet Kennels And Runs

Military Housing Applications

Mobile Vehicle Patios

Temporary Parking Lots

Wet Area Safety Flooring

UltraBaseSystems™

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Made In USA

Made from Recycled Materials