

MAINTENANCE MANUAL

THANK YOU!

Let me take this opportunity to express our appreciation to you for choosing Shaw Sports Turf.

We are proud that you have entrusted us to meet your synthetic turf needs. We look forward to many years of working together.

If you have any questions about your field or its maintenance, we invite you to contact us immediately by calling or emailing. We will be happy to assist you.

Shaw Sports Turf can also provide continued support through our field maintenance programs. Proper maintenance is critical to keep your field playing and looking like new, and can be customized for your specific needs.

Once again, thank you for your business.



Chuck McClurg

Vice President

MAINTENANCE

Shaw Sports Turf has designed a multi-tiered maintenance program to support facility operators in the proper care and maintenance of their synthetic surfaces.

Maintaining your Shaw Sports Turf field is the single most important thing you can do to ensure you get the best performance and longest life out of your field. Don't worry! We are here to help. Shaw Sports Turf offers two maintenance programs to satisfy whichever level of service you may need. Each plan will include field inspection and a maintenance summary report at each visit.

			SHAW BASIC	SHAW PLUS
	FIELD INSPECTION	Infill Depth	X	X
		Seam Inspection	X	X
		Visual Fiber Wear Analysis	X	X
		Edge Detail Inspection	X	X
		Monitor High Use Areas	X	X
		Inspect Inlays	X	X
	GROOMING	Level Infill	X	X
		Brush Fibers Upright	X	X
		Deep Clean Infill		X
		Infill Decomaction		X
	SUMMARY REPORT	Field Inspection Documentation	X	X
		Suggested Repairs	X	X
		Checklist and Maintenance Plan	X	X
		Infill Depth Measurements	X	X
		Additional Recommendations	X	X

TWO TYPES OF GROOMING (DEPENDING ON SELECTED PLAN)

1. Standard Grooming

- » Utilize synthetic turf equipment to level the infill and brush fibers upright for the entire field.

2. Premium Grooming

- » Utilize synthetic turf equipment for deep cleaning to remove foreign debris and contaminants. During this process we utilize equipment with a large magnet to remove all ferrous metal from the field.
- » Utilize synthetic turf equipment to decompact infill material. This will loosen the infill material to increase the absorbency and field performance.
- » Utilize synthetic turf equipment to level the infill and brush fibers upright for the entire field.

WRITTEN MAINTENANCE SUMMARY REPORT INCLUDES:

- » Detailed documentation of the field inspection performed
- » Detailed documentation of the repairs needed
- » Thorough checklist of the maintenance plan provided
- » Infill depth measurements at 10 locations from before and after grooming
- » Ongoing maintenance recommendations
- » Final inspection and walkthrough with the customer

INTRODUCTION TO

MAINTENANCE

Since 1989, Shaw Sports Turf has refined installation techniques and developed and manufactured synthetic surfaces that are extremely advanced, both in material and design. Your surface will perform, look, and feel better for a longer period of time if the maintenance procedures outlined in this manual are followed closely. This manual attempts to address and answer the most frequently asked questions regarding your surface. However, there are always new demands, uncertainties and unanticipated occurrences that may arise. Please do not hesitate to call us with any questions or concerns that you may have regarding specific care for your surface.

Following these simple suggestions will significantly extend the life and performance of your product:

- » Keep it clean and free of debris
- » Maintain proper infill levels, especially in high-use areas
- » Do not abuse it. No vehicle traffic, no heavy static loads or fireworks, etc.
- » Make all minor repairs to your surface promptly
- » Consult with a Shaw Sports Turf professional for major repairs

NOTE:

This manual is intended for customer use. It is important that the people who are responsible for field maintenance are thoroughly familiar with its contents and refer to it regularly. The contents of this manual represent the most current information regarding suggested procedures for the proper use and care of Shaw Sports Turf synthetic turf systems.

CONTACTS

sstservice@shawinc.com

Maintenance & Warranty Coordinator: 1-866-703-4004

www.shawsportsturf.com

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USAGE

PROTECT THE FIELD

PERMITTED PLAY ONLY

The following items are prohibited:

- > soda, sports drinks, alcohol, coffee, or any beverage other than water
- > metal cleats or other sharp objects that could penetrate the synthetic surface
- > food, peanuts, seeds, or gum
- > unauthorized vehicles
- > pets or other animals



Each Shaw Sports Turf surface is specially designed for optimal performance and is suitable for the following applications:

- » Football, soccer, lacrosse, field hockey, rugby
- » Softball / baseball (non-metal cleats)
- » Physical exercises
- » Physical education activities
- » Pneumatic rubber-tired maintenance and service vehicles
- » Pedestrian traffic and other similar uses



DO's

Shaw Sports Turf systems are designed to resist both wear and exposure to the elements. However, there are additional precautions that can be taken to help extend the life of your field.

- » Control access to the synthetic turf system.
 - » Keep the synthetic turf system and adjacent areas clean and free of litter, mud, and debris.
 - » Post signs at all entrances to the field prohibiting smoking and carrying food or drink onto the synthetic turf system.
 - » Observe load limits for static and rolling loads, especially when the surface is wet.
 - » Maintain infill levels.
 - » Use practice mats when possible or rotate practice drills to avoid wear in a single location.
 - » Repair minor damage promptly.
 - » Inspect your field regularly for damaged seams, logos, and inlays. Follow suggested maintenance and cleaning procedures.
 - » Contact your Shaw Sports Turf representative promptly for assistance with repairs or any other technical details.
-



DON'Ts

Shaw Sports Turf systems are resilient, but not indestructible. This list outlines activities to avoid when owning an artificial turf field.

- » Any unauthorized use
- » Heavy static loads
- » Fireworks, open flames, welding, etc.
- » Storage of materials such as drums, lumber, equipment, etc.
- » Golfing, shot putting, javelin, or discus throwing
- » Long metal spike shoes
- » Use of wire brushes in any form
- » Use of cleaning equipment, materials, and methods not authorized by Shaw Sports Turf
- » High-pressure water sprays exceeding 300 psi
- » Vehicles with non-pneumatic tires or tires inflated above 35 psi
- » Introduction of infills or impregnated layers other than supplied or authorized by Shaw Sports Turf
- » Use of bikes, lawnmowers, etc.
- » Displace infill with direct water pressure

MAINTENANCE LOG

The form displayed below will be used as the end user performs maintenance on their field. This provides documentation that the owner has completed the maintenance on the field necessary to fulfill warranty requirements. Additional copies of the maintenance log are located at the back of this manual for your use and convenience.



Maintenance Log

Field Name: _____

Location: _____

For Year: _____

Submitted by: _____

Groom Field -					
Date	Signature	Date	Signature	Date	Signature
Date	Signature	Date	Signature	Date	Signature
Date	Signature	Date	Signature	Date	Signature
Date	Signature	Date	Signature	Date	Signature

Sweeper -					
Date	Signature	Date	Signature	Date	Signature
Date	Signature	Date	Signature	Date	Signature
Date	Signature	Date	Signature	Date	Signature

General Maintenance		
Date	Signature	Reason / Comments
Date	Signature	
Date	Signature	
Date	Signature	

Send the completed form to Shaw Sports Turf

Via Email: sstservice@shawinc.com

Via Fax: 706-879-4045

FIELD EXPECTATIONS



FIELD LIFE CYCLE

NEWLY INSTALLED

After the field has been installed, all of the fibers will be upright and have an appearance similar to freshly cut grass. The field may appear a bit darker since the infill level is slightly higher and looser than it will be after use.



MIDLIFE

After initial use, the fibers will establish a more grass-like appearance with the tips moving in multiple directions. The infill will also settle down to the field's specified level. The time frame for this change to occur varies based on the amount of use. Areas of the field with frequent play may have this appearance after as little as one season. Areas with less frequent play may take years to reach this appearance.



SEASONED

After your field has been in use for several years, the fibers will lay over even more. Following our maintenance guidelines and maintaining proper infill height will help maintain the safety and performance qualities of your field even as these normal appearance changes take place.

GROOMING/SWEEPING OF INFILLED TURF

Surface maintenance is a necessary process in preserving your Shaw Sports Turf playing field. Both the groomer and sweeper are vital pieces of equipment in assisting with the maintenance of your field. However, both machines have very different roles in helping to keep a well maintained field. The sweeper is used to remove debris in the form of trash and organic matter like leaves. A sweeper with a magnet will also remove ferrous material such as pins, snaps, cleats, etc. The groomer's role is to re-level irregularities within the infill and recondition the turf fibers by standing them up or altering the way fibers lay for better surface play. When grooming and sweeping the field, it is important to follow proper grooming patterns based on your field type. Only use approved maintenance equipment on your synthetic turf playing surface. If you do not have an approved synthetic turf groomer and / or sweeper, please contact your Shaw Sport Turf representative for pricing options.

ROUTINE GROOMING AND SWEEPING

You may notice individual fibers that stand up from the turf after initial installation. These may be present around inlays, or they may be fibers that are pulled up during de-compaction. These fibers should not be pulled up because that can damage the turf. High fibers should simply be trimmed using scissors.



Routine grooming keeps the surface free from debris and also maintains your Shaw Sports Turf synthetic turf system at its optimum performance. Shaw Sports Turf recommends that every infilled turf system has a routine grooming after every 80-100 hours of use, or a minimum of once per month. Additional grooming may be necessary based on frequency or intensity of usage. Routine turf maintenance simultaneously achieves the following objectives:

1. Keeps infill layer uniform in its distribution
2. Recondition turf field fibers by standing them up
3. Helps remove litter, leaves, dirt, etc.
4. Consistent footing and ball bounce throughout the surface
5. Improves aesthetic appeal
6. Ensures maximum life expectancy

NOTE: Infilled turf systems can be groomed when slightly damp, but should not be groomed when wet/saturated.

Maintaining proper infill depth is critical to your field's longevity and performance. Follow the instructions below to periodically measure your infill depth with an infill depth gauge. Your measured infill depth should then be compared to the minimum infill depth for your field's pile height.

1. Turn black knob to loosen depth gauge
2. Slide center shaft down until it makes contact with turf backing
3. Place white foot plate on infill surface
4. Lift out and read gauge in inches or millimeters
5. Note, you should check 2 or 3 areas at each location to get the average infill for that test area
6. Check high wear areas more frequently as these areas are usually where the infill is dispersed more frequently (see maintenance video for visual representation)



Adding additional infill may be necessary in certain areas of the surface due to excessive use/displacement. Prior to adding infill, groom the field to redistribute and level out infill. Infill can be added by hand and spread with a broom or flexible tine leaf rake for smaller areas, or spread with a groomer for larger areas. Contact a Shaw Sports Turf representative if your entire field is in need of additional infill.



INFILL DECOMPACTION

Some groomers come equipped with spring tines to be used to decompact the infill. Shaw Sports Turf recommends annual decompaction for high use fields. Fields that experience more typical levels of use should be decompacted every 3-4 years.

Bristle Type

All equipment should have nylon or polypropylene bristles. The brush should not contain metal or wire bristles which can cause damage to the turf surface.

Brush Setting

Proper grooming techniques require that the groomers brush be set down in the turf fibers resting just on top of the infill, so that the brush may redistribute infill evenly as it moves over the field. Do not set the brush so low that it digs into the infill or backing. If the bristles are set too low, the groomer will pull up excess infill resulting in an uneven playing surface. Make sure the wheels are supporting the weight of the groomer, not the bristles. (Proper set up method will depend on the model and type of equipment.)

For best results, always drag the groomer from one side of the field to the other, back and forth. Make sure to change directions (start at the opposite end of the field than the previous grooming) each time the field is groomed.

The sweeper will work best when the brush is set so that it barely touches the tips of the turf fibers, so as not to dig into

the infill. The sweeper is designed to removed debris in the form of trash and organic matter such as leaves and should be used as needed and prior to grooming. Much like grooming, drag the sweeper from one side of the field to the other, changing direction each time the field is swept.

Turf Loading Limitations

Both sweeping and grooming will require multiple passes over the field to complete the operation. When driving a maintenance vehicle, be sure to make wide slow turns on the synthetic turf surface to avoid associated damage. Maintenance equipment weighing over 300 lbs should use turf type low pressure tires (pneumatic tires) with a maximum tire pressure of 35 pounds per square inch (psi). (Parking vehicles on the turf is prohibited for extended periods of time.)

Exhaust Fumes

For indoor use we recommend either electric or propane powered equipment. The type of fuel or power used by your equipment is of no major importance for outdoor use. However, if your equipment has an internal combustion engine, make certain that the hot engine exhaust is not discharged down toward the playing surface. Also check to make sure that your equipment is designed in such a way that a hot muffler or exhaust pipe cannot accidentally touch the turf surface. Hot objects, including engine exhaust can damage the field by melting fibers.

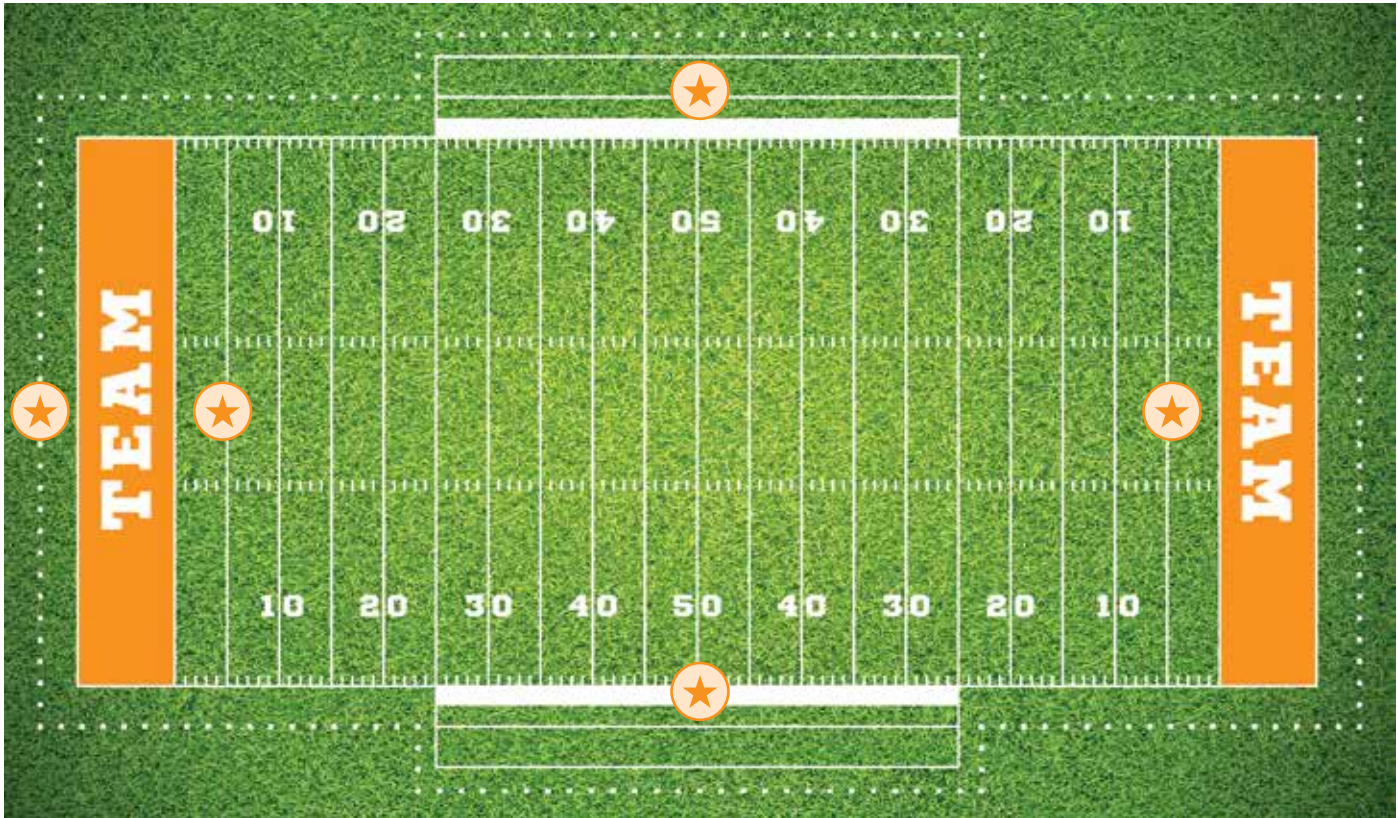
Oil Spillage, etc.

Caution should be taken to prevent spilling, dripping, or leaking lubricating oil, gasoline, grease, transmission fluids, battery acid, break fluids, etc. on the turf surface during maintenance activities. Spills of this nature can stain or discolor the turf and cause damage to the turf fibers. The fluids listed above should not be allowed on the turf surface, proper maintenance procedures should be observed in this regard. Adding or changing fluids to maintenance equipment should be done in designated locations, never on the turf surface.



NOTE: When using any equipment on a new field, you may notice many loose fibers are collected. This is normal. The fibers are the result of the many seams and inlays on your field. The loose fibers will diminish after a few routine brushings.

FOOTBALL

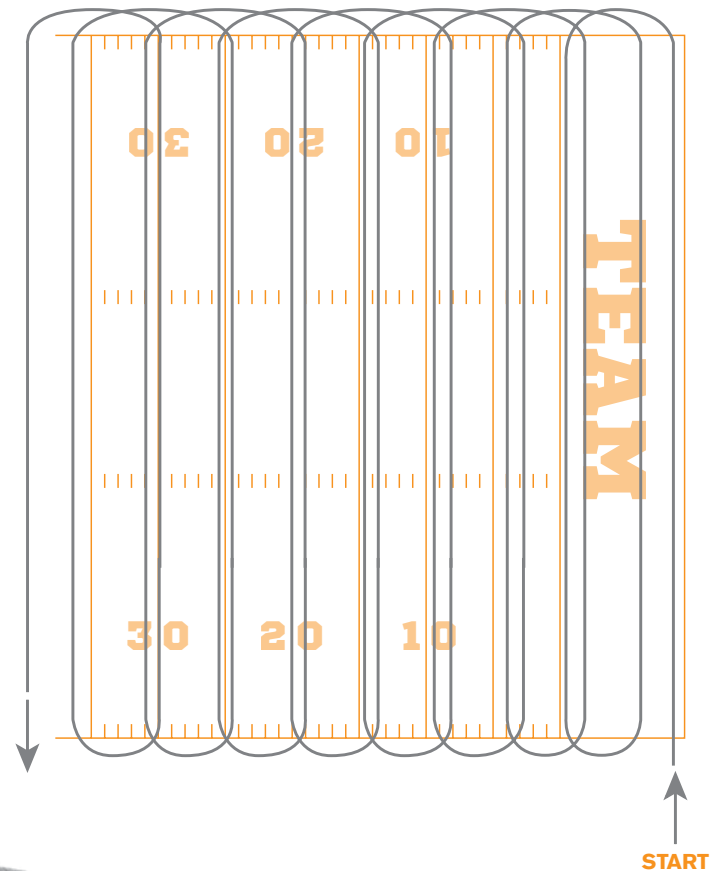


In addition to our standard maintenance guidelines, we recommend that you pay special attention to the following specific areas, which will need additional attention due to the high traffic:

- » Extra point line
- » Team sideline areas
- » Entrance from field house
- » Between the hash marks

For more detailed information on surface grooming, infill decompaction, infill depth, and replenishing infill as necessary please reference page 9-10.

Football Grooming Pattern



Rotate between clockwise and counterclockwise each time you groom.



SOCCER / LACROSSE

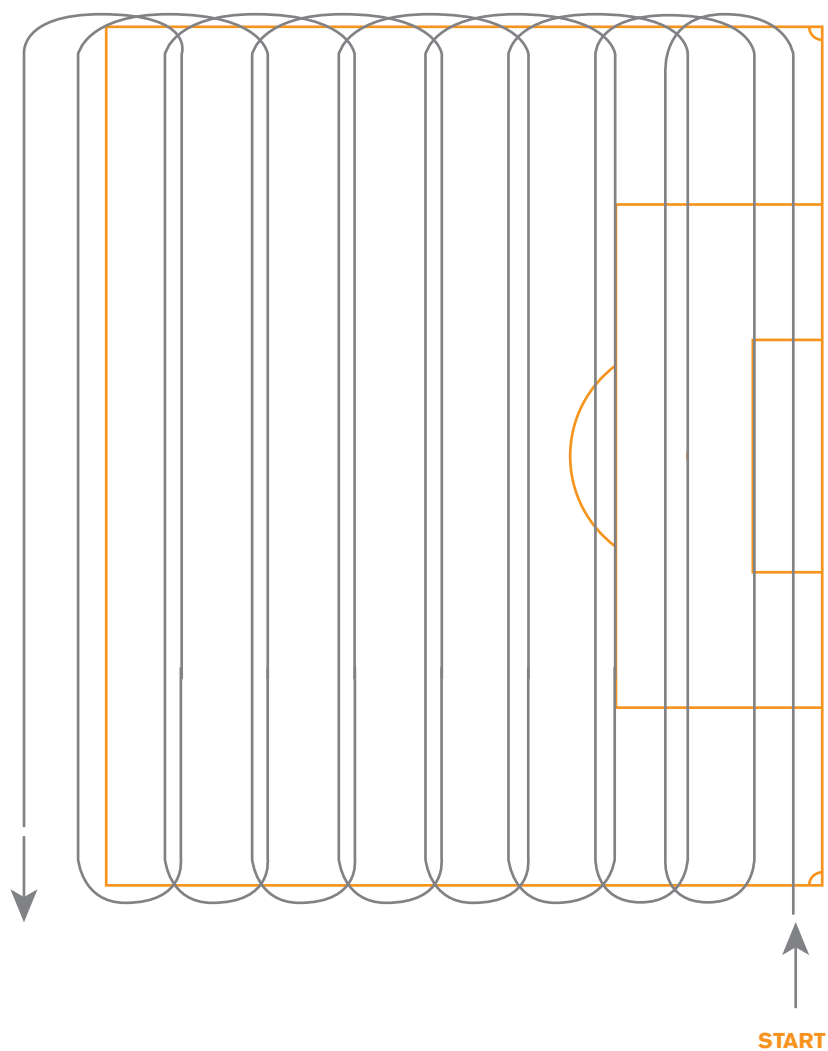


In addition to our standard maintenance guidelines, we recommend that you pay special attention to the following specific areas, which will need additional attention due to the high traffic:

- » Penalty spot
- » Corner kick
- » Goal mouth
- » Center circle
- » Face-off location
- » Linesman paths
- » Entrance from field house
- » Team areas

For more detailed information on surface grooming, infill decompaction, infill depth, and replenishing infill as necessary please reference page 9-10.

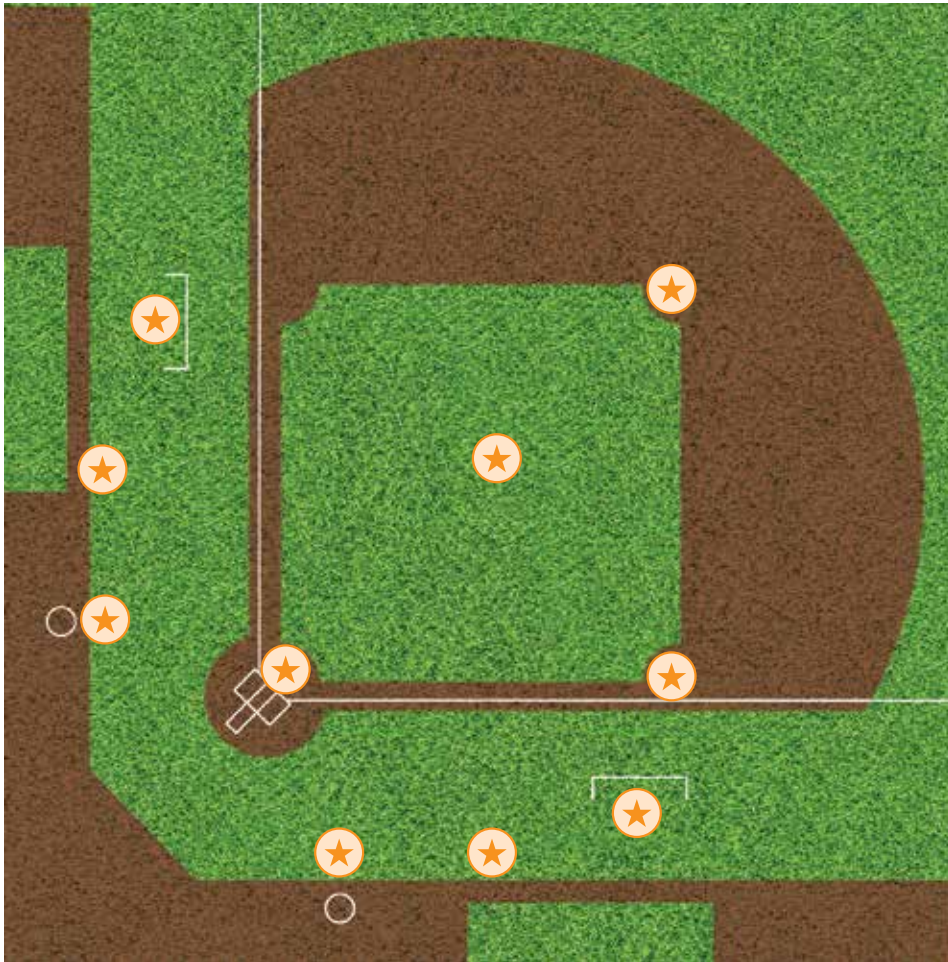
SOCCER/LACROSSE GROOMING PATTERN



Rotate between clockwise and counterclockwise
each time you groom.



BASEBALL / SOFTBALL



For more detailed information on surface grooming, infill decompaction, infill depth, and replenishing infill as necessary please reference page 9-10.

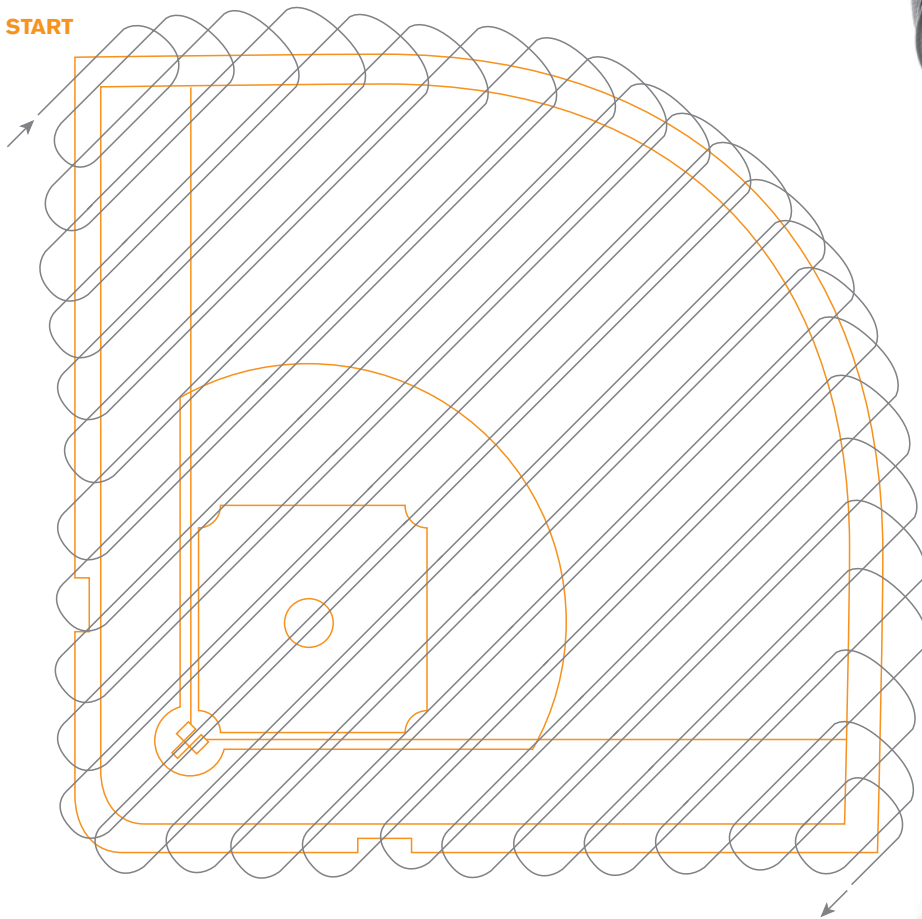
In addition to our standard maintenance guidelines, we recommend that you pay special attention to the following specific areas (if turf), which will need additional attention due to the high traffic:

- » Batter's box
- » Catcher's box
- » Umpire's box
(Shaw Sports Turf recommends protecting your home plate area with a temporary turf covering while conducting practice.)
- » First base area
- » Second base area
- » Pitcher's mound
- » On-deck circles
- » Dugout entrance
- » Coach's box

Shaw Sports Turf recommends that these areas be checked and remediated after every game and practice.

BASEBALL/SOFTBALL GROOMING PATTERN

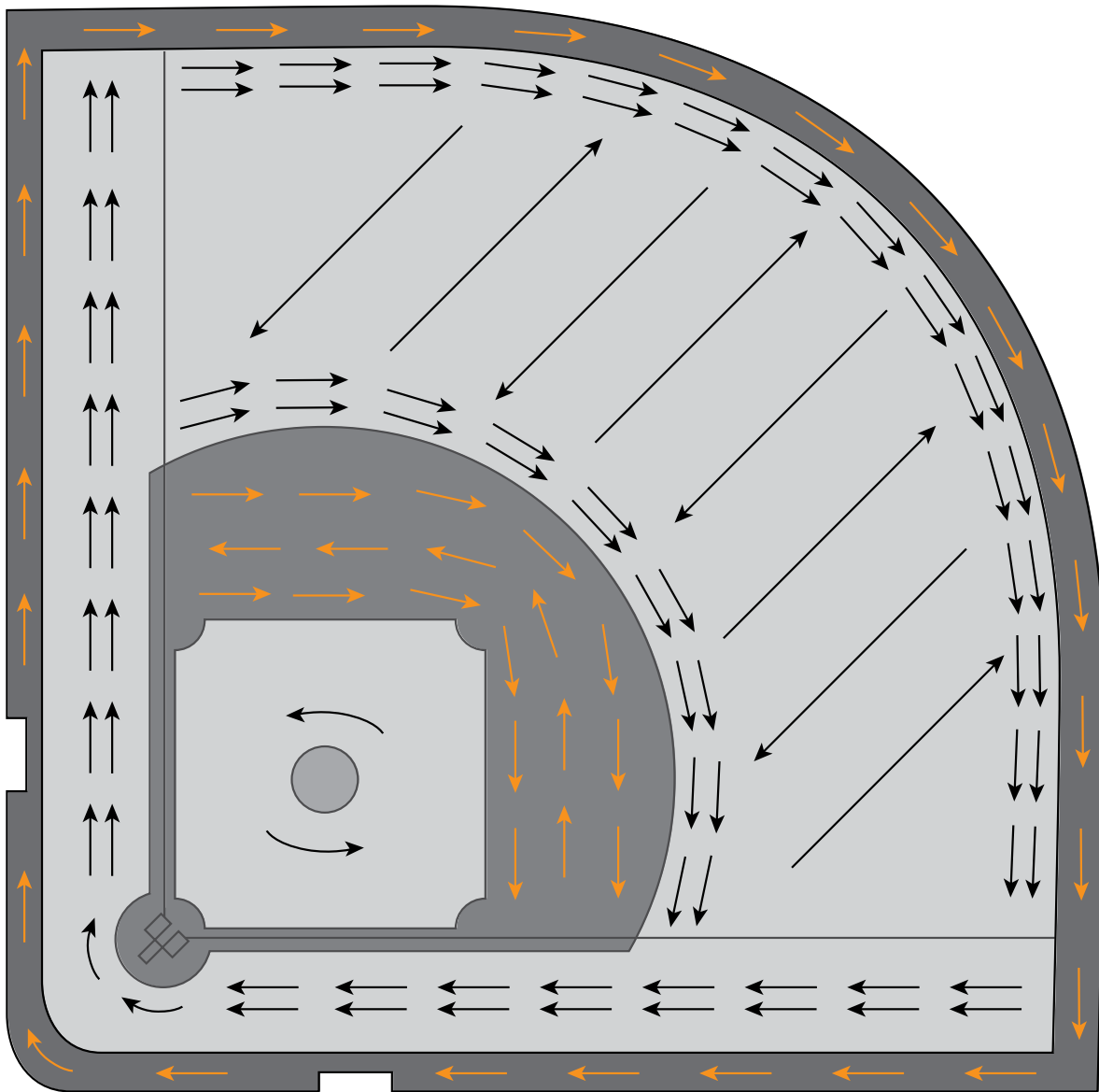
START



Rotate between clockwise and counterclockwise
each time you groom.



B1K NATURAL BASEBALL/SOFTBALL GROOMING PATTERN



B1K NATURAL INSTALLATION NOTES

B1K natural systems have been specifically designed to replicate the performance of a high quality natural field. To achieve this level of performance each area contains a unique infill type or mixture. These unique infill areas need to be preserved while grooming to keep the performance characteristics intact.

GROOMING

Groom around the entire edge of a unique area to establish a perimeter, then proceed to groom within the established area only. Proceed with this method until all areas have been groomed. When grooming Trutrack, Shaw Sports Turf recommends that this area be groomed by hand using a steel drag mat for best results.

Use a drop spreader or add infill by hand in transition areas.

Make sure that infill levels are consistent throughout the field based on manufacturers recommendation for pile height.

Watering after grooming is preferred but not required.

*Ask your Shaw Sports Turf representative about a maintenance assessment utilizing the patent pending playability assessment tool.





HOW TO GROOM THE FIELD

Grooming instructions remain the same as those described on pages 9-10 for conventional infilled systems.

WHEN TO GROOM THE FIELD

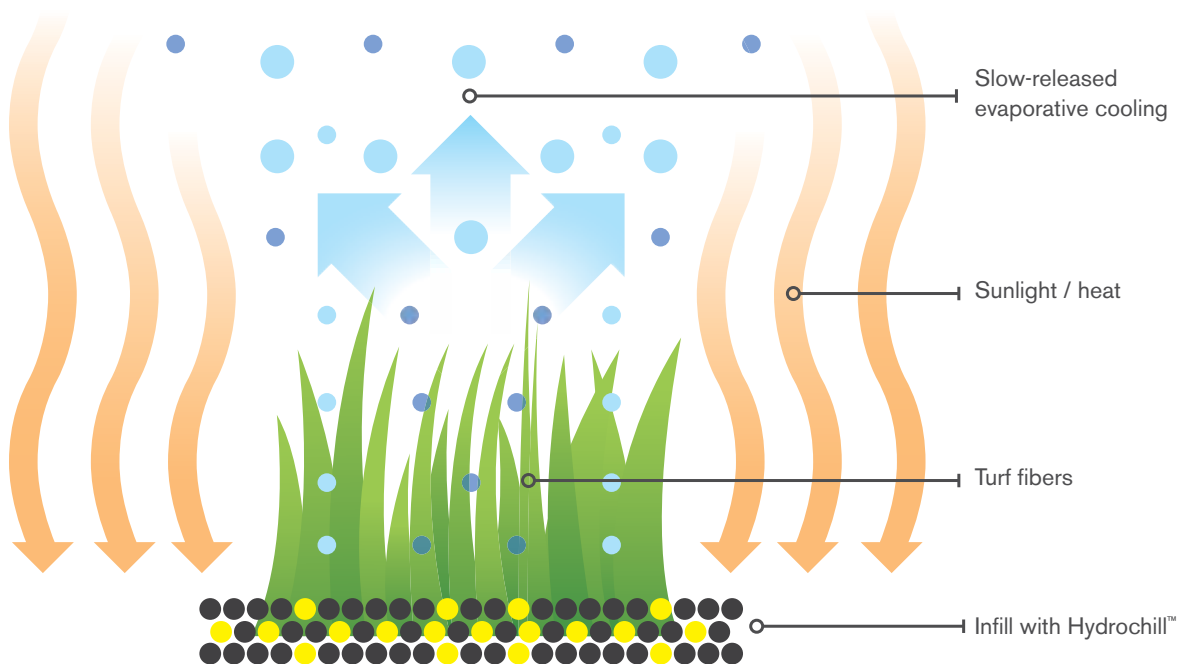
The most important point to note is that the field should NOT be groomed when it is wet (from rain, watering of the system, or dew).

USE OF ANTIMICROBIAL OR TURF DISINFECTANT TREATMENTS

We do not recommend the use of antimicrobial or turf disinfectant treatments for Hydrochill infill systems. If the customer intends to treat a field with an antimicrobial or turf disinfectant treatment, they should have a sample of the chemicals and the MSDS sheets sent to Shaw Sports Turf to determine what, if any, effect the chemicals have on the Hydrochill application. After testing, we will determine if the intended chemical will be allowed on the system.

SNOW AND ICE REMOVAL

No salt or ice melting chemicals should be used on the field. Refer to page 27 for the recommended guidelines for snow and ice removal.



PAINTING OF FIELD MARKINGS ON THE SURFACE

Painting instructions remain the same as those described on pages 25-26 for conventional infilled systems.

ADDING INFILL

Only Hydrochill infill should be used on a field originally infilled with Hydrochill. Infill can be added by hand and spread with a broom or rake in smaller areas, or spread with a powered groomer in larger areas. If you have any concerns regarding the addition of infill, please contact Shaw Sports Turf.

HYDRATING THE SYSTEM (CHARGING THE SYSTEM)

When should the system be hydrated?

As a general rule, the system should be hydrated during periods of daily use every 3-to-4 days if there is no significant rainfall (significant defined as $\frac{1}{4}$ "). This can vary depending on humidity and partial cloud cover. We recommend hydrating in the morning, before the field gets hot. Typically this should be done before 10:00 a.m. Every installation will need to be monitored to develop a customized watering plan specific for that site.

How much should it be hydrated?

As a general rule, 12,000 gallons of water for an 85,000 square foot field. That is the equivalent of $\frac{1}{4}$ " of rain. Depending on the watering source, 300 gallons per minute over 10 minutes should cover $\frac{1}{4}$ of the field. We would not recommend anything faster than this. The watering process can be done slower than this. That would be dependent upon how much time the customer has to water and what watering methods are available.

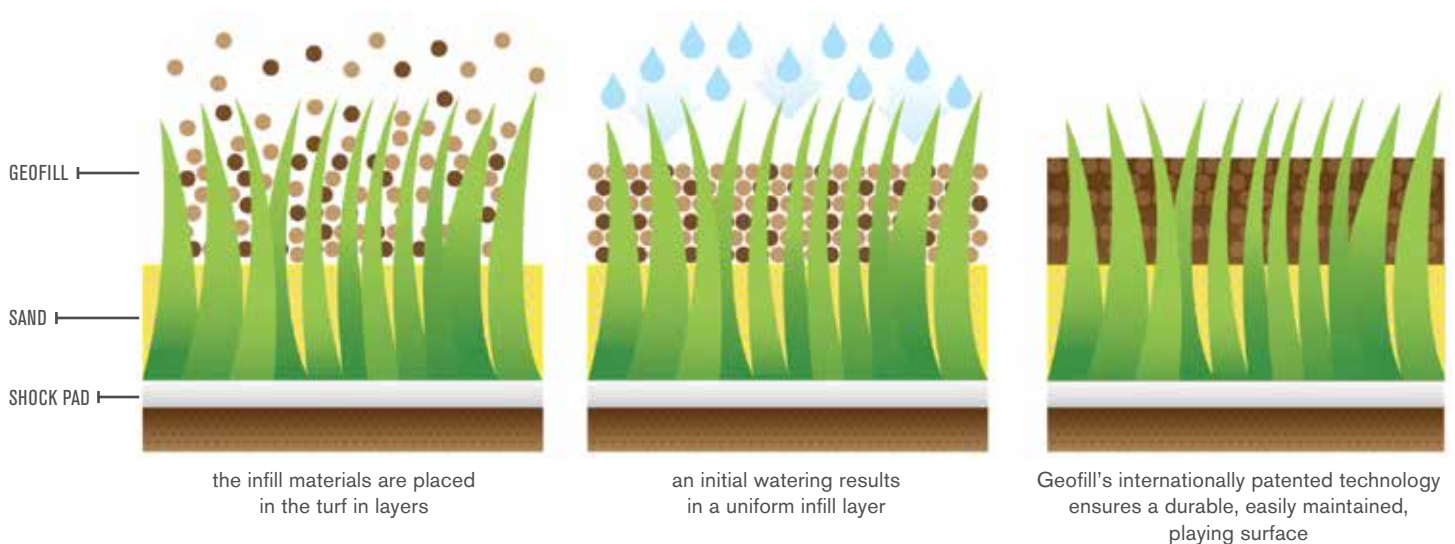


GEOFILL

Shaw Sports Turf paired with our exclusive Geofill infill results in a system that mimics natural grass like no other. However, to achieve this premium level of performance a few additional maintenance procedures are required.

- » Requires moisture for optimal performance. Watering requirements for the Geofill system are directly related to the amount and frequency of rainfall and the relative humidity at a given location. The optimal level of moisture in the Geofill system is between 10% and 30%.
- » The moisture requirement of Geofill extends to field maintenance. The field should be moist when groomed or brushed (but not wet, ideally in the early morning or evening) to prevent the infill from being displaced.
- » Requires regular brushing as needed, or after approximately every 100 hours of use or every two months.
- » Requires annual decompaction for high use (daily, multi-sport, tournament use or municipal fields/parks) fields. Typical use fields will need to be decompacted every 2 to 3 years prior to top-dressing with Geofill.
- » To maintain proper infill depths, as with all infilled synthetic turf systems, GeoFill requires a top dressing. The frequency and amount depend on use of the field, regularity of routine maintenance, and other environmental conditions. In most cases, as long as the proper moisture content is kept, top dressing should only be necessary every 2-3 years.
- » Should you require additional infill, please contact Shaw Sports Turf.

**MOISTURE METERS CAN BE PURCHASED AT MOST HOME IMPROVEMENT CENTERS.
BE SURE THE METER IS SET TO THE "WOOD SETTING" BEFORE TAKING READINGS.**



CLEANING

AND STAIN REMOVAL

For outdoor surfaces, rainfall gently rinses the fiber of pollen and airborne particles in a way that is difficult to duplicate. In areas where rainfall is scarce – or during prolonged periods of drought – an occasional watering is beneficial to rinse the synthetic surface. Listed below are the suggested precautionary maintenance practices:

- » Keep trash and litter containers on site
- » Minimize mud/dirt tracking on the field
- » During field activities, set up drinks for breaks off of the synthetic surface, if possible
- » Enforce a smoke-free environment and discourage the use of chewing tobacco, gum and sunflower seeds

HELPFUL HINTS FOR REMOVING STATIC ELECTRICITY & SURFACE TENSION

The static electricity level on a synthetic turf field can be reduced by using a fabric softener, i.e., Downy. The recommended distribution level is 3.2 fluid oz of fabric softener per 1,000 square feet of turf surface. The fabric softener is typically diluted 1:50 in water (a 129 oz bottle of fabric softener will mix with 50 gallons of water to treat 40,000 sq ft of turf). There should be an immediate reduction in static once applied. The treatment may need to be repeated after it rains as the fabric softener is water soluble.

Newly installed synthetic turf fields may experience ponding after it rains as a result of high surface tension on the new rubber infill. A solution is to apply Liquid Tide Original. The recommended distribution level is 7.5 fluid oz of Tide per 1,000 square feet of turf surface. The Tide is typically diluted 1:20 in water (150 oz of Tide will mix with 50 gallons of water to treat approximately 20,000 sq ft of turf).

Note: Application rates may vary depending on spray equipment.

STAIN REMOVAL

General Instructions

Promptness is the first and most important rule in spot removal. Most stains are actually residue of foreign matter that must be promptly and thoroughly removed. A fresh spill is much easier to clean when compared to a stain that has dried and hardened. A painter's comb or putty knife can be used to remove any paste-like or solid deposit. A thick stack of paper towels can be used to blot up excess liquids. You can also use a dry absorbent (i.e. cat litter, Fuller's Earth) to absorb liquids, these materials can be vacuumed or swept up for easy clean up.

Shaw Sports Turf fibers are among the most stain resistant in the industry. However, it is important to realize they are only one part of a sophisticated system of various components designed for overall field performance. Some cleaning agents that are safe for the fiber can be harmful to other components of the system. Cleaners should only be applied by rubbing a white cloth soaked in the cleaner, in order to minimize the exposure of harmful agents below the turf fibers.

General fiber cleaning

Mild cleaning agents can be used in liberal amounts directly on the turf surface, but more abrasive cleaners should be applied by rubbing a white cloth soaked in the cleaner in order to minimize penetration of the agent below turf fibers.

Three suggested cleaning methods outlined below:

1. A warm, mild solution of granular household detergent such as Tide or ALL in water, or any neutral low sudsing detergent that is recommended for fine fabrics. Use approximately one teaspoon of detergent to one pint of water. This will handle most stains.
2. Use three percent solution of ammonia in water for more severe cleaning problems. (NOTE: household ammonia is three percent. Industrial aqua ammonia is 33 percent. Dilute nine parts water to one part industrial ammonia, or the available supply as appropriate.) Thoroughly flush the surface and rinse with plenty of cold water afterwards.
3. Clean, dry absorbents such as paper towels or commercial cat litter can be used for applicable stains. Any other cleaners must be applied sparingly, and care must be taken to avoid penetration beneath the turf fibers. We recommend consulting a professional for application instructions.

Specific stain recommendations

The majority of stains on Shaw Sports Turf fields are the result of foreign matter which must be promptly and thoroughly removed. (See stain removal section on pg. 24 for instructions on prompt thorough stain removal as well as the following section on pg. 25-26 for removal of certain types of paint.)

Waterborne Residues

The majority of stains associated with polypropylene and polyethylene playing fields are known as “waterborne” stains. Waterborne stains should be removed using a mixture of water and a warm mild solution of granular household detergent that is non-abrasive.

Typical Waterborne Stains

Acid	Blood	Cola	Gatorade	Latex Paint	Thimerosal
Alcohol	Butter	Dye	Glue	Milk	Urine
Alkali	Chocolate	Food Coloring	Ice Cream	Mustard	Water Colors
Beer	Coffee	Fruit Juice	Ketchup	Tea	

1. Brush the residue with a stiff brush
2. Scrub the area with soap and water
3. Rinse the area thoroughly with clear water to remove all traces of soap
4. Dry with absorbent towel(s), if necessary

A three percent solution of ammonia in water may be used in lieu of household detergent for more stubborn residues or stains.

DISINFECTING TURF CONTAMINATED WITH BODY FLUIDS

Synthetic turf surfaces that have come in contact with blood, vomit, or other body fluids should be disinfected to eliminate bacteria including Methicillin-Resistant Staphylococcus Aureus (MRSA). The Centers for Disease Control and Prevention (CDC) recommends* treatment of surfaces that may be contaminated can be accomplished by treating the area with a solution of sodium hypochlorite (household bleach). The bleach should be diluted with cold water (1 part bleach to 9 parts water). For small areas, mix $\frac{3}{4}$ cup of bleach with 1 gallon of water. For large areas, combine 5 gallons of bleach with 45 gallons of water.

The diluted solution is sprayed onto the affected surfaces. The surface should be wet with the bleach solution. The surface needs at least 20 minutes of contact time with the bleach solution to be effective. The surface should be sprayed with water after the treatment period to remove any residue. The diluted bleach solution is only stable for 24 hours and should be discarded.

* <http://www.cdc.gov/mrsa/community/environment/athletic-facilities>

Shaw Sports Turf provides a product for full field disinfecting. Contact your Shaw Sports Turf representative for more information and pricing.

Non Waterborne Stains

Note: Removing contaminated infill due to non-waterborne stains may be necessary to ensure optimal system performance.

Asphalt	Cooking Oil	Grease	Paraffin wax	Shoe Polish
Ball-point	Crayon	Lipstick	Rubber Cleat	Suntan Oil
Chewing Gum	Floor Wax	Motor Oil	Marks	

Non Waterborne Residues

With other cleaners, where agents must be applied sparingly, care must be taken to avoid penetration into the turf fibers. We recommend consulting a professional for application instructions. Ensure that the turf is rinsed thoroughly after cleaning.

FIELD MARKING, LOGOS, ADVERTISING & DECORATION

PAINTED LINE & MARKING SYSTEM

Alternative painting of line and marking systems and their care is explained in this section. Many facility owners like to use elaborate line and marking systems, including facility logos, league logos, sponsor logos, mid-field, and end-zone designs, in assorted colors. Others prefer the simpler approach of sharp, well-defined game markings with no extraneous markings. In either instance, the materials and techniques used in applying paints will determine the life of the markings and the ease of removal when these need to be changed. In marking, do not apply paint too heavily. Light applications give good visibility and adequate life and are less abrasive than excessive layers of caked-on paint. Also, where possible, do not paint over inlaid lines and logos.

NOTE: Permanent inlaid line and marking systems are recommended over painted systems because of the reduction in maintenance and quality of image.

Types of Paint

Dry Markings	Temporary Paint	Durable Paint
Easiest to remove	Easy to remove	Long lasting & durable
Can cause chalk build up	Requires solution for removal	Chemicals required to remove
No curing period required	Requires one day curing period	48-72 cure period

We recommend contacting Pioneer Athletics for pricing on products and a list of paint related services for your turf field.
800-877-1500

PAINTS

Regardless of the type of paint used and design required, best results will be obtained when paint is applied to a clean, dry, dust and grease-free base. It is extremely important that old, degraded paint and dirt be washed off any area that is to be repainted if the best appearance and traffic resistance are to be obtained.

1. DRY MARKINGS

Chalk markings are not recommended for infilled systems. Dry chalk can be captured by the infill which can degrade a field's performance and drainage. There are some aerosol chalks that have proven to work well on synthetic turf. Some brands can stain inlaid lines and logos. We recommend Pioneer's Aerosol chalk as it fades to white over time and will not stain turf.

2. TEMPORARY PAINT

The recommended paints in this category are designed to be easily removable after usage in a limited number of games on infilled systems. Usually, the removal can be achieved by applying a special paint remover solution, agitating with a deck brush or remover machine and rinsing thoroughly with water. We suggest a top quality water-based paint designed specifically for synthetic turf such as Pioneer Athletics Game Line paints. One day curing of these paints, at moderate temperature and dry weather, is sufficient. Traditional grass paints or household paints can be very difficult to remove.

3. DURABLE PAINTS

High quality latex based permanent paint is highly durable. Once applied and cured, this paint may require special chemicals and equipment to remove. Thus, it is imperative that use of this paint be restricted to carefully chosen areas. For each of the above paints, it is recommended that 48-72 hours be allowed for complete cure. Paint should always be applied to dry turf at moderate temperatures. We recommend Pioneer Athletics' Extreme Line paints for infilled systems and Titan for non-infilled systems.

LOAD LIMITS

Shaw Sports Turf does not recommend allowing long term static loads or any transient rolling load of more than 35 psi to be applied to any of our surfaces including shock pads or elastic layer underpad. Rolling loads of up to 35 psi or 5,040 lbs. are acceptable on an occasional basis if using pneumatic balloon/turf tires. (The load limit of a pneumatic-tired vehicle is approximately equal to the tire's air pressure (psi) multiplied by 144.)

For long term static loads, Shaw Sports Turf recommends event decking specifically designed for synthetic turf. However, it is good practice to eliminate any unnecessary, long-term static loads.

NOTE: 3/4" Plywood may be used in lieu of event decking to disperse load limits when necessary, but only as a short term solution. Under static loads, the surface should first be covered with a polyethylene barrier or landscape fabric to keep the turf clean as new plywood may contain materials that will leach out and stain the turf if exposed to water.

SNOW & ICE

MANAGEMENT

Snow and ice can be left to melt and run off on their own, they are not harmful to your Shaw Sports Turf surface. However, it may be essential to clear away snow and ice to permit scheduled use of the surface. When this happens, we recommend leaving the snow in place and not removing it until as close to the scheduled time of use as possible. Doing so will minimize the risk of ice build up from cold wind blowing across a damp snow-cleared surface. Ice removal is more difficult, especially if a heavy layer has built up following freezing rains (see below). Two methods are used for snow removal:

Snow Blowers

Dry and powdery snow can be swept or blown from the field by using either a rotary brush or snow blower. Use caution to ensure that any tool or machinery is at the correct setting while being used so that it does not dig into or gouge the turf surface.

Using a blower:

1. Move down the center of the field with the first pass.
2. With the second pass, you should be at the edge of either side of the first pass.
3. Continue down one side and up the other with the blower.
4. Use a mechanical broom to clean off any remaining snow.

Snow Plows

Snow that is wet and sticky is typically easier to push off of the field by using a snow blade with a 4" to 6" wide rubber tip mounted on a light tractor. With this type of blade, use extreme care to avoid digging into the surface. The best blade setting is one that barely touches the top of the surface and rolls the snow ahead of the blade.

In this procedure, the snow itself will maintain contact with the surface. Wood, metal or other rigid surface blades should not be used. Adjust the blade to proper height so that it will not gouge or dig into the surface. Shaw Sports Turf recommends wheels on each side of the blade to ensure the blade can not possibly dig into the surface.

Using a plow:

1. Push snow off of the playing surface into piles.
2. Use a front-end-loader with a rubber tipped blade to scoop into truck. Use extreme caution not to damage the field while using a front end loader on the playing surface.
3. A rotary mechanical broom can be used to clean off the remaining snow.

Severe cases of ice can be removed by using a small lawn roller to break up the ice and then proceed as above. (See description above for instructions on how equipment should be used.)

Lugs, studs and chains are damaging and should not be used.

Snow removal equipment may be stopped momentarily on the surface, but do not park such equipment on the field overnight or for several hours. It is recommended that all of the equipment used as described above be moved on pneumatic tires. Tire pressure should be below 35 psi.

IMPORTANT: Avoid using tarps or field covers on the field during freezing weather. They can freeze to the turf surface by means of condensation making them very difficult to remove for a scheduled event.

SPECIAL EVENTS

ON SYNTHETIC TURF SYSTEMS

Facilities with synthetic surfaces are often used for graduation and other ceremonies. The basic precaution is to manage long term static loads by the use of load spreaders. Generally, most chairs will not damage the surface, however "post" chairs should only be used with rubber stoppers/feet on the bottom of the chair legs. After the event, the field should be groomed to help remove any divots created by these chairs. Ideally, a load spreader (4' x 8' plywood or field coverings/decking) should be used under chairs and especially the stage for these types of events. There are products available from many third-party vendors to accomplish this task. A polyethylene barrier or landscape fabric should be laid over the turf, under the load spreaders to avoid staining or spoilage of the turf in the case of plywood.

*See load limit section for more detail and instructions on this.

MINOR REPAIRS

TO TURF SURFACES

Your playing surface has been carefully engineered to provide many years of service. In the case of vandalism or unusual abuse, limit your maintenance staff to performing minor repairs. For more serious problems, consult your Shaw Sports Turf representative.

When to Repair

To properly maintain a synthetic playing field, be aware of day-to-day activities, usage, and condition of the field. It is very important that any minor damage be repaired immediately because a small problem may eventually grow into a major repair. In addition to routine awareness of field conditions, once or twice a year, each field should be given a careful and thorough inspection, preferably in the spring with a follow-up in early fall. All seams should be inspected, and any loose areas noted and repaired. Infill should also be checked and added as required after any repair. Go over the body of each panel of fabric and note any rips and/or tears. Assess the status of the under-padding for any damage or inconsistencies prior to making repairs. In the case of an older and/or heavily used field, inspections should be made more frequently. For instructions on how to make minor repairs to your turf surface, consult the digital instructions located on the thumb drive provided with your closeout packet. If further information is required, contact Shaw Sports Turf for assistance.



Shaw Sports Turf Minor Repair Kit is above. If you would like a repair kit, please contact SST maintenance at 1-866-703-4004 or sstservice@shawinc.com

Why a Spring inspection?

Fields endure their heaviest scheduled activity during the fall months. Once your inspection has been completed you may require the assistance of a professional Shaw Sports Turf crew. Your Shaw Sports Turf representative is always available to assist in the case of an emergency, but planned visits permit more efficient and cost effective service. If repairs are required they are easier to make in warm, dry weather. Leaving the repaired area undisturbed will allow the adhesives to cure faster and properly adhere to the turf backing. Repairs involving adhesive should not be attempted while the field is wet.

What Are Minor Repairs?

Cuts, rips, tears or open spots in seams that are less than 36" in length are considered minor repairs and do not generally require a visit from our service staff. These minor repairs can be performed by the owner or maintainer without much effort. To repair minor seam openings or loose areas:

NOTE: Consult your SST thumb drive provided with your closeout packet for detailed repair instructions.

- 1.** Remove infill and debris from the area with a vacuum.
- 2.** Cut a piece of seam tape slightly longer than area to be repaired.
- 3.** Slide the seam tape under the seam.
- 4.** Apply a generous amount of PL adhesive between the backing and seam tape.
- 5.** Firmly press both sides of the seam until the adhesive rises to form a bead between the two edges of the turf backing creating a barrier that keeps infill out.
- 6.** Allow to cure before adding infill back to the turf fibers.
- 7.** Spread appropriate infill on the repaired area and brush thoroughly.
- 8.** Check infill levels to ensure they match the surrounding area.

OTHER TYPICAL REPAIRS

Cigarette / Firework Burns

Use a hand-held metal brush (such as is used to remove paint) and brush the spot vigorously to separate the fibers. If brushing the turf does not remove the damage, cut the fused area away using a razor knife. Upon removing the area proceed to follow the directions outlined above for the minor repair.

Smoking should be strictly prohibited on your field!



Maintenance Log

Field Name: _____

Location: _____

For Year: _____

Submitted by: _____

Groom Field -

Date	Signature	Date	Signature	Date	Signature
_____	_____	_____	_____	_____	_____
Date	Signature	Date	Signature	Date	Signature
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Sweeper -

Date	Signature	Date	Signature	Date	Signature
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General Maintenance

Date	Signature	Reason / Comments
_____	_____	_____
Date	Signature	_____
_____	_____	_____
Date	Signature	_____
_____	_____	_____

Send the completed form to Shaw Sports Turf

Via Email: sstservice@shawinc.com

Via Fax: 706-879-4045



Maintenance Log

Field Name: _____

Location: _____

For Year: _____

Submitted by: _____

Groom Field -

Date	Signature	Date	Signature	Date	Signature
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Sweeper -

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General Maintenance

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Date	Signature	_____
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Date	Signature	_____
_____	_____	_____

Send the completed form to Shaw Sports Turf

Via Email: sstservice@shawinc.com

Via Fax: 706-879-4045

KEY POINTS

TO REMEMBER

To ensure your surface provides the performance, longevity, and quality, you've come to expect from Shaw Sports Turf, please be sure to follow the maintenance plan outlined in this manual.

Shaw Sports Turf is here to help! Our qualified Turf Representatives are eager to assist with any questions or inquiries regarding your field, and are dedicated to providing our customers with the best possible experience on your new Shaw Sports Turf field.

Except as expressly provided in writing, Shaw Sports Turf makes no representations, warranties, or guarantees, of any kind.

CONTACTS

sstservice@shawinc.com

Maintenance & Warranty Coordinator: 1-866-703-4004

www.shawsportsturf.com





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