

# Synthetic Turf Sports Fields Maintenance



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Shaw Sports Turf & GTR Turf



Extend the life and performance of your product by:

- » Keep it clean
- » 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 if your repairs and renovations are complicated
- » Maintain proper infill levels in high-use areas

# INTRODUCTION TO MAINTENANCE

Your surface will perform,  
look, and feel better for a longer period of time if  
the maintenance procedures  
are followed closely.



# DO's and DON'Ts



## Do's

- 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.
- Use practice mats when possible or rotate practice drills to avoid wear in a single location.
- Repair minor damage promptly.
- Follow suggested maintenance and cleaning procedures. Inspect your field regularly for damaged seams, logos, and inlays.



## Don'ts

- 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 the manufacturer.
- 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 the manufacture
- Use of bikes, lawnmowers, etc.
- Displace infill with direct water pressure



# 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.





# The Grooming

Shaw Sports Turf recommends that every turf system has a routine grooming after every 80 hours of use, or a minimum of once per month. Additional grooming may be necessary based on frequency or intensity of usage.

## Routine Grooming

1. Keeps infill layer uniform in its distribution
2. Ensures that the fiber is protected and that the exposed part of the fiber is uniform in its direction and stays erect
3. Helps remove litter, leaves, dirt, etc.

The realized benefits from routine grooming are:

1. Consistent footing and ball bounce throughout the surface
2. Maximum aesthetic appeal
3. Lengthened life expectancy

## Frequent CARE

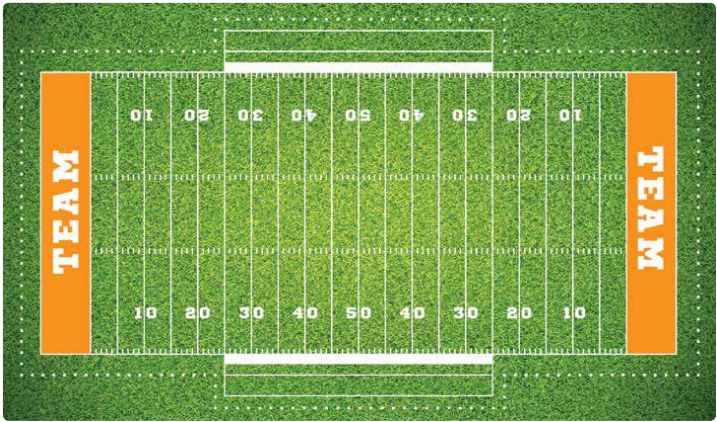
The amount and frequency of care is dependent on not only the surface, but also by the volume and the type of use.

## Deep 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 shock absorbency and support the upright fiber.
- » Deep cleaning removes dirt and contaminants and also improves surface drainage.



# FOOTBALL FIELDS



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

## Surface Grooming

- Surface grooming is recommended every 80 hours, or at least once per month, to maintain proper infill depth and place fibers in an upright position.

## Infill Decompaction

- Shaw Sports Turf recommends annual decompaction for high use (daily, multi-sport, tournament use or municipal fields/parks) fields with conventional infill systems. Fields with more typical levels of use will need to be decompacted every 3-to-4 years.

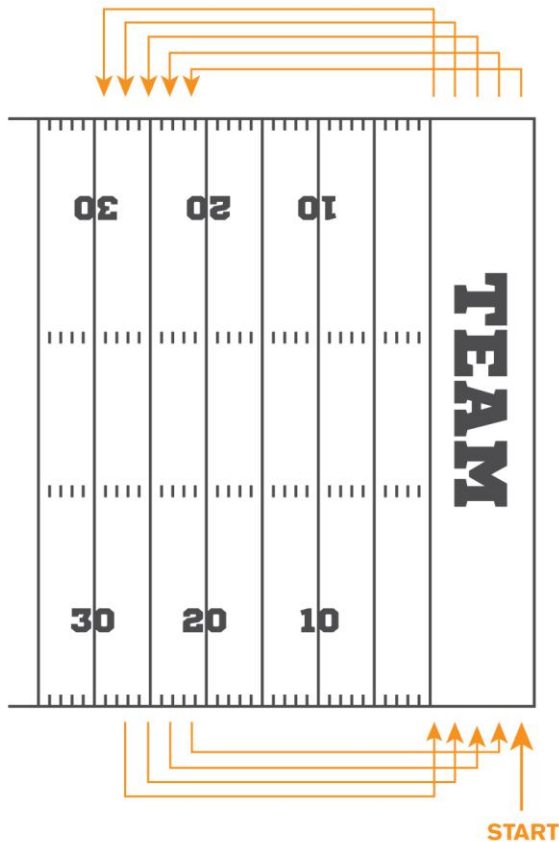
## Proper Infill Depth

- Add infill as needed to high traffic areas to maintain proper infill depth. Maintain the Shaw Sports Turf recommended infill level for your specific field and infill type. Proper infill level is critical to fiber performance and player safety.

## Adding Infill

- Infill can be added by hand and spread with a broom or flexible leaf rake in smaller areas, or spread with a powered groomer in larger areas. Contact SST maintenance if infill needs to be added to your entire field.

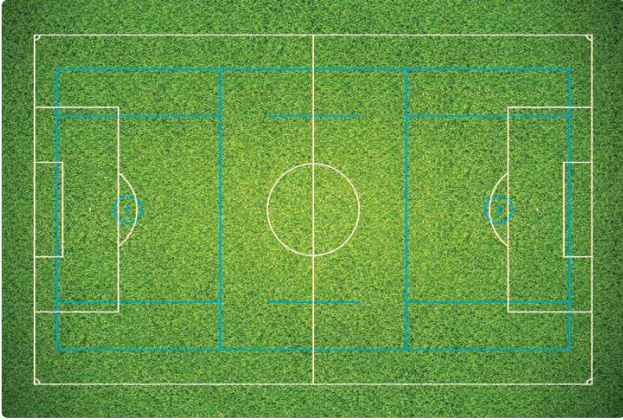
### 50 YARD GROOMING PATTERN



- Continue this pattern until you reach the 50 yard line.
- Repeat to complete the other half of the field. Rotate between
  - clockwise and counter clockwise each time you groom.



# SOCCER / LACROSSE FIELDS



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

## Surface Grooming

- Surface grooming is recommended every 80 hours, or at least once per month, to maintain proper infill depth and place fibers in an upright position.

## Infill Decompaction

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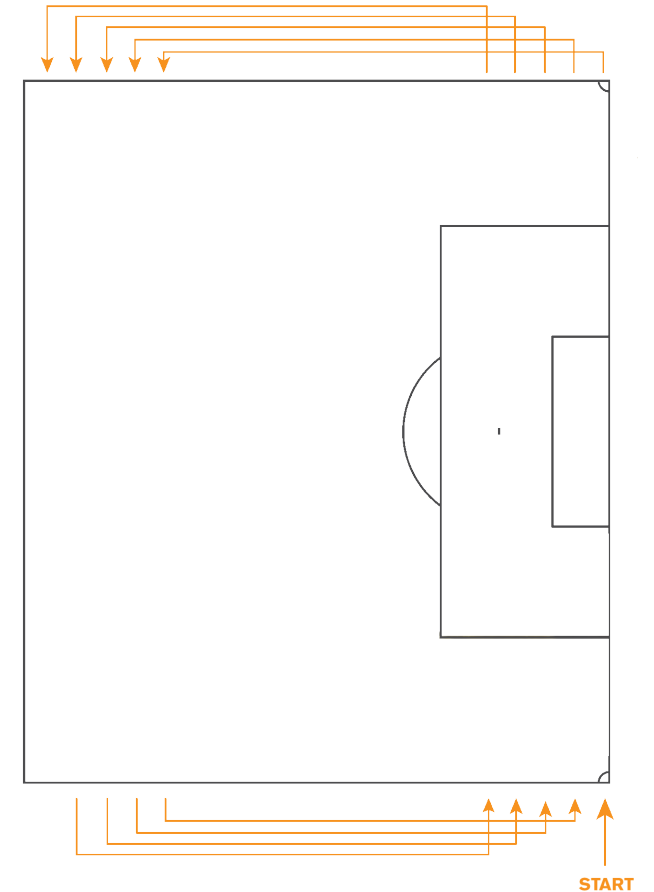
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## Adding Infill

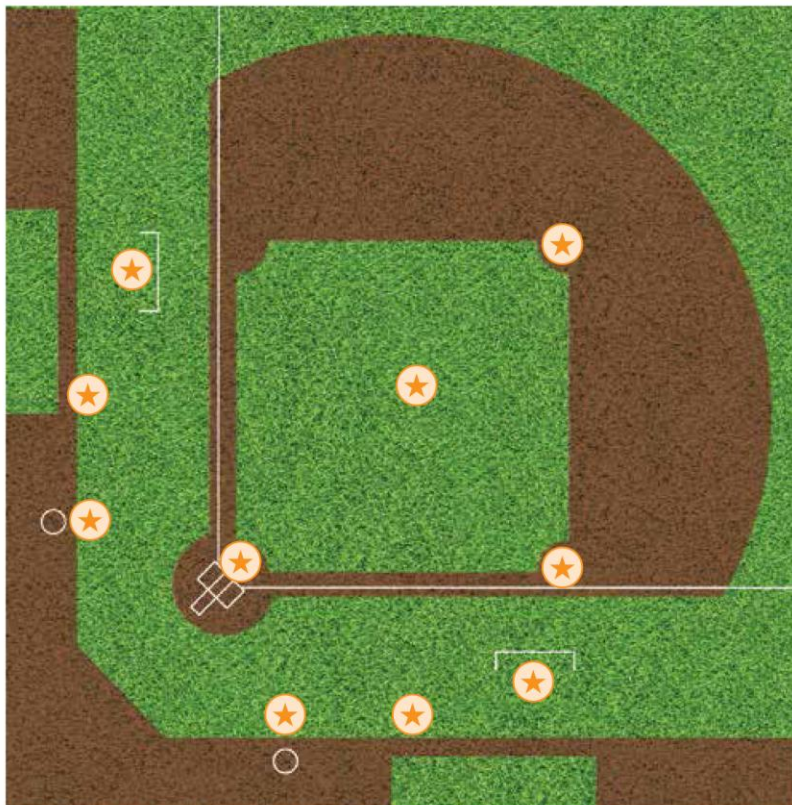
- Infill can be added by hand and spread with a broom or flexible leaf rake in smaller areas, or spread with a powered groomer in larger areas. Contact SST maintenance if infill needs to be added to your entire field.

## SOCCER/LACROSSE GROOMING PATTERN



Continue this pattern until you reach midfield. Repeat to complete the other half of the field. Rotate between clockwise and counter clockwise each time you groom.

# BASEBALL / SOFTBALL



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

## Surface Grooming

- Surface grooming is recommended every 80 hours, or at least once per month, to maintain proper infill depth and place fibers in an upright position.

## Infill Decompaction

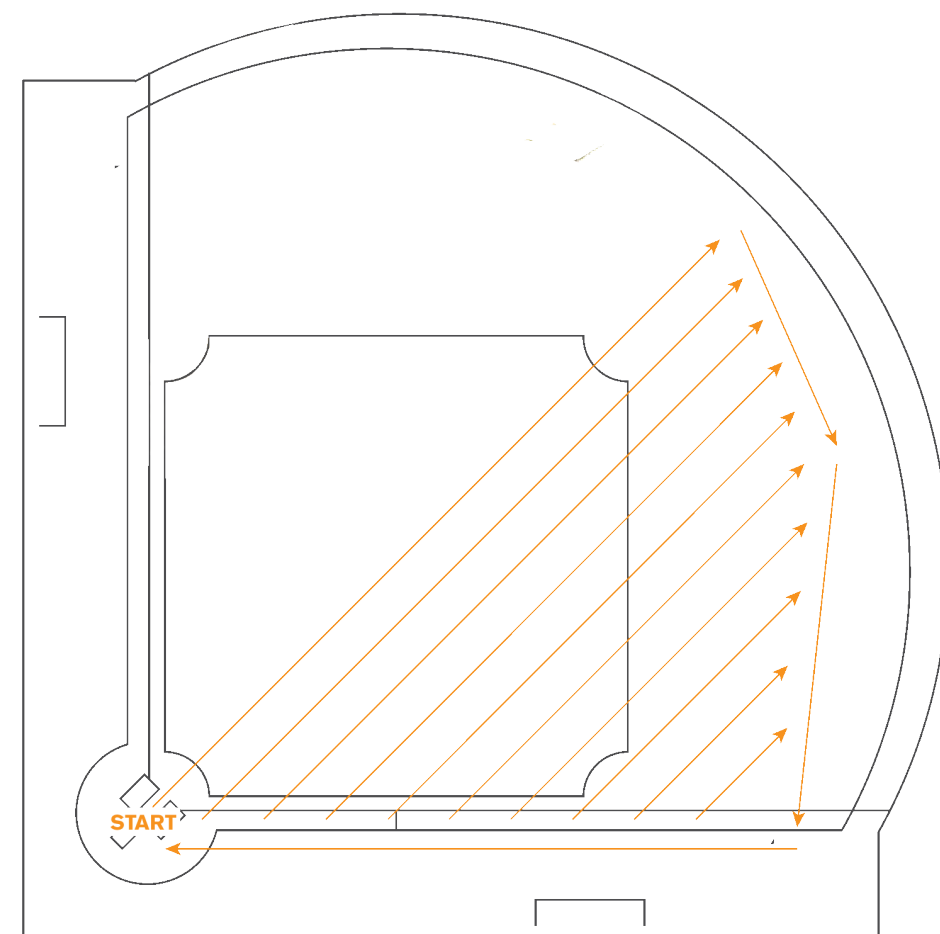
- Shaw Sports Turf recommends annual decompaction for high use (daily, multi-sport, tournament use or municipal fields/parks) fields with conventional infill systems. Fields with more typical levels of use will need to be decompacted every 3-to-4 years.

## Proper Infill Depth

- Add infill as needed to high traffic areas to maintain proper infill depth. Maintain the Shaw Sports Turf recommended infill level for your specific field and infill type. Proper infill level is critical to fiber performance and player safety.

## Adding Infill

- Infill can be added by hand and spread with a broom or flexible leaf rake in smaller areas, or spread with a powered groomer in larger areas. Contact SST maintenance if infill needs to be added to your entire sports field.



Continue this pattern until you reach midfield. Repeat to complete the other half of the field. Rotate between clockwise and counter clockwise each time you groom.





# CLEANING

For outdoor surfaces, rain is the best cleaner. Rainfall gently cleans the fibers of pollen and airborne pollutants 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 clean 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

## STAIN REMOVAL

Most stains are actually residue of foreign matter that must be promptly and thoroughly removed.

- ❖ The first rule in spot removal is promptness. It is always easier to clean up a fresh spill than one that has dried and hardened.
- ❖ Remove any solid or paste-like deposit with a spatula or table knife. Blot up excess liquids with a thick stack of paper towels or a dry absorbent such as kitty litter or Fuller's Earth. Dry absorbents can then be swept or vacuumed up.
- ❖ Shaw Sports Turf surfaces provide good resistance to staining. 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.



# Nylon Fibers

Cleaning agents are grouped into two sets, one of which can be used in liberal amounts directly on the turf surface, and the second which should only be applied by rubbing a white cloth soaked in cleaner, in order to minimize penetration of possibly harmful agents below the turf fibers. In the first group of cleaners, which generally can be applied to non-infilled systems without any special precautions, are the following:

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 kitty 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.





# Polypropylene & Polyethylene Fibers

Polypropylene & polyethylene fibers are among the most stain resistant fibers known to man. Hence, most stains on Shaw Sports Turf polypropylene and polyethylene fields are actually residues of foreign matter which must be promptly and thoroughly removed. (This is not the case with nylon and other fibers on the market.)

1. Most stains on polypropylene or polyethylene fields can be removed with water or soap and water. The first rule is promptness. It is much easier to clean up a fresh oil spill before it has time to dry and harden. Remove any solid or paste-like deposit promptly using a dull knife or spatula-like tool. Blot up excess liquids with a stack of white towels, cloth or paper. Dry absorbent clay-based materials, such as cat litter absorbers (kitty litter) can be very useful and should be stored on site. Such dry absorbers can be swept or vacuumed up.

- Any other cleaners should only be applied by rubbing a white cloth soaked in the cleaner, in order to minimize penetration of possibly harmful agents below the turf fibers.

2. The first group of cleaners can generally be applied to infilled systems without any special precautions



# Waterborne Residues

Most stains commonly associated with polypropylene and polyethylene playing fields can be classified as "waterborne" stains. These stains are best removed using a warm mild solution of granular household detergent (non-abrasive) and water.

## Typical Waterborne Stains

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

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.





# 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

## Non Waterborne Stains

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

## 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 2 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 or it can be left for the bleach to naturally decompose. The diluted bleach solution is only stable for 24 hours and should be discarded.

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



# Field marking and logos

## 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.

## 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.

## 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.

## Durable Paints

Infill can be added by hand and spread with a broom or flexible leaf rake in smaller areas, or spread with a powered groomer in larger areas.





# Snow & Ice

Snow and ice are not harmful to synthetic turf systems and can be left to melt and run off on their own accord.

**Two methods are used for snow removal:**

## Snow Blowers

If using a blower:

1. The First pass of the blower should be down the center of the Field.
2. Second pass should be made at the edge of either side of the First pass.
3. The blower then continues down one side and up the other.
4. Clean off remaining snow with a mechanical broom.

## Snow Plows

If using a plow:

1. Push snow into piles off playing surface.
2. Scoop into truck using front-end-loader., also with rubber tipped blade. Use extreme caution.
3. Use a rotary mechanical broom to clean off the remaining snow.

**IMPORTANT:** Keep tarps or field covers off the field in freezing weather. They are difficult to remove when frozen to the surface. Avoid using a tarp on the field during freezing weather. Tarps can freeze to the turf by means of condensation and thus can be very difficult to remove for a scheduled event.



# SPECIAL EVENTS & LOAD LIMITS

## SPECIAL EVENTS

Facilities with synthetic surfaces are often used for graduation and other ceremonies. The basic precaution is to keep long-term static loads below 300 pounds per square foot by the use of load spreaders. There are products available from many third-party vendors to accomplish this task. Landscape fabric can be laid over the turf, under the load spreaders to avoid staining or spoilage of the turf.

## LOAD LIMITS

As a general rule, no long term static load of more than 3 psi (300 lbs./sq.ft), nor any transient rolling load of more than 35 psi should be applied to any Shaw Sports Turf surface (foam pad or elastic layer underpad). Rolling loads of up to 35 psi are acceptable on an occasional basis, or under 3,000 lbs vehicles using balloon/turf tires. (The loading of a pneumatic-tired vehicle is approximately equal to the air pressure in its tires.) Make turns slowly when driving vehicles on synthetic turf. It is good practice to eliminate any unnecessary, long-term static loads.

## NOTE

Under static loads, the surface should first be covered with a load spreader such as polyethylene sheeting to keep it clean. New plywood may contain materials that will leach out and stain the turf if it is exposed to water therefore a polypropylene barrier should be used under the plywood to prevent this from happening.





# MINOR REPAIRS TO TURF SURFACES

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.
- ❖ Go over the body of each panel of fabric and note any rips and/or tears.
- ❖ Assess the status of the under-padding and the condition of the surface.
- ❖ In the case of an older and/or heavily used field, inspections should be made more frequently.



## What Are Minor repairs?

- An open spot in a sewn or glued seam, where the loose area in the seam extends from a few inches to one or two feet.
- Cuts, rips or tears in the surface fabric that are less than six inches or so in length generally can be repaired by the owner without much effort.

### To repair minor seam openings or loose seam areas:

1. For infilled systems, vacuum sand or rubber from the turf to be repaired.
2. Be sure that the fabrics to be adhered are dry, free from loose sand, dirt, old adhesive, and other foreign matter.
3. Remove the area of debris.
4. Position the fabric to check for satisfactory final placement.
5. Be sure the seaming tape to which the fabric will be adhered is itself adhered to the underlying pad (if system uses an underlying pad).
6. Apply a small amount of caulk onto seaming tape. Avoid excessive adhesive to reduce the possibility of bleed through or bleed out. Spread the adhesive with a trowel and trowel so that the entire fabric is coated lightly and evenly.
7. Press the fabric into the adhesive bed uniformly.
8. Weigh down the area and allow curing for a minimum of two hours.
9. For in-filled systems, spread appropriate rubber or sand on the repaired area and brush into the turf thoroughly until even with surrounding playing areas.

### 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, take a razor knife and cut the fused area away.






# KEY POINTS TO REMEMBER


1. Call for help or advice when you have questions about your field and its use. Your representative can assist with your questions and inquiries and we are always eager to help you experience your field to its fullest potential.
2. Following the exact recommendations and procedures shown in this manual, will assure that your Shaw Sports Turf surface will give you years of good service with minimal maintenance.






# Thank You


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# QUESTIONS?

