



MAINTENANCE & OPERATING INSTRUCTIONS FOR XGRASS SAND/RUBBER INFILLED SYSTEM ATHLETIC FIELDS

XGrass sand/rubber infilled systems will perform satisfactorily with only a minimum degree of maintenance beyond good housekeeping. But, for a superior level of playing characteristics, a higher degree of maintenance is highly recommended. The following notes are intended as a guide to the maintenance program for your XGrass turf system.

Following the completion of your XGrass athletic field, there are several items that may require attention on a regular basis in order for the playing surface to achieve its optimal standard of play. These are as follows:

Initial Maintenance

1. **Infill compaction and consolidation.** Full settlement of the granular sand/rubber infill material occurs naturally through weathering and use, especially after periods of continuous rainfall. The sand/rubber is typically displaced by intensive use in high wear areas such as soccer goal creases. These areas will require special attention. If the sand/rubber infill material is displaced thus decreased in these areas, additional sand/rubber must be added by brushing thoroughly into the grass fiber pile.
2. **Even distribution of sand/rubber.** During installation, the sand/rubber is distributed evenly throughout the entire surface. History shows that frequent brushing (perhaps weekly) during the first months after installation is beneficial to keeping an even distribution of infill material as it eventually reaches consolidation.

Regular Maintenance (WARRANTY REQUIREMENT)

After the first 6 to 12 months after installation (initial period), only a minimal amount of maintenance is required. Frequency of maintenance will be dictated by intensity of use. The types of regular maintenance required are as follows:

1. **Brushing.** Brushing in two directions at right angles will be sufficient to maintain an even infill distribution over the playing surface. The frequency of required brushing will depend on the intensity of use, but a good guide is once or twice per month. For large fields, a lawn tractor or typical field maintenance vehicle with flotation tires is adequate to pull a plastic bristle brush such as a GreensGroomer® model 720SDE. The brush should be set to apply slight pressure to the turf, allowing the brush to work the infill material back into the grass pile. For smaller areas or when working around equipment such as goal posts or track event structures, a hand broom with plastic bristles will suffice. In any case, the proper infill level must be maintained to achieve maximum durability and optimal playing characteristics.
2. **Good Housekeeping.** Removing debris from the playing surface should be carried out on a regular basis. To remove debris, using the same utility tractor, a tow-behind sweeper such as a Parker Suburbanite model SU8336 is recommended.



Special Maintenance

1. **Weeds.** Sand/rubber systems can provide a potentially good growth medium for windblown seeds, moss and algae. XGrass turf systems can withstand periodic chemical weed treatment. An annual weed treatment using a weed killer containing Atrazine is recommended.
2. **Snow Clearance.** Snow may be cleared from the turf field by a tractor mounted snow plow with a rubber blade. Great care must be taken to remove the snow on the surface only. Do not attempt to remove embedded or consolidate snow beneath the grass fiber surface.
3. **Ice Clearance.** The formation of ice may be prevented by the application of salt to the surface. Under normal frost conditions, an application of 250gm / m² (8 oz. / yd²) would be adequate. The salt will be eventually washed out by rainfall. During the winter season, a re-treatment at the same rate may be necessary once per month or at a half rate every two weeks to maintain a suitable concentration of salt at the surface.
4. **Cleaning.** Rainfall takes care of most cleaning and rinsing aspects that the system will need. At times, particularly in the first two years of the life of the field, granular rubber will migrate to the surface do to static charge buildup. To dissipate these static charges and settle the granular rubber back into place, it is recommended to spray the field with a diluted fabric softener solution. 10 parts to 1 of water to surfactant will suffice.



Required Maintenance Table

Type of Maintenance	Frequency	Responsibility
Brushing & leveling	Weekly to monthly	Owner (warranty requirement)
Removing debris	monthly	Owner (warranty requirement)
Topical cleaning (surfactant)	2 per year	Owner (warranty requirement)
Adjust /maintain infill levels	annual	As needed per XGrass inspection, fee based or contractual (warranty requirement)
Contra brushing, de-compaction	1 – 2 years	As needed per XGrass inspection, fee based or contractual
Moss/weed killing	1 – 2 years	Owner self perform or fee based by XGrass
Revitalize (clean and/or replace) infill material	5 – 7 years if needed	As needed per XGrass inspection, fee based



Equipment

Lightweight maintenance vehicles with a 2 ton maximum load or a 5 ton total weight and fitted with broad or balloon (flotation) tires only should be used on the playing surface. It is important that the larger more heavily loaded vehicles are driven at more than a walking pace and sharp turns are to be avoided. Sudden acceleration, deceleration and breaking should be avoided, as well. Maintenance vehicles should be inspected regularly to ensure that there is no leakage of oils, fuels or lubricants.

Use

The XGrass sand/rubber infill system should be used solely for sporting activities. It is important that the correct shoes be worn in accordance with the type of sport being played. If the sports field is to be used for events other than for which it was designed, the suitable protective measures should be agreed upon with XGrass prior to the event taking place.

Schedule of Maintenance Activities and Recommended Procedures (Warranty Requirement)

1. **Weekly Inspection:** Brushing of heavy wear areas and re-filling as necessary.
2. **Monthly Inspection:** Whole field inspection including all seams, infill level, stains, excessive wear, etc.
3. **Annual Inspection:** Contact XGrass for a thorough inspection and an update on suggested maintenance procedures.

Warranty Do's & Don'ts

- **Do not** wear spikes of cleats or studs longer than $\frac{3}{4}$ ".
- **Do not** wear metal spikes.
- **Do not** wear sneakers or flat soled shoes for athletic activity.
- **Do not** smoke or drop cigarettes, cigars or matches on the surface.
- **Do not** allow dogs or other animals on the surface.
- **Do not** allow chewing gum on the surface.
- **Do not** allow glass of any kind on the surface.
- **Do not** allow food or beverages other than water on the surface.
- **Do not** place heavy or sharp objects on the surface.
- **Do not** leave gas powered equipment running idle in one location. This can burn or melt the surface.

- **Do** clean your footwear before going on the surface.
- **Do** keep areas around the field entrance free of dirt.
- **Do** brush the surface regularly when dry.
- **Do** provide adequate trash receptacles.
- **Do** make sure all security measures are kept in place (closed gates, etc.)



Inspection Checklist

Weekly Inspection

1. Inspect heavy wear areas. Re-dress and re-brush areas where sand/rubber infill has been displaced, as necessary.
2. Inspect all seams.
3. Check playing surface for any windblown debris, seeds, etc. and remove.
4. Check perimeter of the playing surface for weeds or dirt which may encourage weed growth.

Monthly Inspection

1. Inspect all of the above in weekly inspection.
2. Check overall level of sand/rubber infill of the entire playing surface and re-brush and re-dress as necessary.
3. Thoroughly check area immediately opposite field access point and re-brush as necessary.

Annual Inspection

1. Inspect all required in weekly and monthly inspection list.
2. Arrange site visit by XGrass to inspect field with facility grounds staff to answer questions or offer solutions to any problems that may have arisen since installation or most recent inspection.



Stain Table

Type of Stain	Lukewarm Water	Diluted Household Cleaner	Concentrated Household Cleaner	Degreaser*	Acetic Acid* Approx. 10%
Tea	X				
Coffee	X				
Cola	X				
Ice Cream		X			
Ashes / Residue		X			
Fruit		X			
Milk		X			
Chocolate Milk		X			
Beer		X			
Liquor		X			
Urine		X			
Animal Feces		X	X		
Vomit		X	X		
Eggs		X	X		
Copy Marker		X	X		
Blood		X	X		
India Ink			X	X	
Ink			X	X	
Chocolate			X	X	
Ball Point Pen			X	X	
Marker			X	X	
Butter			X	X	
Mineral Oil			X	X	
Shoe Polish			X	X	
Lipstick				X	
Tar				X	
Chewing Gum				X	
Wax				X	
Rust					X
Lime					X