

What is Geofill?

Geofill is an environmentally-friendly alternative infill for synthetic turf systems.

How long has Geofill infill been used and how many Geofill fields have been installed?

Geofill has been used since 2005. Over 500 Geofill fields have been installed world-wide. (Reference List Available)

What is the make-up of the Geofill?

Geofill is 90% coconut and 10% natural derived plant based matter.

Where is the source for the coconut raw material?

The coconut for our Geofill system comes from Sri Lanka or India.

Is there any performance data for a FIFA 2 Star recommended product which includes Geofill?

Geofill Product Performance Properties

| PROPERTY | FIFA 2 STAR LIMITS | ELITE GEO 45P | ELITE GEO 45G | ELITE GEO 2.5 |
|----------------------------|--------------------|---------------|---------------|---------------|
| g-max | | 98 | 100 | 118 |
| Force Red (%) | 60-70% | 65 | 65 | 66 |
| Vertical Deformation (mm) | 4-11 mm | 9.0 | 9.6 | 10.0 |
| Rotational Resistance (NM) | 30-45 NM | 40 | 40 | 36 |
| Vertical Ball Rebound (m) | 0.6-0.85 m | 0.75 | 0.71 | 0.82 |
| Ball Roll (m) | 4-8 m | 5.0 | 5.0 | 5.1 |

How does the infill splash (fly) of Geofill compare to fields with crumb rubber infill?

A properly maintained Geofill system has little to no infill splash or fly.

Do Geofill systems require a pad?

All 100% Geofill systems require a shock pad. A system containing a combination of Geofill and SBR crumb rubber can be installed without a pad.

What is the warranty of a Shaw Sports Turf synthetic turf field with the Geofill infill mixture?

Shaw Sports Turf systems with the Geofill infill mixture carry the same standard 8 year warranty as all other Shaw Sports Turf systems.

Does it require a watering source and what is the optimum moisture percentage?

The 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 30% and 40%. If an installation is located where occasional precipitation and humidity is in the 30-50% range, less mechanical irrigation is required. However, the system's moisture content should be monitored at least twice a week when no precipitation has taken place to naturally add. If the system drops below a 30% moisture reading, approximately 3,200 gallons of water should be added to an 80,000 square foot field (5 oz. per square foot). Typically, during a dry period this would not have to be done more than two times per week. Cloud cover and sunlight will affect the evaporation of the water from the system, and need to be monitored with the other variables noted above.

What happens in drought conditions when watering restrictions are in effect, and the system cannot be watered?

If the proper moisture content is not maintained, the system can become dusty, more splash can be seen, and the playing speed can be slower. Under these conditions, additional Geofill may need to be added more frequently (dry Geofill breaks down more quickly than properly maintained Geofill).

How is the moisture content of the Geofill system measured?

Moisture content can be measured by using a meter such as the Extech MO210 Moisture Meter.

What is the moisture content when the Geofill is shipped?

The moisture content at shipping is generally around 20%.

What routine maintenance is required?

The synthetic turf system with Geofill should be maintained in accordance with the Shaw Sports Turf Maintenance Manual as written for routine maintenance. If larger issues arise that are not covered in the maintenance manual, a solution would be developed on a case by case basis.

Is there any additional yearly maintenance required?

Shaw Sports Turf Geofill systems should be de-compacted on a yearly basis by a Shaw Sports Turf crew or a Shaw Sports Turf certified maintenance crew. Our Geofill systems require the same amount of maintenance compared to sand and rubber infill systems, but much less compared to natural fields. We usually recommend regular brushing/sweeping as normal procedure (approx. every 100 hours of play). Also, using a spring tine rake on a groomer will help de-compact a field which should be done no more than once per year. With regards to the equipment, Geofill can be installed and maintained with the same standard machines used for rubber/sand installations.

Can the customer do their own yearly decompaction?

With the proper equipment and training, a customer could do their own yearly decompaction; however, we would prefer that a properly trained Shaw Sports Turf crew or a Shaw Sports Turf certified maintenance crew do the yearly maintenance.

When does the system need to be topped off, and how much?

If the moisture content of the Geofill is maintained correctly, approximately 10% of the Geofill will need to be replenished every 2-3 years. Based on an 80,000 square foot field requiring 1.5 lbs. of Geofill per square foot, 12,000 lbs. (or 7 bags) would need to be added every two to three years. This process will include a decompaction, the addition of the new Geofill, and a final grooming. This process will take two to three days.

Does the degradation of the Geofill over time affect the drainage properties?

Experience with these fields has not shown drainage to be negatively affected.

Will dry Geofill blow away?

Dry Geofill will not typically blow away; however, if the proper moisture content is not maintained, the dry system can become somewhat dusty.

Are there any limits to hours of play on a Geofill system?

No, there are no limits on hours of play. However, higher usage will require more frequent routine maintenance. As with any Shaw Sports Turf system, all high use areas should be monitored frequently for proper infill depth. If the infill depth is low in any area, it should be brought up to the proper depth immediately.

Does the Geofill system freeze or get hard in the winter?

The system typically contains moisture, so without any type of treatment it stands to reason that some freeze/thaw will take place. We recommend a pre-winter treatment with a salt solution of 0.2 lbs. salt/sq. ft. mixed into the Geofill infill system. While this will decrease the freezing potential, Geofill, like natural grass and traditional synthetic turf fields, will become harder during freezing weather.

Will heavy rain affect the playability or drainage of the field?

During heavy rains the Geofill may become saturated, but the drainage and playability should not be affected.

Do weeds grow in the system, if so, how are they treated?

While this does not happen in most environments, some environments have led to weed growth. The system has been treated with a herbicide (that is naturally washed out of the system) to effectively to kill the weeds. A pre-emergent has also been used to further control weed growth in those areas.

Will Geofill be more likely to harbor bad bacteria such as MRSA than traditional synthetic turf systems?

There is no documented proof of this being the case. With respect to our systems (Geofill/Sand), and the benefits of sunlight/UV, these systems will closely match natural grass fields as it pertains to harboring any contaminant. Coconut, or Coir, fibers are completely natural and biodegradable. They are used as a growing medium in greenhouses because it retains moisture very well and is free of bacterial and fungal spores.

Are birds and animals attracted to Geofill more than traditional synthetic turf?

Geofill is not a food source, so there has been no evidence that this is the case.

Will the Geofill system pass synthetic turf flammability tests?

A properly maintained (proper moisture content) Geofill Field will pass ASTM D2859 (pill burn test) and ISO 11925-2 (filter paper test).

How is the Geofill delivered to the field?

Geofill comes in 1784 lb. super sacks loaded on a flatbed truck. Typically 22 bags/truck.

How is Geofill Installed?

Geofill is installed with the same equipment and the same techniques as standard infill. Geofill cannot be installed when the field is wet or when it is raining.

Can game lines be painted on a Geofill system?

Yes.

If a Geofill field is painted and then groomed, is there any impact on the aesthetics of the field?

The grooming process should not affect the overall aesthetics of the painted game lines.

Are people with peanut allergies at risk on a Geofill field?

No. Coconut is not a nut or a legume (like peanuts). Coconuts are part of the palm tree family.

Explain the cooling effect of Geofill.

The excellent moisture retention capabilities of Geofill allows the infill system to absorb water which is released when sunlight warms the field. The release of water removes heat from the field by evaporative cooling. The surface will remain cooler as long as there is water present in the system. When compared to crumb rubber infilled fields, Geofill fields have been seen to be 40 degrees F cooler than traditional synthetic turf fields. Test results are available upon request.

Can Geofill be recycled or re-used?

A large percentage of the existing Geofill can be removed from the synthetic turf system and the mix is perfect for top-dressing of natural grass fields or landscaped area. Coconut, or Coir, fibers are completely natural and biodegradable. It is used as a growing medium in greenhouses because it retains moisture very well and is free of bacterial and fungal spores.

How do you remove snow and ice from the Geofill system?

Refer to the Shaw Sports Turf Maintenance Manual for the recommended guidelines for snow removal. If these recommendations are followed, there should be no adverse effect to the Geofill system. It is important to point out that no removal method should dig into, or gouge the surface.

We do not recommend breaking up ice from the surface and removing, as infill may be stuck in the ice.

THIS IS CONSIDERED A GENERAL GUIDELINE. IF YOU HAVE ANY QUESTIONS, PLEASE CONTACT YOUR SHAW SPORTS TURF REPRESENTATIVE, AND WE WOULD BE MORE THAN HAPPY TO ADDRESS ANY QUESTIONS YOU MAY HAVE.