Tools & Equipment
Groomer Technology

TWO MANUFACTURERS’ OPINIONS ON MAINTAINING SYNTHETIC TURF

We asked Jim Dobmeier, president of A-Turf, a manufacturer, supplier and installer of synthetic grass systems, and Tom Moore, national sales manager for GreensGroomer Worldwide, their thoughts on maintaining and grooming synthetic turf systems.

SportsTurf: What type of maintenance is required for an A-Turf field?

Dobmeier: Some maintenance is required to keep the field in ideal playing condition. An A-Turf field should be groomed once every 3–4 weeks during periods of active use. Regular grooming ensures the fiber strands are standing upright and that the infill is level. Several different grooming devices are acceptable for use in grooming the field. The GreensGroomer, which attaches to the back of a Gator or similar type of vehicle, is used to periodically groom the fibers and infill. A Parker Sweeper can also be purchased to remove trash and debris from the field before grooming the field with the GreensGroomer.

ST: How important is maintenance for a synthetic field in terms of the life of the field, performance and aesthetics?

Dobmeier: A-Turf fields offer a life expectancy of 12–15 years. Like any long-term investment, proper care is required to prevent damage and premature aging. Grooming once every 3–4 weeks will prevent fibers from becoming matted over time and keep the infill level across the field—especially in high usage sections, such as the corner kick area or mid-section of a field. Proper grooming not only helps keep the field looking good, it also helps to ensure safety (Gmax rating) is not compromised. For some fields under constant use, testing the Gmax at the 6 to 8 year mark is advisable. In addition to grooming, it’s important to conduct regular visual inspections to check for issues such as loose seams or tears, some of which may be covered under the A-Turf warranty.

ST: Is it possible to over-groom a synthetic field?

Dobmeier: Yes, it is possible to over-groom a synthetic turf field. Over-brushing can cause premature aging of the fibers. The amount of grooming should be proportional to the use of the field. A multi-use field will require more attention than fields that get less action.

Tom Moore, GreensGroomer

Since the advent of synthetic surfaces, there has been a subtle over-statement concerning maintenance savings compared to natural surfaces. In fact, most facilities would admit that their maintenance strategies have had to focus considerable efforts on surface consistency and safety.

While the growth of synthetic, infill surfaces has been significant, maintenance routines and techniques have struggled to keep pace, leaving many facilities with less than optimal conditions and far below performance benchmarks.

While many facilities perform required maintenance in-house, there has been an increase in external service contracts for field grooming and conditioning. Augmenting a facility’s normal efforts, service contracts can off-load critical maintenance routines to knowledgeable specialists that efficiently deliver playability and safety benchmarks.

A reliable provider will offer the following services:

- Visual inspection. Includes a walk of the entire playing surface, identifying loose seams and hash marks, infill distribution, and general condition of the turf.
- Brushing/grooming. Re-level and re-distribute infill material, stand up turf fibers.
- De-compact. De-compacting the infill improves drainage, Gmax, safety, and playability.
- Debris removal. Sweeping the playing surface, removing broken fibers, litter, and other contaminants.
- Turf magnet. Removal of ferrous materials left on the playing surface from equipment, players, and general public.
- Final grooming. Final process for that professional appearance that makes your investment stand out.
- Antimicrobial spraying. Long-lasting protective layer to guard against infectious bacteria, mold, mildew, and germs.
- Gmax testing. The hardness or softness of the field surface is key to player safety and field owner liability. This test will determine the risk a field might have so action can be taken.
- Anti-static spraying. Static is controllable and spraying adds to player comfort and reduces infill migration.

Gmax is the benchmark for the shock absorbing properties of sports surfaces. It expresses the ratio of maximum acceleration experienced during impact, to the normal rate of acceleration due to gravity. As the Gmax value increases, the shock-absorbing properties of the surface decrease. The harder the playing surface is the more impact a player’s body will absorb during impact with the surface. These measurements are a fundamental tool for field safety testing and also prove useful in managing playability. Defining a regular schedule of field grooming and Gmax testing should be an integral part of any maintenance program, regardless of synthetic or natural turf.

When considering whether to augment your maintenance efforts with an external service provider, you’ll need to evaluate their range of services, equipment used, prices and packages offered, and whether they meet ASTM certification for Gmax testing.