



Where the Games Come to Play

## PIEDMONT FIELD VENDOR QUESTIONNAIRE

- 1) Describe the manufacturer recommendations concerning annual maintenance and repair. Include whether water or chemical agents (including anti-bacterial agents) are recommended and, if so, the quantity and frequency of application.**

With your purchase of a Mondoturf Artificial Turf System, we will deliver a field sweeper, which will be the primary piece of equipment needed to perform your periodic maintenance. We recommend that this sweeper be used to groom the field once per month, or as needed, dependent on the type and frequency of activity on your field. Additional grooming may be prudent, if the field accumulates more debris (litter, leaves, etc.).

For any spills on the synthetic grass surface, we recommend using water whenever possible as the best, simplest and safest solution for rinsing contaminants or liquids from the field.

Once your field has been installed, we will perform an initial maintenance seminar with your staff, in order to ensure they completely understand the process and methodology that is needed to protect your investment. We will also provide you with Mondo Field Signs that outline prohibited activities. These can be placed in strategic locations around the field. They will provide added assistance to help you protect your field from unnecessary damage and trash.

- 2) Describe the durability of the field, including the hours of potential use per day and number of days of potential use per year. Indicate whether the durability changes over the estimated lifetime of the field.**

Mondoturf Artificial Turf Systems were designed for optimal performance, durability, and protection of the athlete and environment. Mondo invests 6% of top line revenues into our research and development programs every year, in order to ensure that all of our products are tested and retested to be the highest quality products within the industry. As such, we heavily scrutinize the raw materials used within our systems, whether it is the fiber, infill or backing, and we continually monitor them against strict production benchmarks throughout the manufacturing process. Below are key factors that deliver quality, on each of our Mondoturf fields:

- Fiber - Only the highest grade UV stabilization packages are used within our fibers, have been independently tested, free of heavy metals and other semi-volatile compounds.
- Backing - Our thermobonded backing has superior tuft bind, in comparison to traditional carpets, which will reduce the long term incidence of fiber loss.
- Infill - Our Ecofill Star infill is made within the Mondo Group's manufacturing plants, and is proprietary to Mondo. We manufacture under ISO 9001 (Standards for Quality Management Systems) and ISO 14001 (Standards for Environmental Management Systems).
- Shock/Drainage - The use of our Fine Tuned System (underlayment) ensures that GMAX will be consistent throughout the product's useful life, and future lives of replacement field(s).

Mondoturf Artificial Turf Systems are extremely durable, and may be used approximately 4 times that of a natural grass field. While our warranty does not list any maximum towards the number of hours per month of use, the total number of hours will be dictated by the amount of maintenance performed on the field.



Where the Games Come to Play

As with any type of asset, the field has a useful life. However, Mondoturf has been engineered and constructed with the highest levels of scrutiny in order to withstand the rigors of daily use, and will therefore age with integrity and consistency, if maintained in accordance to our recommendations.

### **3) What is the estimated lifetime of the field?**

The estimated life span of a Mondoturf field is eight to ten years, dependent upon factors such as UV exposure, intensity of use, and type/frequency of maintenance.

Mondo's premium artificial turf system, Mondoturf Ecofill FTS3, employs an engineered drainage/safety pad that does come with a 20-year warranty (FTS - Fine Tuned System). This will indirectly extend the lifespan of the overall system and effectively reduce life cycle costs, since a shorter pile height is utilized with the system (45mm vs. 60mm).

As a part of our ongoing customer service and in an effort to help you get the most out of your investment, our local representation will periodically monitor the field. We feel that constant feedback on an asset of this magnitude is essential. It is our goal to ensure your perpetual satisfaction throughout the field's useful life.

### **4) What is the product warranty (for what period is the field guaranteed to be usable and meeting applicable standards, and what is the remedy if it does not)?**

Our warranty is a standard eight years, and we have attached our standard warranty template with the questionnaire response. Please note that our warranty is not prorated and we do have a third party insured warranty if Piedmont is so interested.

Mondo has been in business for the past 60 years and is able to stand by its warranty, if there should ever be an issue with the product. We have been privately held for the entire 60 years, which reduces the concern of changes in ownership (venture capitalists) and changes in management that could have a significant impact on a manufacturing warranty. Mondo offers complete stability and consistency in our products, vision and message.

Mondo has a designated technical department comprised of professionals that can assist you with respect to concerns and claims, for all Mondo products. It is very important that we properly document and address any issues, while handling them with the utmost expediency and care. Once issues have been properly documented and evaluated, Mondo will contact the right individuals in order to be able to expedite any work needed, and resolve all issues brought forth.

For assistance from one of our technical experts, please call: 800-361-3747

### **5) Does a single warranty cover all aspects of the artificial field's soil base preparation, base materials, artificial turf materials, etc.? Will there be separate warranties and warranty voiding conditions could contravene each other?**

Mondo's standard warranty associated to the fiber, backing and infill is 8 years. The warranty on our Fine Tuned System, which serves as the underlayment/drain pad for many of our fields, is 20



Where the Games Come to Play

years. Since we manufacture all of the components of our system, you do not have to be concerned with multiple company warranties.

The warranty for any earthwork, such as rock laid underneath our system, is generally the responsibility of the general contractor performing such work; typically, such warranties are for one year.

## **6) What is the cost of replacement at the end of the warranty period?**

In regards to the cost of replacement at the end of the warranty period, it can be divided into two: cost of removal and disposal of the initial field, and cost of the replacement field.

Current removal costs are approximately \$0.30ft<sup>2</sup>. Disposal costs will depend on the system purchased. SBR (reground tires) are slowly being mitigated from landfills, and therefore it is unknown as to the future cost regarding these. Since they have already been vulcanized, SBR rubber cannot be recycled. Ecofill Star, Mondo's infill solution is 100% recyclable and Mondo will be able to recover the Ecofill at the end of its useful life. Only separation and freight costs will have to be absorbed by the End User.

In terms of replacement costs, this is extremely difficult to identify since we cannot accurately predict future costs of raw materials, labor, etc. However, we can reduce the cost of replacement, should our Fine Tuned System be utilized. The Fined Tuned panel, due to its projected lifespan, will be able to be used through multiple fiber lives, thereby saving money for preparatory work on the base/drainage system when it is time to replace the field surface. We only recommend 45mm fiber height when using Fine Tuned (because of its shock attenuation properties). Therefore, second and third replacements will effectively be \$0.50 - \$1.00ft<sup>2</sup> less, in today's dollars. The Fine Tuned System also saves money on initial civil work, as the need for drainage stone and drainage piping can be dramatically reduced.

If installed over a rock base, invariably some costs are incurred while doing remedial work to that rock base prior to re-installing the surface.

## **7) Are recycled materials used to manufacture the field material?**

Yes, recycled materials are definitely used in the manufacturing of our fields. The percentage of recycled materials varies depending on which products are installed, but all of our surfacing products incorporate recycled materials in some fashion.

- Ecofill Star – 22% post-consumer content
- FTS – 90% post-consumer content

## **8) Is the field material recyclable upon replacement?**

Mondo is very proud to be a leader in recycling, when it comes to recycling our fields at the end of their useful life. We are currently working on a formal process detailing how this can be done, but our fields are designed with post-use recyclability in mind, making it much easier to do so when the time comes.

**9) What is heat of the field compared to conventional grass on a warm, sunny day? What can be done to mitigate excessive heat?**

Accompanying this questionnaire response is a copy of an independent third party test of some fields in Japan. This test highlights the fact that Mondo's Ecofill fields are cooler than SBR rubber infilled fields. This translates to safer fields on hot days, and less expenditure for watering and cooling the fields. We have also mandated third party testing of our Ecofill fields using thermal photography vs. traditional SBR fields. The results were a consistent 20 degree difference in temperature vs. SBR fields.

**10) What certification does the manufacturer/vendor supply regarding the presence or absence of chemicals on California's Prop 65 list?**

All chemicals listed on CA prop65 list are not part of the original ingredients used in the compounds, and are not used as a raw material in the product. For the moment we can only supply the EPA test results. Currently we are working with the Air Quality Science (AQS) and the Greenguard Environmental Institute (GEI) to establish a testing protocol for our turf system. This is something that has never been done before. So, if this goes through Mondo will be the first in the industry to have a turf system Greenguard certified.

**11) What is the risk of bacteria and mold growth in the material? What can be done to mitigate this risk?**

We have never had any instance/problem with respect to bacteria or mold on any of our fields. It is very important to follow our maintenance recommendations, and avoid putting food and drinks in the position to cause potential problems.

**12) What is the risk that the field material will aerosolize (become respirable?) What can be done to mitigate this risk?**

All of Mondo's Artificial Turf Systems incorporating Ecofill, our fiber and our backing, have been tested against established EPA standards (as stated below). There is no chance of harmful toxins being released from our systems, therefore there should not be any concerns with field material will aerosolize.

All testing done by PARADIGM follows a specific EPA test protocol which states the method and the analytes (chemical) measured.

EPA 6010 measures the heavy metals (e.g.: Lead, arsenic and chromium)  
EPA 8270 measures semi-volatiles organic compounds. (Halogens, aromatic amines)

We have attached the relevant tests for your review.



Where the Games Come to Play

**13) What is the risk that the field material will migrate off the field, including but not limited to migration into the storm drain system? What can be done to mitigate this risk?**

Due to the fact that our Ecofill Star infill is more dense and heavier than recycled (SBR) tire rubber (approximately 40%), it does not have the same migration patterns or “splash” traditionally associated to artificial turf infill. Its high density reduces the tendency to float and obstruct the water intake system. It also does not retain the same type of static charge that SBR granules have, and will not be tracked off the field on socks, uniforms, helmets, etc., in the same capacity of traditional fill. Some other key characteristics of Ecofill Star:

- 80% lower frequency vibrations vs. traditional infill. Recent studies confirmed that there is a direct relationship between the vibration level on the body and the risk of injury; moreover, the vibration level influences the comfort level and athlete’s steadiness on the turf.
- Controlled resiliency on the entire play surface. This ensures extraordinary ball behavior and good playability, shock absorption, energy return and reduction of injury risks.

**14) What is the longest period of time the field being specified has been in use at another school, college, or university?**

Our longest in-service field using Ecofill is Ambleside Park.

Ambleside Park  
West Vancouver, British Columbia  
Canada

Installation date: 2003

Our first installation of Ecofill was installed in 2002 in Gallo D’Alba Italy.

Thank you for allowing us to participate in this process. We are excited about the prospect of working with Piedmont Unified School District on a project. Please review our answers and let us know of any additional needs—thanks again!

Sincerely,

C. J. Collins  
Mondo USA

Enclosures

CJC/oht