

The facts about Alternative Infills

Certain companies have been attempting to gain a competitive advantage in the marketplace by trying to convince potential clients to pay more for their alternate infill product. They make some strong statements regarding the safety of their product but have not produced a single safety study conducted by an independent source from their installed fields. Contrast this to FieldTurf, which has two major safety studies conducted by independent parties, one of which was recently published in the **American Journal of Sports Medicine**. (Available upon request).

Attached are two recent studies done at Rutgers University, by the French Government and by that debunk these alternate infill competitor statements and show beyond a doubt that SBR is the exact same environmentally as EPDM or TPE. The third environmental document comes from Milone & MacBroom, an environmental Science company who conducted a year long study on synthetic turf with SBR rubber in regards to water quality, temperature and air quality.

Also, the same companies that have been really promoting alternate infills and bashing the evils of SBR rubber will gladly install an SBR rubber field for you if you ask them to and the majority of their total turf installs are in fact, with SBR rubber. Frankly, in our opinion we feel this is very hypocritical.

Please keep in mind that out of the 1000+ synthetic turf fields that will be installed in North America in 2009, 700+ will be FieldTurf and about 250-300 will be installed by all of our 30 competitors combined. Only 10-15 out of 1000+ fields will be installed with an alternate infill. Simply put, when customers review the facts about alternate infills, they come to the conclusion that there is no benefit to using these infills, especially with the extremely high price of these products.

FieldTurf has the exact same alternate infills available. Our clients have the option of installing either EPDM or TPE (what some companies call Ecofill) in our Prestige fields but we must be up front and let you know that even though we do offer these infills there are several reasons why we do not recommend them.

Here are the facts:

1. EPDM, TPE and Organic infills have not been proven long-term in the marketplace.
2. There have been no safety studies done in regards to play on the field, lower extremity injuries, etc.
3. The playability and safety of these infills will be inferior to our Pro Series field and that is why we only offer these infills with our Prestige product and not in Pro Series product. We will not compromise our proven, engineered Pro Series system.

4. The alternate infills tend to separate and migrate, creating potential high and low spots that can be a problem and require frequent maintenance to level the fields out.
5. Some of these infills require frequent watering to keep the infill and dust down and from migrating.
6. There are serious questions regarding the durability of these infills over the long-run. We know our fields will last 10-12 years because we are the only ones in the industry to have made it to and past a warranty period with our current fields. Who knows how long alternate infill fields will really last?
7. We are concerned about the breakdown of this infill over time and there have been some G-Max tests done on competitor's fields with TPE and Organic fill that show G-Max readings well above the consumer product safety commission's allowable limit of 200 for catastrophic head injuries after just a few years of play (available upon request).

HEAT FACTS

On going heat studies done by FieldTurf as well as Independent heat studies done by Biomechanica shows only a 2-3 degrees difference in the temperature using EPDM, TPE and other colored rubber, (study available upon request). That is because 70% or more of the heat in synthetic turf fields come from the fibers, not the infill and once the fibers lay over and cover the infill, the amount of heat generated by the fibers themselves is even greater as a percentage of the total heat from the field.

FieldTurf and other competitors have installed fields with green, tan and other colored rubber and our own heat studies and customer feedback also confirm that this is not a very cost effective way of trying to deal with reducing heat. Simply watering the field for 10 minutes will drop its temperature approximately 25-35 degrees. The temperatures remain lowered for almost 2 hours. No matter what infill or product you choose, you should consider a sprinkler type system to reduce heat during the few months where it is applicable.

ENVIRONMENTAL FACTS

The installation of a FieldTurf field with clean, cryogenic rubber combined with washed silica sand eliminates the use of harmful pesticides, fertilizers and herbicides, while at the same time, prevents over 40,000 tires from being dumped in landfill sites. The state of California encourages, funds, and gives grants towards both the end users of fields, playgrounds, and tracks, as well as the factories that turn this tire rubber into viable products. Also, FieldTurf fields are 100% recyclable and FieldTurf fields qualify for LEED credit points.

Contrast this to TPE, which is a manufactured plastic product that uses energy to produce and is not recycling anything.

We have attached two recent studies on Alternate Infills. These studies were done by **Rutgers University and ALIAPUR**, the leading French government body responsible for used tires, along with ADEME, the French Agency for Environment and Energy Management.

1. The studies prove no cause for concern to human health from SBR rubber & that TPE and EPDM infills are not superior to SBR in terms of the environment, contrary to the claims of some suppliers.
2. “Recyclable Thermoplastic Infill (TPE): May contain PAHs, heavy metals, and phthalates but likelihood of significant health impacts is low (less likely and unlikely). Exposure routes of greatest concern are ingestion and inhalation.” ***This puts it in the exact same category as SBR.***
3. A comparable behavior regardless which type of infill material was used - whether SBR from used tires, new TPE thermoplastic material or EPDM new virgin rubber material.
4. The absence of impact of SBR or TPE materials on water resources.
5. There was no effect on health associated with the inhalation of VOC and aldehydes emitted by artificial surfaces with any of the infills, including SBR
6. Emissions from the artificial turf without any infill material are very low compared with those from other construction products (ex: parquet flooring).
7. The emissions from the artificial turf containing SBR (rubber granules from used tires) and from TPE (new material thermoplastic rubber granules) are both relatively low. "Relatively low" by European standards signifies an environmentally safe substance.
8. The emissions from the artificial turf containing EPDM (new virgin material rubber granules) are greater.
9. From an ecotoxicological point of view and on the basis of a comparison with strict European health standards, the water that passed through the artificial grass sample fields was proven to have no impact on the environment, regardless of the type of infill in the turf.

FieldTurf invented and perfected synthetic grass fields over the past 10 years and has installed over 3,000 fields world-wide. Our product is backed by over 30 key patents that make the FieldTurf system the safest, most durable and best performing field in the

market. **Three out of every four synthetic grass projects in California** over the past nine years have been FieldTurf fields and there are many reasons why the overwhelming majority of cities, high schools, colleges and professional teams continue to choose FieldTurf today.

With FieldTurf your investment is in the field. FieldTurf clients are assured that they have purchased the best, safest and most technologically advanced product on the market and one that represents **the best value for your project**, which is the summation of track record, experience, playability, performance, quality control, company financial strength and stability, safety, durability, insured warranty, long-term customer service and exclusive local crews, nine of which are based in California and four full crews that live locally in the bay area.