





#### What is synthetic turf infill?

Infill is crushed or graded material added between the turf blades within your synthetic turf system. Examples include silica sand, organic material ( hemp, wood chips, walnut shells), or crumb rubber.

#### Synthetic Turf Infill:

- Mimics a natural grass system soil supporting turf blades
- Maintains turf's aesthetic for years by keeping artificial turf blades upright
- Adds ballast and weight for the artificial turf system
- Creates footing and a more natural grass feel
- Protects your turf by creating a barrier between harmful UV rays and the backing of your synthetic turf
- Provides performance and safety. Attenuates shock for athletes and provides proper footing on sports fields, playgrounds, and recreational areas.

#### "2020: The Year of the Infill"

Synthetic turf infill has become more important than ever. With so many types of infills to choose from, there is a lot of confusion around educating the consumer on what infill makes most sense in 2020 and beyond.

As turf users, we must understand the implication of the type of infill we choose.

As the densification of the world intensifies, so do problems such as the urban heat island effect, climate change, and the consequences from these issues - increased energy consumption, heat related illnesses, etc.

### **STANDARD INFILLS**

SAND (VARIOUS GRADES)

#### RUBBER (CRUMB RUBBER / EPDM RUBBER)



ORGANICS - WALNUT (SAFESHELL), WOOD CHIPS (BROCKFILL), CORK, HEMP



ACRYLIC COATED SAND/ ZINC BASED ANTIMICROBIAL - ENVIROFILL, DURAFILL



**ZEOLITES - ZEOFILL** 







#### What other infill options are there?

Synthetic turf is well-known for it's easy maintenance and enhanced function over natural grass. For decades though, one fact has been overlooked: synthetic turf in its natural habitat has the potential to reach temperatures of **140°F**-**200°F**. Within the synthetic turf industry, the educated consumer is well-aware of this fact, but has yet to see innovation. There has not been an effective, sustainable solution to this incredibly apparent heat problem.

#### Now there is T°COOL

T°Cool is an artificial turf, performance based, cooling infill that is engineered to work through the same thermoregulation process our bodies use to keep us cool - evaporative cooling. T°Cool simply requires hydration, which can come from irrigation, rainfall, or humidity. Similar to natural grass, T°Cool utilizes the moisture that it holds to create powerful evaporative cooling of the artificial turf surface - Up to **50°F cooler** synthetic turf surface temperatures.



T°Cool is the only technology based infill on the market today. T°Cool is 100% non toxic, non hazardous and cools your turf up to 50°F for multiple days on one water "charge". This breakthrough technology not only drives down the temperature on synthetic turf surfaces, but also reduces friction to help combat skin turf burns. T°Cool makes synthetic turf surfaces more playable for millions.

## **INFILL COMPARISON CHART**

	Expected Lifetime	Benefits	Drawbacks	Sustained Evaporative Cooling?
Standard Silica Sand	Long lasting, however can migrate over time. A % of material to be replenished annually.	Economical. Widely available, low price point.	Potential health risk with dust - silicosis. Angular edges and variable particle size grading , will compact if area is high traffic. More abrasive than alternatives.	No
Rubber - EDPM	Long lasting, however can migrate over time. A % of material will need to replenish as turf gets used.	Virgin rubber that can be made in any color. Extremely durable, low maintenance option.	EPDM infill not as readily available as recycled crumb rubber. Can be the most expensive of any infill. Tends to get hotter than alternative infills.	No
Rubber - Crumb	Long lasting, however can migrate over time. A % of material will need to replenish as turf gets used.	Provides proper footing and shock attenuation. Can improve HIC and GMAX rating. Does not require shock pad.	Tends to get hotter than alternative infills. Amount of material needed. up to 3-4 lbs. Requires maintenance or grooming yearly.	No
Organics Walnuts, Wood chips, etc	High % of material needs to be replenished annually.	Organic based. Can improve HIC / GMAX rating when combined with a shock pad.	Quickly degrades /rots. Needs to be replenished frequently.	No Extremely short term cooling.
Acrylic Coated Sand	Long lasting, however can migrate over time. May need to replenish as turf gets used.	Performance size grades available. Most contain antimicrobials.	Most considered microplastics due to particle size. Some contain heavy metal antimicrobials, which can cause bio accumulation in the environment.	No
Zeolites	Material may need to be replenished every 2-3 years	Considered a good infill to use to help eliminate pet waste smells Readily available on west coast.	Tends to be very dusty, will crush, and degrade very quickly. ADsorbs as opposed to ABsorbs	No Extremely short term cooling.
T°COOL	Long lasting, however can migrate over time. May need to replenish as turf gets used.	Performance size grades available. Mitigates compaction. Sand contains biobased Antimicrobial. Cooling Up to 50°F for Multiple days	Due to shipping costs, can be slightly more expensive than alternative infill options.	Yes Up to 50°F for multiple days



#### Why we believe T°COOL to be THE SUPERIOR INFILL

T°Cool is the only technology based infill on the market today. T°Cool's infill is 100% non toxic, non hazardous and cools your turf up to 50°F. T°Cool provides a sustained cooling effect for days.

The chosen antimicrobial for our coated sand, Bac Shield, is biobased and sustainable. During the manufacturing process we coat the infill with our T<sup>o</sup>Cool evaporative cooling technology, encapsulating the infill.

#### T°COOL is the only PROVEN and EFFECTIVE synthetic turf COOLING infill

T°Cool is available in pretreated 16/30 grade coated sand, and 10/20 grade coated rubber. Both of which resist compaction, and inhibit bacteria growth. T°Cool is cooler, cleaner, and safer for your athletes, kids, and pets.







# TOCOOL SAY GOODBYE TO HOT TURF!