Synthetic Turf Information

Answers to Frequently Asked Questions

1- Why were synthetic fields selected to be installed at Ridgeland Common?

Several factors went into the decision to install synthetic turf. First, synthetic turf provides the Park District with the ability to take pressure off other facilities and rotate fields, which will help the District meet activity demands based on the findings in the Athletic Field Study conducted in 2012. Second, the installation of synthetic turf in the Park District system will reduce the number of rainouts experienced, which will lead to increased play for a variety of sports/activities regardless of weather conditions. Having a surface that is almost always playable will contribute to increased activity levels for our community. As we all know, obesity is a national crisis and the Park District is actively engaged in trying to get more people of all ages outdoors and active. Lastly, synthetic turf does not require irrigation and reduces emissions from frequent mowing of grass fields and dragging of infields, both of which lead to better stewardship of the environment.

2- What are synthetic fields and infill materials made of?

Synthetic fields are made up of durable and elastic polymers and materials to resemble grass-like playing surfaces. Most of the leading manufacturers utilize nylon, polypropylene, and/or polyethylene films to act as the "grass" blade. Most synthetic turf systems also include infill materials that are primarily used to meet the attenuation* property of the artificial surface. Infill materials are commonly found to be comprised of rubber, sand, or a combination of both. Recent advancements and research have resulted in other materials being used in the infill mix; these include cork, coconut fibers, and manufactured elastomers.

*Attenuation is the ability of the playing surface to absorb impact forces. Playing fields vary in softness/hardness; the softness is optimal for fall zone safety and the hardness characteristic accounts for the playability of the field.

3- What will be the infill mix for the Ridgeland Common field?

The infill will be a combination of crumb rubber and sand. Sand will represent at least 60% of the mix.

4- Are there any national regulations recommending against or prohibiting the use of synthetic turf fields?

There are no current national regulations prohibiting the use of synthetic turf fields. Some notable associations like FIFA and UEFA have previously banned the use of synthetic fields due to its original poor performance, but as the synthetic turf field industry improved, these associations have now accepted the use of artificial turfs; and in cases, have even preferred the synthetic turf in lieu of natural grass.

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5- Are there any chemical off-gassing produced by the materials of synthetic turf fields?

Yes. Studies conducted by various state-funded research (Connecticut and California to name two) found that a mixture of chemicals and Volatile Organic Compounds (VOC's) are found to be released from synthetic turf field products. Although off-gassing is present, it has been determined that the amount is not significant to pose a health risk. Most of these chemicals present are commonly found in urban and suburban areas and the amounts aren't greater than those produced as a result of the wear and tear of car tires. Also, according to the Connecticut Department of Health, weather conditions such as wind and temperature directly affect gas and particle concentrations above the field. This means that VOC's released from the turf rapidly dilute and exposure is limited to the brief period when individuals are lying on the ground.

6- Some synthetic turf fields contain lead; is the lead content a health concern?

Tests conducted by the New Jersey Department of Health and Senior Services (NJDHSS) have concluded that the lead content in new fields is low and does not pose a health concern for humans. The detectable levels were well below regulatory levels.

7- Does synthetic turf promote the spread of MRSA, or other infectious diseases?

MRSA infections are primarily due to poor hygiene and are spread by skin contact only. Synthetic turf fields do not promote the spread of the MRSA bacteria or other infectious diseases. A few leading manufacturers offer anti-microbial properties in synthetic turf field fibers.

8- Is the crumb rubber infill used in most synthetic turf fields a health concern for users?

Government-funded studies have determined that crumb rubber infill poses no threat to the environment or public health.

9- How hot does a synthetic turf field get during summer seasons?

Artificial turf field surfaces have been observed to generally reach 30 to 55 degrees warmer than grass surfaces in comparison. The surface temperature of the field is highly dependent on exposure to sun and the local climate.

10- How will the Park District handle hot temperature and children playing on the fields?

Most play on fields occurs either in the mornings or early evening when temperatures are not at their hottest. The Park District will monitor temperature on the synthetic field and schedule accordingly.

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11- How does the injury rate for players utilizing artificial turf fields compare with natural grass fields?

Synthetic turf fields are designed for maximum athletic performance. They generally provide a uniform, consistent and resilient playing surface. Recent studies made by FIFA's Medical Assessment and Research Center to evaluate the severity of injuries for synthetic turfs concluded that there is "little difference in the incidence, nature and causes of injuries observed during games played on artificial turf compared with those played on grass."

12- What is the maintenance required for synthetic turf fields?

Brushing, aeration, raking and sweeping are used to avoid settling and matting down of the infill. Routine inspections and clearing are also part of the maintenance of fields to ensure the playing surface stays free of debris and contaminants.

13- Are synthetic turf fields highly flammable?

No; synthetic turf fields are generally made of non-combustible materials.

14- How long will a synthetic turf field last before it is replaced?

Manufacturer warranties commonly range from 5 to 8 years. The life cycle of a synthetic turf field is dependent on its use and maintenance. Fields have been found to last as long as 12 to 15 years.

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