ARTIFICIAL TURF FIELDS
FREQUENTLY ASKED QUESTIONS

Question: What is ASTM?

Answer: ASTM International is a globally recognized leader in the development and delivery of voluntary consensus standards. Over 12,000 ASTM standards are used around the world to improve product quality, enhance health and safety, strengthen market access and trade, and build consumer confidence. The ASTM standard for artificial turf fields is ASTM F1936-10.

Question: What is GMAX test?

Answer: A GMAX test measures the impact attenuation of surface systems and materials, specifically the peak impact acceleration (“impact shock”) produced under prescribed impact conditions. For artificial turf fields, ASTM F1936-10 specifies 200 as the maximum threshold.

Question: Are the artificial turf fields operated in MCPS high schools safe for players?

Answer: Yes. All MCPS artificial turf fields meet the ASTM industry standard of less than 200 GMAX.

Question: What are the plans for some of the artificial turf fields that have areas close to 200 in GMAX testing?

Answer: Based on the annual GMAX testing, areas reading close to 200 in GMAX will be monitored and rejuvenated as needed by de-compacting infill and adding infill mix to increase depth in order to ensure compliance with ASTM GMAX standards.

Question: Why are there inconsistencies in GMAX in various areas of the fields?

Answer: It is typical for older fields and areas of high traffic to have higher GMAX ratings than the newer fields due to the amount of use they have received over their life-cycle.

Question: Who conducts the GMAX testing? How often are GMAX tests conducted on each field?

Answer: A licensed independent contractor performs GMAX tests on each artificial turf field two times per year.

Question: Who does the maintenance of the artificial turf fields?

Answer: The advanced and standard care maintenance programs, along with biannual GMAX testing, are performed by Keystone Sports Construction. The maintenance contract is comprehensive and requires very little, if any, maintenance from local school staff.
Question: How much does it cost to build an artificial turf field at a high school?

Answer: The cost is estimated at approximately $1.2 million–$1.5 million per artificial turf field in high school stadium. The cost would vary depending on the size of the field, and as well as various existing conditions to comply with the environmental regulations such as Storm water Management, Sediment Erosion Control measures, and Forest Conservation requirements.

Question: How much does it cost to maintain an artificial turf field?

Answer: The annual comprehensive maintenance plan for each artificial turf field is $15,000-20,000.

Question: How long does it take to construct an artificial turf field in a high school stadium?

Answer: It is estimated that approximately six to nine months are required to prepare engineering documents and for permit approval processes. The installation of the artificial turf field would take approximately an additional six months.

Question: How does MCPS procure artificial turf field manufacturer and contractor?

Answer: While there are many manufacturers of artificial turf fields and installation contractors, MCPS utilizes the Keystone Purchasing Network (KPN) that offers the most competitive pricing nationally for educational institutions.

If you have any questions, please e-mail: dfm@mcpsmd.org