Selecting an artificial surface

By John Fik, CSFM

Artificial surfaces have been the "in" thing now for a number of years. High schools are getting state dollars to finance new stadiums and most have been with an artificial surface. I have also seen a large increase of high-end prep schools going to synthetic turf.

I think the first questions I would ask before selecting an artificial surface are "Are you sure you need one?" and "How much funding do you have secured?" and maybe "What are the factors driving this conversion?" Is it lack of space, lack of technical knowledge by the grounds department to handle a sand base field or a native field, too many sporting activities, concerts, band practices? Is there an increase in summer camps, club, or intramural teams?

If you are trying to play Div 1 and/or Div 3 lacrosse in the northeast like Hobart (men's) and William Smith (women's) Colleges in Geneva, NY are, then it is imperative to have a synthetic field. Our first home game is usually the first or second week of March, which in a normal snow year finds the grass under 2 feet of snow. Most field hockey programs like to play on a synthetic surface; however, before our conversion to synthetic, our women's team won three national championships on our natural grass field.

The maintenance was very high on that field because we were mowing a k-blue/rye

IF YOUR CAMPUS HAS NOT DONE A CAMPUS MASTER LANDSCAPE PLAN IN THE PAST 10 YEARS THEN YOU PROBABLY SHOULD DO ONE.

mix at 5/8-inch; the coach and players loved the field. But the maintenance on that natural field was not any more, and in some cases less, than the current synthetic field (Astroturf 12).

What primarily drove our conversion to turf was the lacrosse schedule begins so early, coupled with the colleges' desire to increase intramural and club sports. We are blessed with field space here but our intramural and club programs are very large. Studies show if you should get a student involved in a team sport or environment he or she is more likely to stay at that college for the 4 years.

Once you have determined that there is a realistic need for turf the next step is deciding where it would fit best on your campus. If your campus has not done a campus master landscape plan in the past 10 years then you probably should do one. Any new sports facility or field is a long-term investment and once it is placed it cannot be moved easily. A master landscape plan will vary on the size of campus and could cost up to $100,000. A smaller scale athletic field master plan can be developed on smaller campuses and at far less cost. We had a master but choosing the new location was not easy; numerous ideas

were proposed. We finally chose to replace the existing grass field hockey field.

What sport?

The type of synthetic surface you choose will have long lasting effects on your athletic program. What sport(s) will be played predominantly on this field? For us, field hockey meant we could not go with an infill product. If it is soccer, you'd better make sure the surface is FIFA-approved. (FIFA is the world governing body for soccer.)

Say football is your sport, then an infill might be the right choice. Then you must decide what type rubber, sand, a rubber layer then a sand layer, a sand layer then a rubber layer, a mix of both? What type of turf fibers or seams, inlaid lines and logos or painted, more fibers per square inch or less? Is this all the company does or do they sell carpet too? What about the warranty?

Your best method of solving this riddle is to educate yourself. Get a list of places that have a good cross section of the products you are considering and talk with them. Ask about the contractor that was used, the installation process, ("Did they finish on time?"), the major issues that came up with construction, how has the field held up over the time you have had it, how are the Gmax numbers over time?

A decision has been made to go with "x" infill product now what? The success of the infill or any product is only as good as the contractor installing it and as importantly the contractor installing the sub-base. Many systems fail because of an improperly built sub-base. I would see if you could get the same contractor to do both. And don't forget – these synthetic fields need to be irrigated! It may take some convincing but "flushing" the infield regularly can help move certain things like bird dropping, earth worm casts, salvia, etc through the infill profile and into the sub-base. Irrigation will also help lower surface temps on the turf. No sports field is complete without new bleachers, lighting press box, fencing, goals, benches, dug outs etc., cha-ching, cha-ching. Expect to pay $1.5 to $2 million for a basic new stadium.

Synthetic turf does not mean little to no maintenance. The amount of time spent plowing, sweeping, hosing down, marking etc. can equate to far more time that if it were natural grass, in my experience.

I believe synthetic turf has a place on most college campuses but it should not replace the smell, look, and feel and playability of natural grass.

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