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Surface Assembly - Synthetic turfs that are used outdoors for athletic fields, playgrounds, landscaping, etc. are basically rolls of engineered high tech carpets. During installation, each roll of turf is permanently joined together to make one continuous piece that covers the entire surface. In trade jargon, it's called "seaming".

Strong and tightly bonded seams are essential not only for aesthetic purposes, but also to avoid hazards like tripping or injury due to an open seam.

A Little Light Science - It is an accepted fact that an assembly is less likely to break or become distorted if stress is distributed evenly over a large area instead of concentrating it unequally at localized points. Distribution of stress over a large area is one reason why the use of adhesive bonding is increasing at some expense of mechanical fasteners which concentrate stress at fastening points. Examples are: sewing, rivets, wire, staples, etc.

Total Glue Down vs. Loose Laid - From a seam standpoint, it is better for the turf to be totally glued down because stress is distributed over the entire surface. Total glue downs also prevent game line movement, plus it helps prevent turf from lifting and blowing away in high wind conditions such as in airports, hurricanes, typhoons, tornados, dust and sand storms. Conversely, by just gluing and/or sewing the seams together without bonding to a subsurface, all of the stress resulting from: athletic activities; maintenance vehicles; vandalism; plus, both expansion and contraction from day to day weather changes, is on the seams. That's why many problems from installed turf are at the seams.

.... From a seam standpoint, it is better for the turf to be totally glued down ...

Today, for a variety of reasons, including money, most synthetic turf athletic fields and other recreational surfaces are not glued down. Instead the turf is loose laid on the subsurface; the turf rolls are then seamed (joined together) by either gluing or sewing; followed by sand and/or rubber infill being sprinkled into the turf. The weight of the infill may help to hold the turf down but unlike a total glue down, it does not eliminate game line movement; shear or lateral seam stresses.

Glued vs. Sewn Seams - Both type seams are adequate provided good workmanship, plus either a wide width of a proven durable

outdoor adhesive applied to seaming tape and/or a strong durable sewing thread is used.

Few argue with the fact that both the appearance and "feel underfoot" of glued seams is better than sewed seams. However, some mistakenly believe that sewn seams are stronger than glued seams because they do not realize that when bonding there is a big difference between "shear strength" and "peel strength".*

**For information about "peel" vs. "shear", refer to the article entitled "Myths About Glued Synthetic Turf Seams" which is available from Synthetic Surfaces Inc.*

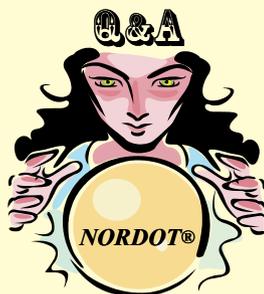
Glued seams are superior for shear because stress is distributed over a wide bonded area instead of

concentrating stresses at the thread holes from sewing.

In summary, total glue downs eliminate game line movement; wind lift; reduce lateral seam stress due to: athletic activities, turf maintenance, and weather changes. Furthermore, if there is a problem on a glued down surface, it remains localized instead of potentially causing the entire loose laid surface to have problems.

If it is a loose laid installation that is just held together by joined seams, and the seams must be either glued or sewn: for stress distribution; appearances; "feel underfoot"; and shear strength purposes, go with properly prepared glued seams.

*By Norris Legue,
The Guru of Glue®*



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Infield skin maintenance:
Use your resources wisely

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Mow this way and that way
BY DR. DAVID MINNER

>> on the cover



Abby McNeal, CSFM, is the Sports Turf Managers Association's new president. She is turfgrass manager for the Colorado School of Mines, Golden, CO.



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Enough change already?

WE'LL KNOW whether Punxsutawney Phil the Groundhog saw his shadow February 2 by the time you read this; I don't know why we pay attention to him since in most regions of the country prospects of an early spring annually is as unpredictable as, ahem, the weather.

But unlike the Bill Murray character in "Groundhog Day," we can count on one thing for sure—"change" is in the 2009 forecast.

That word, change, has been popping up all over, especially since President Obama was elected on the theme, Wall Street tanked big-time, and heck, the Cardinals made the Super Bowl. Yes, change is inevitable but not always welcome; for example, I hope my daily newspaper never goes the way of the dodo bird.

So though you might have heard enough about change recently to roll your eyes about whatever's next, here are some "changes" I learned about at the STMA Conference last month you might find interesting:

- The Playing Conditions Index (PCI), developed by an STMA Task Force, has undergone testing and is now ready for members to use to assess a field's playability. One tester, Peter Lockwood of the Nashville Sounds, said, "[The PCI] can be used as a tool for managers to tune their programs and help as firepower when asking for a better budget." Visit www.stma.org to download or print instructions and the worksheet.

- According to keynote speaker Dr. Ali Harivandi, University of California Extension, another change coming is less water available for irrigating. "Drought is coming to everyone, especially in the south and southwest," he said. "The demand for that precious commodity, 'blue gold', doubles every 20 years." His message was clear: You may not have water issues yet but you will.

- I did not attend an educational session at the Conference without the impact of smaller budgets being discussed. More than once attendees were cautioned to find ways to cut back without laying off any staff—getting that position back in a future budget may be impossible.

- The material used as infill for synthetic turf system might be changing as well. A European company has introduced a 100% organic coconut fibers and cork material that reportedly absorbs humidity to help keep turf systems cooler.

- One more change to consider: Keynote speaker Steve Farber explained how leadership has nothing to do with titles or responsibilities and everything to do with transforming yourself into someone who's not afraid to encounter an "OSM"—Oh Sh- - Moment. True leaders stick their necks out sometimes for the cause. If you never experience an OSM in your leadership role, you're failing.

Correction: In last month's article by Kevin Trotta (p. 35), the amount of seed referred to should have been "10 lb/1,000 ft²" rather than "10,000 lb/1,000 ft²." Our apologies to Kevin and our readers.

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New era begins for STMA

A NEW ERA for STMA has just begun with a larger board, new term lengths for the officer positions, and an official ascension process to the Presidency. The Governance Task group started in 2007 and the membership approved in the fall of 2008 the new at-large Director positions, the new term lengths, and the combination of the Secretary/ Treasurer position.

The new board representation will allow for more diverse representation from the membership as well as more opportunities to serve the organization. The new term lengths for the officer positions allow for shorter board service along with a true path for choosing the STMA President. I am excited to be a part of a larger board that has strong and diverse representation from the membership.

The Strategic Plan provides the path for the board to set its yearly tasks. From the first time I participated in the Strategic Planning session in 2001 until now, I have learned the value of having a good Strategic Plan. We have achieved quite a bit from the current Strategic Plan and still have more to accomplish. This year the board will be focusing on rolling out the Playing Conditions Index (PCI) (which made its official debut at the conference), Chapter Executive Training, Regional Education Seminars, and Membership Enhancement.

The PCI is a tool for sport turf managers to assess the playability of their fields. The goal is to help your employer, athletes, coaches and fans understand the skills and knowledge needed to provide high quality playing surfaces. Look for the complete booklet on the STMA website (www.stma.org); we encourage you to use it to your benefit in such a way that makes the most sense for your situation.

STMA is also planning to host Chapter Executives for a training session to assist in organizing the operations of the chapters. And the board is committed to two Regional Education Seminars this year, one in New England with six chapters and one in Iowa with seven chapters. This is just another opportunity to bring STMA's educational programs to the local level and reach members and potential members in those areas.

To grow our membership, we must make sure that our current members fully know what they get with their membership. Taking the current benefits that are provided with membership and enhancing them to show the benefit of being a member will then lead to growing the membership.

Thomas Edison said, "Opportunity is missed by most people because it is dressed in overalls and looks like work." Please consider volunteering to serve on one of the many committees and help guide the work of the STMA. STMA has strong committees and committees are where the bulk of work is carried out. Become an active part of your organization.

I am excited to be a part of the change, and I am looking forward to the coming year with the new board.

McNeal ready to handle STMA reins



“Abby knows pushing our Strategic Initiatives further down the path pushes our profession and our individual members further up a rewarding hill. We’re headed in the right direction and Abby’s leadership will be exceptional.”

—Mike Andresen, CSFM, past president of STMA

ABBY MCNEAL, CSFM, turf-grass manager at the Colorado School of Mines, made history last month by becoming the first female president of the Sports Turf Managers Association (STMA). But if you know McNeal, you know she’s not interested in such things. This woman is about getting the job done, and done well.

You could ask her about being one of the first two women asked to serve on a Super Bowl crew but she’ll respond by mentioning the scores of other turf managers who have assisted Ed Mangan and George Toma many times over the years. McNeal’s passion is service to the association and the industry, not seeking the limelight. In that way, she is a perfect reflection of what it means to be a professional sports turf manager—it’s about the game, the athletes, the competition and

nothing else. What else would you expect from someone who plays goalie for her ice hockey team?

“One thing I really like about this industry is the passion turf managers have about what we do,” McNeal says. “We share information and do our jobs behind the scenes, and not too many people know what we do. I call it ‘elf magic’ as if elves appear to take care of the fields and no one knows about it.”

Takes one to know one

“Abby is exceedingly unselfish and she has never failed to give back or give more than her share at every opportunity,” says outgoing STMA president Mike Andresen, CSFM. “Her long-time leadership of chapters, her chairing our first education piece on artificial turf, her most recent work with upgrading the conference are three obvi-

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ous examples of her leadership abilities and unselfishness.

“Her association work from the time she joined as a student member and received a scholarship has been exceptional. She was a prime player in developing the Strategic Plan and her commitment to fulfilling its goals will be a priority for her,” says Andresen.

Like most turf managers, McNeal didn’t grow up dreaming of becoming an expert on growing grass. Raised on Kent Island, MD, in the middle of the Chesapeake Bay, McNeal’s childhood was all-American: pickup football and soccer games, tossing Frisbee, sailing, and mowing lawns for pocket money. In high school she played basketball and tennis as well as the trumpet in the school band. “Yes, I was a band geek,” she says, “but it’s actually helped in my career as I understand how bands use fields.”

She did want to be a firefighter when she was young and says that in a way she has fulfilled that dream—what do sports turf managers do if not put out “fires”?

But upon graduation McNeal joined the Coast Guard, following an uncle who had put 20 years into that service, but when she blew out a knee she was sent home. “It was a tough time for me; I was on crutches for a month and not sure what path to take.” She chose to move to Colorado, where her mother then lived (her mother passed away last October and Abby says, “I admired my mother very much; she used to walk barefoot on all my fields to ‘bless’ them.”), and enrolled at Colorado State, majoring in Landscape and Horticulture. “After my first term design class, I discussed options with a professor and decided to make turf my emphasis,” she laughs now.

She met Dr. Tony Koski, an extension turf specialist for CSU, who became her advisor as well as one of her professors. “I really enjoyed learning from Tony about all the various avenues my degree could take me. He was instrumental in my finding STMA and receiving an STMA scholarship as well.”

McNeal interned one summer at a YMCA camp and the next summer with the Fort Collins Parks and Rec department; then, in 1993, she spent her summer interning at the Denver Broncos training facility, valuable experience that would pay off later. She graduated from CSU’s 4-year program in 1994 and began her career as a seasonal worker for the City of Westminster’s parks department, and followed that with a full-time gig with the City of Boulder Parks department, where she won the 1997 STMA College Soccer Field of the Year award.

In 1999 McNeal joined the University of Colorado athletic department and was instrumental in the changeover from artificial turf to natural at Folsom Stadium, as well as hiring the Buffaloes’ current turf manager, Jason DePaepe, CSFM.

In the spring of 2000, McNeal joined Ross Kurcab, CSFM at INVESCO Field

at Mile High to work for the Broncos. “I learned how to manage multiple sports through the grind of an NFL season,” she says. “Dealing with weather and the non-sports events taught me to make ‘scenarios’ not ‘plans’.

“That experience helped me handle the event schedule at my next job, at Toyota Park outside Chicago, where we went from soccer to a concert in less than 24 hours three times in one year,” she says.

McNeal’s experience hasn’t been all roses. “I’ve learned to be very proactive and less reactive,” she says. “I had a situation in the past where a lack of communication led to a string of events that caused things to snowball. It was a big turning point. Now, if anything I am ‘over-thoughtful’ in being proactive and seeking feedback from everyone. Everybody on the staff that I worked with had an opportunity to voice their opinions and suggestions on all issues. This has helped me from that point on.”

That situation won’t be an issue in her current job; McNeal’s a one-woman staff at the School of Mines in Golden, responsible for all work on the softball, baseball, and football fields, as well as the intramural fields. “It can be frustrating because you just can’t get to everything, especially with a limited staff and resources,” she says. And not only at work is McNeal challenged with prioritizing; as the mother of 8-month-old twins, she definitely understands how to balance work and family!

“On the plus side, the athletic department previously did not have a strong field management program but my current supervisor is determined to improve our fields.”

McNeal helps the grounds staff with snow removal when necessary and in turn gets help painting the football field as well as other athletic field projects. The baseball and softball teams have a mandate to help her maintain the mound and home plate areas, putting down the tarp, etc. “The athletes are helpful; they will shovel snow off a tarp to practice, for example,” she says. “And I used the

“Abby is a very hard worker and takes her position seriously. She is most deserving of this prestigious position.”

—Heather Nabozny, Detroit Tigers



Abby flanked by her twins, Hayley (left) and Aidan.