

SEPTEMBER 2017

40 1977 2017 Athletic Business

CELEBRATING

THE RESOURCE FOR ATHLETIC, FITNESS & RECREATION PROFESSIONALS www.athleticbusiness.com

Equipping the group training movement

Designing a Ninja Warrior course

Surfacing track and field facilities

WATERSHED DESIGN

How aquatic facilities are making room for both competitive athletics and community recreation

MATRIX

VERSA FUNCTIONAL TRAINER

COMPACT DESIGN. TREMENDOUS VERSATILITY.

The smart design of our Versa Functional Trainer offers a remarkable range of exercise options in a space-saving footprint, helping you get more out of your investment and your floor space than ever before.

Discover more at matrixfitness.com



300 COLLEGE COACHES DESCEND.
500 GIRLS TEAMS DIG DEEP.
24 FIELDS BECOME ONE GIANT STAGE.



"Just for kicks." The real action at the 2015 Girls Bethesda Premier Cup happened the week before. For the turf manager and his crew. See dreams coming to life, hard work pay off and one stage bring it all to a dramatic finale. The Maryland SoccerPlex has a story. Watch it: JohnDeere.com/Sportsturf

Trusted by the Best





Imagine a world where high-performance LED is easy and affordable to install and use. Retrofitting with Ephesus All Field makes it possible. All Field fixtures are small, light, and aerodynamic enough to repurpose your existing poles and crossarms, and require fewer fixtures to provide greater efficiency, brightness, and glare suppression with decreased light spillage and skyglow. Not only do they outshine the competition, they bring your venue into this century via wireless tech, like Bluetooth, web-based access, and control options. Ephesus All Field puts advanced LED technology **WITHIN YOUR REACH.**

 **ephesus All Field**

*Data is for lights operating for an average of 10 years



DON'T WASTE MONEY ON THINGS YOU DON'T NEED

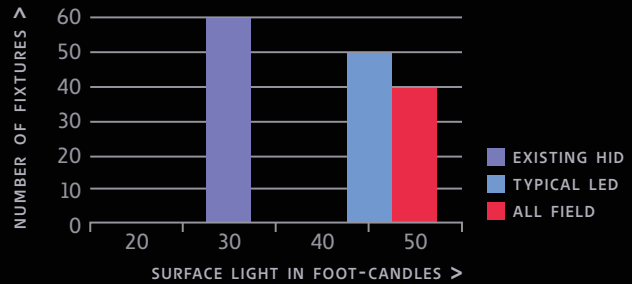


< CUT THE COST OF INSTALLATION IN HALF

Our All Field is the only LED field lighting system able to fully adapt to your existing infrastructure. This eliminates the expenses for new poles, crossarms, demolition, engineering, and foundations.

BRIGHTER LIGHT, LESS HARDWARE >

Our highly efficient All Field fixtures deliver more foot-candles of light with fewer overall fixtures. This means less hardware to buy for installation.

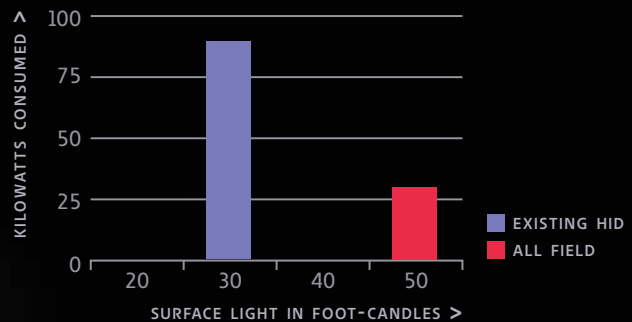


< MAINTENANCE FREE

Ephesus All Field fixtures don't use bulbs, so you save considerable time and money over the replacements needed with HID. Plus, our fixtures operate maintenance free for 25 years.

GIVE IT THE GREEN LIGHT >

Ephesus All Field produces more light while consuming less energy. This equates to a 66% reduction in energy costs over HID while providing 66% more light.



< TO DOWNLOAD THE FREE GUIDE TO RETROFITTING WITH LED VISIT LEDwithinReach.com OR GIVE US A CALL US AT 800-573-3600

ab **Inside This Issue**

September 2017 Vol. 41, No. 7

Starting Lines

10 Is the 'pot gym' a budding trend, or will it go up in smoke?

ONE ON ONE: Author Charles Duhigg discusses habit formation.

PERSPECTIVES: What habits would you change?

PLUS: The Score, Noteworthy

Voices

Legal Action

22 How to avoid the type of discrimination that cost the University of Iowa dearly.

The Owners Club

26 Rob reveals how old ways of doing business have set his club back.

Personal Best

28 A Rockford, Ill., school district goes against the grain to help its student-athletes succeed.

Safety & Security

30 Tips for keeping your outdoor event safe when weather strikes.

7 Online TOC

8 Letter from the Editor

18 Happening now at AB Show

20 New & Improved

76 Products/Advertisers Directory

78 Forward Progress

80 Professional Directory

82 Design Details

Features

34 An in-depth look at how **aquatic facilities** can simultaneously accommodate high-level competition and community recreation.

44 **Training like a ninja:** Obstacle race programming for your gym.



[Photo courtesy of Technogym]

50 Equipping your gym for the **group training** evolution.

56 Robots may be the next line of defense in **venue security**.

60 Surfacing the modern **track and field** facility.

COVER IMAGE OF THE UNIVERSITY OF BRITISH COLUMBIA AQUATIC CENTRE, COURTESY OF MJMA.



ATHLETIC BUSINESS (ISSN 0747-315X) is published nine times annually: January/February, March, April, May, June, July/August, September, October, November/December and is distributed without charge to qualified athletic, recreation and fitness professionals by: AB Media Inc. 22 E. Mifflin St., Suite 910 Madison, WI 53703

CHANGE OF ADDRESS: In order to ensure uninterrupted delivery of Athletic Business, notice of change should be made at least five weeks in advance. Direct all subscription mail to: ATHLETIC BUSINESS P.O. Box 47705 Plymouth, MN 55447 Call: (800) 869-6882 or Fax: (866) 658-6156. For faster service, visit us online at athleticbusiness.com/subscribe. Single-copy price is \$8 Buyers Guide, \$50. Subscription price is \$55 for nine issues in the U.S.A., Canada. Periodicals postage paid at Madison, Wisconsin, and at additional mailing offices.

POSTMASTER: Send address changes to ATHLETIC BUSINESS P.O. Box 47705 Plymouth, MN 55447 Canadian Publications Agreement No. PM40063731. Email: athb@kmpsgroup.com Printed in U.S.A. © AB Media Inc., 2017 ALL RIGHTS RESERVED. Reproduction in whole or in part is prohibited. ATHLETIC BUSINESS® is a trademark of AB Media Inc.



ab Digital Extras

Stay informed and get involved via our online and social offerings

On Our Blog

www.athleticbusiness.com

How to Design Rec Centers for Diversity



Stephen Springs,
senior principal,
Brinkley Sargent
Wiginton
Architects

Embracing a culture of ethnic diversity might be the most important factor impacting recreation facility design, especially considering the divides that exist in the United States today.

Municipalities with strong or growing ethnic populations know the effect that members of those communities can

have on programming decisions, as well as facility planning and design. The impact goes beyond allocating for program areas – more space devoted to futsal or table tennis in communities with large Hispanic or Asian populations, for example – to all corners of a facility.

Read more of Stephen's blog at www.athleticbusiness.com/design-diversity

AB Social



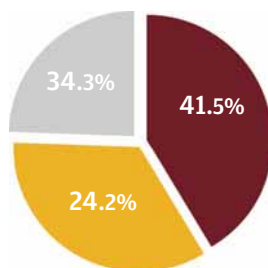
We recently welcomed architects from seven firms around the country into AB's Madison, Wis., offices to act as judges for our annual Facilities of Merit™ awards. Get an inside look at the deliberations on our Instagram account. **Follow us on Instagram @athleticbiz**



According to You

In what was viewed as a victory for the NFL's Washington Redskins, the U.S. Supreme Court ruled that trademarks are protected under the First Amendment, regardless of whether they are offensive.

We asked readers, **"Is it time to retire the Redskins nickname?"** Here's what you said:



NO
41.5%

there's no need to make this kind of business decision in the name of political correctness.

YES
34.3%

it's time the Redskins move on from the offensive name.

NO
24.2%

the Redskins name is tied to team history and should remain in place.



Help build the Ultimate AB Playlist

Do you have a song that helps you push through that last rep, or keep pace during your last mile on the treadmill? We're compiling AB readers' top workout tunes. Share your song with us, and we'll add it to our playlist on Spotify! Join in with the other members of the AB community as we get our collective sweat on!

To submit a song, visit www.athleticbusiness.com/playlist

Advertisers: Get In On the Digital Action

Athletic Business' industry presence spans print, digital and social media. Find out how you can **make the most of our reach** to share your message: athleticbusiness.info

4000

Print Subscribers

11118

Monthly Unique Web Visitors

4370

E-News Subscribers

1238

Social Media Connections

LETTER FROM THE EDITOR



Back to school

The thermometer remained pegged above 80 degrees, while high humidity kept air conditioners working overtime for most of July. However, as we wrapped up production on this month's issue, the calendar turned to August and here in Madison we saw our first day below 70 degrees. By the time some of you read these words, school will be back in session and the season's first football games will have already been played.

While summer is most definitely a time to relax and slow down, we've managed to stay relatively busy. We recently held our Facilities of Merit™ judging with seven architects from around the country who weighed in on 65 of the top sports and rec facilities in North America and beyond – the winners will be announced online and in the upcoming October issue. Meanwhile, we're also finalizing our editorial calendar for 2018 and gearing up for AB Show in Orlando (Nov. 8-11).

We hope you're feeling prepared for fall and the new school year. But no matter how solid you think your game plan is, this month's issue hits on a variety of topics that might prompt you to try something new.

Mat Parker's column on nixing his school district's academic eligibility requirement has some great insight for athletic directors looking to help student-athletes succeed on and off the field. Club owners will want to check out our feature on the latest in fitness programming. We also venture to the industry's cutting edge in separate features on the ninja obstacle course racing trend and an atypical approach to high-tech venue security (think R2-D2). This month's legal column examines the intricacies of discrimination law, and our cover story offers an inside look at how two aquatic facilities outside the United States each successfully manage to accommodate high-performance athletes and community recreation users under one roof.

If that's not enough, we hope to send you into the waning months of 2017 with your groove on. Visit the AB website and peruse the Ultimate Athletic Business Workout playlist, curated by you, our valued readers. Trust me, like the weather in July, it's hot!

Andy Berg
Editor
andy@athleticbusiness.com

Athletic Business®

22 E. Mifflin St., Suite 910 | Madison, WI 53703
(800) 722-8764 | (608) 249-0186

Editorial

Publisher | Peter Brown

Executive Editor | Andy Berg
andy@athleticbusiness.com

Senior Editor | Paul Steinbach
paul@athleticbusiness.com

Online Managing Editor | Jason Scott
jason@athleticbusiness.com

Editorial Assistant | Courtney Cameron
courtney@athleticbusiness.com

Art Director | Nicole Bell

Digital Production Manager | Marjorie Schultz

Production Assistant | Scott Packer

Advertising Sales

athleticbusiness.info

Advertising Director | Diane Ebner
diane@athleticbusiness.com | (608) 729-4189

Account Executive | Michael Gaio
michael@athleticbusiness.com | (608) 729-4216

Sales Coordinator | Jodi Chamberlain

AB Media Inc.

CEO | Gretchen Kelsey Brown

President | Peter Brown

Group Publisher | Shawn Gahagan

Accounting Assistant | Gloria Hawkinson

Audience Development Coordinator | Cooper Brown

IT Manager | Sean Ray

Director of Marketing | Jared Bruley

Marketing Associate | Kate Rampono

Online Producer | Erika Reise

Graphic Designer | Sadye Ring

AB Show

abshow.com

Show Director | Sue Searls

Exhibits Director | Steve Statsick

steve@abshow.com | (608) 729-4191

Conference & CEU Manager | Becky Walker

Trade Show Operations Coordinator | Gloria Hawkinson

Join us at the 36th AB Show, Nov. 9-11, 2017, in Orlando

Premium Partners



The Wellness Company



MATRIX



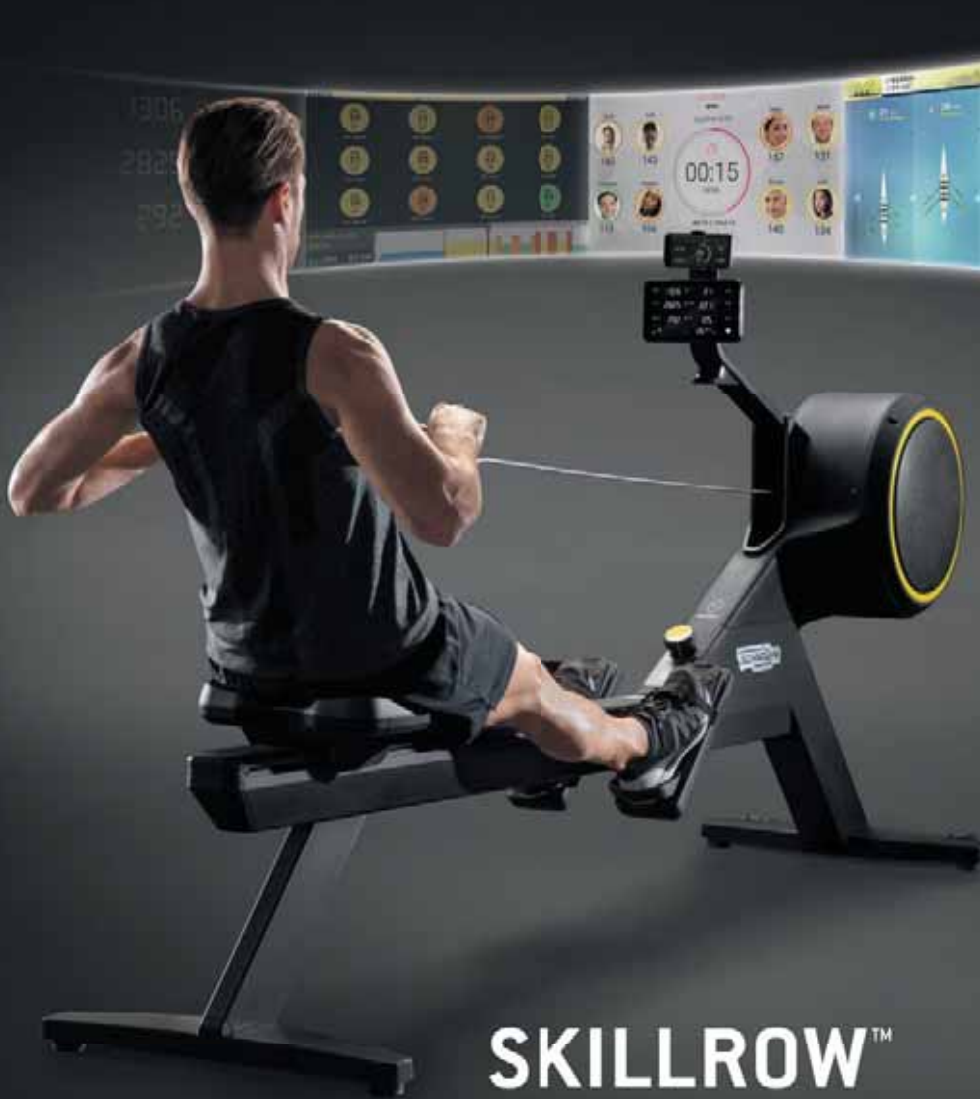
A PLAYCORE Company

Author's Guidelines:

Athletic Business will consider manuscripts that are not offered to other publications. Preferred length is 500-750 words (columns) or 1,000-1,250 words (features). Please submit manuscripts to Andy Berg at the mailing address above or send via e-mail to

editors@athleticbusiness.com

UNLEASH THE ATHLETE INSIDE YOU



SKILLROW™ ATHLETIC TRAINING



**MULTIDRIVE
TECHNOLOGY™**
(PATENT PENDING)



AQUAFEEL™



**ENGAGING
RACES**
(PATENT PENDING)

SKILLROW™ is the only indoor rowing equipment on the market that offers:

- **MULTIDRIVE TECHNOLOGY™** to train cardio and power skills
- **AQUAFEEL™** to enjoy the unique feel of rowing on water
- **RACES** to engage in virtual crew challenges.

Learn more: Technogym.com/Skillrow

TECHNOGYM

The Wellness Company

Starting Lines

Ideas and events shaping our industry



Does the first 'marijuana gym' signal a budding trend?

By Jason Scott

By now, you may have heard about Power Plant Fitness, the so-called “marijuana gym.” As states around the country adopt a more relaxed stance on recreational marijuana use, entire cottage industries have sprouted around its newfound legality – but Power Plant Fitness represents new territory. Scheduled to open this November in San Francisco, Power Plant claims to be the world’s first gym to directly encourage members to partake of marijuana right on location, either before or after a workout.

“As the recreational use of cannabis is now legal in some states and on the ballot in others, including California, perceptions are changing quickly,” reads the gym’s Facebook page. “Old stereotypes are being tossed out the window as the world realizes

they have long been misled about the ‘evils’ of marijuana. It is very likely cannabis will become ingrained into American society like Budweiser, apple pie and baseball.”

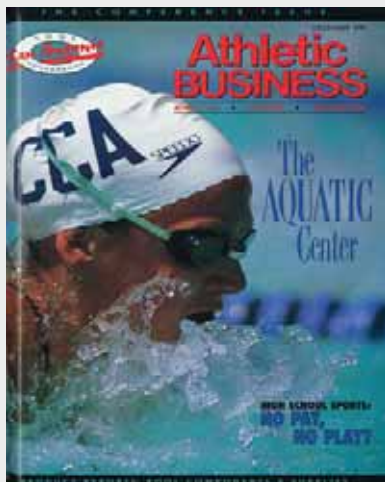
The concept offers a whole new perspective on the phrase “going green.” But what does pot have to do with fitness? That may depend on who you ask.

According to Power Plant owner Jim McAlpine, who also founded the 420 Games and has been hosting Power Plant boot camps ahead of the gym’s official opening, marijuana and fitness belong together.

In an interview with *Outside* magazine, McAlpine said he believes that fitness could become a larger part of the expanding cannabis industry. He sees

Looking Back: December 1991

Revisiting past issues of *Athletic Business*



Check out the full article at www.athleticbusiness.com/leisure-revolution

In the early 1990s, aquatic facility operators began craving flexibility over formal, programmed pools that only served small groups. More pools began implementing free-format, free-play spaces, kicking off what this December 1991 article dubbed “the Leisure Revolution.”

Power Plant Fitness as an opportunity to combat the “stoner” stereotype. “If you use it right, cannabis takes the things you love and lets you love them more,” he told *Outside*. “With fitness, that can help get you into the zone, into ‘Eye of the Tiger’ mode.”

McAlpine’s vision for the gym includes providing members with “weed-assisted fitness plans” and “cannabis performance assessments.” Current California law limits the sale of recreational marijuana to licensed dispensaries, but McAlpine hopes to sell cannabis edibles — “made for pre-workout focus and post-workout recovery” — on site.

That said, McAlpine understands that the focus of any gym should be fitness. He told *USA TODAY* in March that staff will evaluate clients while sober and while under the influence to determine the best candidates for working out while high — expecting that at least half of the people who join Power Plant Fitness won’t wind up being a good fit.

According to Dr. Cedric Bryant, chief science officer for the American Council on Exercise, marijuana may help athletes in some ways and hurt in others. He says marijuana can help manage pain, and in some instances, help athletes focus.

“Mind over matter” is a mantra for many endurance athletes, and marijuana use may help facilitate that mindset,” Bryant says. “The ability to block out the monotony of a long-duration event may be just as important as physical ability

in some cases. The part of the brain that responds with a pleasant buzz when exposed to the THC in marijuana is that same part that fires when athletes feel a ‘runner’s high.’ ”

However, Bryant warns that athletes who choose to use marijuana also expose themselves to certain risks, including reduced energy levels, compromised motor skills and other negative impacts on the brain.

“Marijuana causes changes in visual perception, coordination and reaction time, all of which will negatively impact the ability to exercise, particularly if the activity requires complex movements and high levels of agility,” Bryant says. “This may be one reason why the proponents of marijuana use prior to exercise typically discuss simple, repetitive activities, like long-distance running.”

Overall, Bryant recommends against using pot to enhance exercise performance. “There are simply too many risks and unknowns associated with regular use,” he says, “not the least of which is the building up of a tolerance that requires heavier usage to achieve the same results.”

Whether Power Plant Fitness will set a trend or go up in smoke remains to be seen, but much like the plant that sets it apart, McAlpine has plans for growth. Power Plant Fitness is eyeing expansion into additional markets, including Los Angeles, San Jose, Seattle, Denver and Portland, Ore. 🍓

The Score

31.9

Percentage by which compensation among athletic directors in the NCAA’s Football Bowl Subdivision has increased over the past five years

424,163

Amount, in dollars, separating the average annual salary among athletic directors in the Atlantic Coast Conference (\$1,079,455) from that of Pac-12 ADs (\$695,292)

Source: athleticdirectorou.com

269

Number of NCAA athletic directors, out of 1,101 total, who are women, with more in Division III (157) than in Divisions I and II combined

Source: Women Leaders in College Sports



61,000,000

Projected number of health club memberships in the United States by 2022, up from 54 million in 2014

Source: Allied Market Research

110

Number of deceased NFL players’ brains, out of 111 studied, found to exhibit chronic traumatic encephalopathy

Source: The Journal of the American Medical Association

3.5

Factor by which the 298-acre mixed-use development surrounding the Los Angeles Rams’ \$2.6 billion stadium in Inglewood, Calif., is larger than Disneyland

Source: USA Today

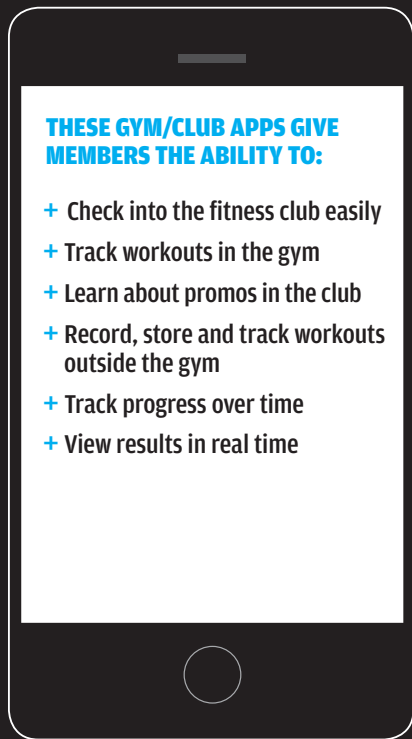


SMARTER WORKOUTS



WEARABLES & MOBILE HEALTH APP USAGE HAS SURGED BY 50% SINCE 2014

Going to the gym has officially gone high tech. Today's wearables are capable of monitoring vitals, tracking progress and turning a grueling workout into a game. Here's a look at how gym patrons are benefitting from tech with every rep:



2015

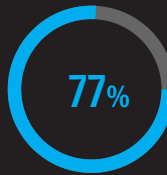
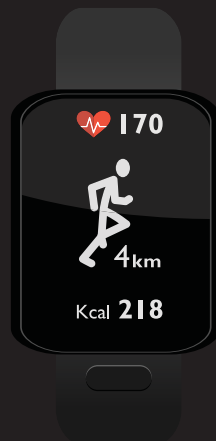


32%

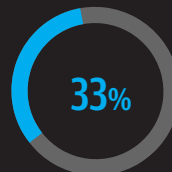
2020



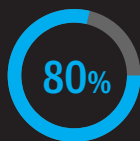
EXPECTED 100%



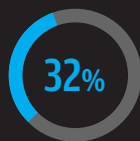
of users said using wearables makes them feel more engaged with their health and fitness



of gym members would be willing to switch gyms for better technology if price and location were similar



of gym members bring their smart phone to the gym



of gyms have equipment that interacts with users' smart phones



of gyms have interactive smart phone capability

GAMIFICATION



Wearable fitness trackers that sync with the gym ecosystem are a great resource for gamification, as they can turn any workout – whether it's a group exercise class or simple weight training – into a game.

Illustration by Nicole Bell

Sources: Netpulse, Business Insider, Accuro, Inc.com

Noteworthy

Comerica Park, home of MLB's Detroit Tigers, partnered with security provider **CLEAR** to provide fans with a more convenient security experience. CLEAR lets fans enter the ballpark with the touch of a finger by turning individual biometrics into a universal ID.



The **National Recreation and Park Association** (NRPA) released a new survey on compensation trends for parks and recreation professionals. Built on responses from 480 parks and recreation agencies across the United States, the survey provides a glimpse into typical compensation packages for industry professionals. The survey revealed that agencies cover 85 percent of full-time employee health insurance premiums. Fully 80 percent of agencies offer retirement plans to full-time employees, and 61 percent of agencies offer to contribute to full-time employees' retirement plans.

Chattanooga, Tenn.-based **PlayCore** announced that it acquired play and recreation product manufacturer **Superior Recreational Products** (SRP). SRP manufactures indoor and outdoor play equipment, as well as shelters, shade structures and site furnishings. The move is PlayCore's seventh acquisition of 2017, as SRP joins Playcraft, Highland Products, Sport Surface Specialties, Alta, American Parks Company and Worlds of Wow.

Fitness equipment manufacturer **Technogym** announced that it was named the "official fitness equipment supplier" for the **USTA** Billie Jean King National Center in

Flushing, N.Y., and the USTA National Campus in Orlando, Fla. The deal will bring Technogym cardio and strength equipment to each facility.

Performance surface supplier **Ecore** announced a partnership with **Hilton Hotels** to become the exclusive surface provider for the hotel chain's "Five Feet to Fitness" program. The wellness concept brings a variety of fitness offerings right into a guest's room, with equipment such as a stationary bike, resistance bands, kettlebells and more. As part of the agreement, Ecore will outfit sections of guest rooms with its Forest rx ergonomic flooring, with the aim of reducing the risk of injury due to hard impacts and falls.

Power Plate, a manufacturer of vibrating platforms for fitness applications, has released new small group training programs. Available as part of a comprehensive launch kit, the training programs offer gyms and health clubs a variety of unique training curricula. Participating facilities can choose from a number of classes, each with a different focus, including a boot camp-style functional program, a strength-focused program, a cardio HIIT program, and a program based on stretching and recovery. @

Speedy Bleachers! by Kay Park

1.) Park It! Highway Towable Indoor or Outdoors  Serves many Venues

Seating Up to 300! As easy as 1, 2, 3!

One Person - 10 Minutes - Set - Up

2.) Unfold It! Hydraulic Folding 

3.) Use It! Also: Regular portable Bleachers 3-15 rows - 15ft to any length 

Making People Places, People Friendly Since 1954!

1-800-553-2476 WWW.KAYPARK.COM
Manufacturing all your bleacher needs.

866.550.5511
gtgrandstands.com

GT
GT GRANDSTANDS®
A PLAYCORE Company



The leading designer and manufacturer of premium quality Permanent Grandstands, Press Boxes, Portable Angle Frame Bleachers and Team Benches, customized to meet your specific needs and exceed your expectations.



THE KEY TO LONGEVITY— LENGTHEN YOUR TELOMERES WITH SPRINT 8

By Phil Campbell

All exercise is beneficial for the body, but not all exercise is created equal. For years, facilities across the country have offered a plethora of high-intensity interval training programs, but an exclusive option from Matrix Fitness goes beyond HIIT.

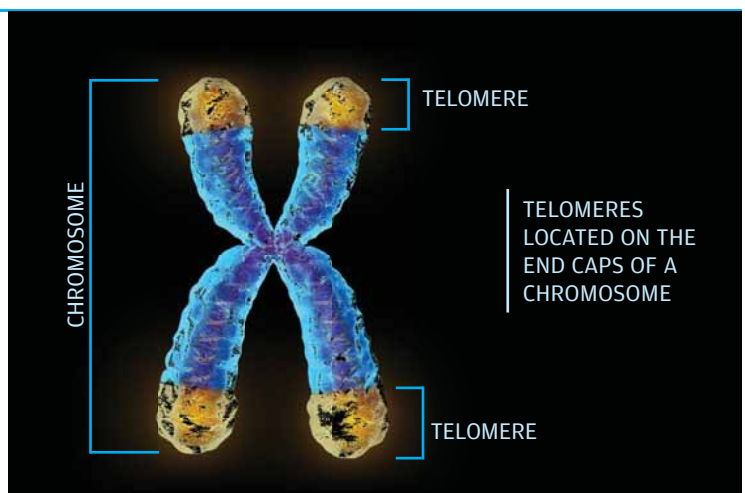
Facility operators looking for an edge – whether training elite athletes or attracting fitness beginners – will find this new program delivers results. The program is called Sprint 8, and realizing the science behind it is the key to understanding how it benefits exercisers of all ages, shapes and sizes.

The Sprint 8 Cardio Protocol can be used by anyone at any age. Just because older adults have quit using their fast-muscle fiber, those cells haven't disappeared. They are just small and wimpy because they don't get used. Sprint 8 helps recruit both slow-twitch and fast-twitch muscle fibers.

But one of the key reasons Sprint 8 is effective has to do with the effect on the body's chromosomes – specifically, the ends of your chromosomes, which are called telomeres. Telomeres deter the degradation of your genes, protecting your cells from aging too quickly. Think of them like caps on the ends of shoelaces that protect them from fraying.

Research shows telomeres appear to measure biological aging (as opposed to chronological aging). They're "cellular timekeepers," and they are a more accurate gauge than your biological age.

As telomere length becomes shorter, the structural integrity weakens, and the cells age and die more quickly. Shorter telomeres are associated with a broad range of aging-related diseases, including many forms of cancer, stroke, vascular dementia, cardiovascular disease, obesity, osteoporosis and diabetes.



The length of telomeres is an important indicator of the body's condition. Long telomeres are associated with health and longevity. The Albert Einstein College of Medicine's study of centenarians concluded telomere length is associated with exceptional longevity. Conversely, short telomeres point to premature aging. More important, we now know that telomere length is modulated by the insulin-like growth factor (IGF, or growth hormone) system, and telomere shortening and decline in IGF levels are contributors to aging.

So how do you ensure your telomeres are long? And what can you do to lengthen them?

Recent research on telomeres shows telomere length is preserved in healthy older adults who perform vigorous aerobic exercise. To be specific, telomere length is positively related to maximal aerobic exercise capacity. Researchers note that this may represent a novel molecular mechanism



underlying the anti-aging effects of maintaining high aerobic fitness. So, vigorous, hard and fast cardio exercise releases growth hormone and in turn positively affects telomere length. In this way, Sprint 8 can be a valuable tool to improve health at the cellular level and a life-long weapon to fight the symptoms of aging at the cellular level.

In their book, *The Immortality Edge*, authors Michael Fossel (M.D., PhD), Greta Blackburn and Dave Woynaroski (M.D., CPT) conclude:

Even more impressive, from our point of view, is some recent research in Italy that found that high levels of HGH correlate with longer telomeres. Measurements for both were taken from 476 healthy people (both men and women) between the ages of 16 and 104, and after the effect of age was factored in, it was determined high HGH levels accounted for a 10 percent increase in telomere length.

As research continues, even more proof pours in about the positive impacts of the type of high-intensity exercise that Sprint 8 can facilitate. In a recent study researchers at the University of Colorado concluded:

Our results indicate telomere length is preserved in healthy older adults who perform vigorous aerobic exercise and is positively related to maximal aerobic exercise capacity. This may represent a novel molecular mechanism underlying the “anti-aging” effects of maintaining high aerobic fitness.

As research continues, even more proof pours in about the positive impacts of high-intensity exercise like Sprint 8.

In a 2017 study reported by BYU News, researchers analyzed data from 5,823 adults who participated in the CDC’s National Health and Nutrition Examination Survey which captured a segment on telomere length. The study shows sedentary people had the shortest telomeres. Researchers also learned there was no significant difference in telomere length between those who did moderate and low-intensity exercise and sedentary people. According to research spokesperson Dr. Larry Tucker, “If you want to see a real difference in slowing your biological aging, it appears that a little exercise won’t cut it,” Tucker said. “You have to work out regularly at high levels.”

While the NIH didn’t categorize the level of “sprint intensity,” it clearly takes high-intensity exercise to impact telomere length. So while moderate-intensity exercisers are better off than those who don’t exercise, they may be falling significantly below their potential in getting results for time spent. With Sprint 8, exercisers can take on short, intense workouts that will produce the growth hormone necessary to lengthen telomeres, helping people of any age look and feel younger.

Phil Campbell
M.S., M.A., C-PT,
American College
Of Sports Medicine
and creator of the
Sprint 8 training
program. For more
information, visit
www.sprint8.com

AB Show keynoter explains how habits are formed (and changed)

Investigative reporter Charles Duhigg slipped into a daily afternoon indulgence of leaving his desk at *The New York Times* and heading to the 14th-floor cafeteria to sample its cookie selection. Once the habit had resulted in 8.7 pounds of weight gain, Duhigg began to wonder why it was so easy to ignore the note he had placed on his monitor that read: “Do not eat the cookie.” Two years of fulltime research into the neurology of habit formation led to his best-selling 2012 book “*The Power of Habit: Why We Do What We Do in Life and Business*.” It’s a topic Duhigg will cover during his keynote address at AB Show 2017, Nov. 10, in Orlando. AB senior editor Paul Steinbach asked the Pulitzer Prize-winning journalist for a preview.



What’s the most useful habit for business leaders to adopt?

What all the research points us to is that people who are more successful tend to think more deeply about the choices they’re making. They understand this distinction between being busy and being productive. They tend to have habits that push them to think, particularly when thinking is hard. Sometimes that means that they have a habit of conducting meetings that allow people to feel like they are really participating – what’s known as psychological safety. Or they write to-do lists in certain ways that push them – not just to use it as a memory aid – but to think about priorities. People develop cognitive routines or little mental habits that push them to take a second and say, “Wait, let me think through this choice. Am I giving this all the thought that it needs? How do I have this meeting in a better way? How do I speed up my innovation so that I’m being more creative faster?” Those are the habits that are most important.

How do bad habits hinder business leaders?

I think that one pattern that often happens is that things that are strengths become weaknesses as we rise in leadership. Someone gets promoted to VP because they’re a hard-charger. They know how to cajole or bulldoze people into doing what needs to be done. But suddenly as a vice president, now they actually need to work in a completely different way. Now they need to persuade and listen and take people’s concerns seriously, and I think that is a really hard transition. Our brain learns to recognize and build instincts around our strengths. That makes us successful. Then suddenly you’re in a new setting and it’s very hard to recognize that what was once a strength is now a weakness. But that’s typically what the best managers do. They’re very attuned to that.

Which is the greater challenge, establishing a good habit or breaking a bad one?

We don’t break bad habits. We actually change them. Once a habit is established in our neurology, once there’s that neural connectivity of a cue, a routine and a reward, it’s essentially impossible to extinguish. Through willpower you can repress it. Through willpower you can ignore an urge, and people do that all the time. The risk, though, is that when your willpower is weak or when you’re feeling tired or stressed, you’ll lapse back into that habit. So the more tried and true formula is not to think of it in terms of breaking a bad habit but rather changing a bad habit – changing it to something healthier. You identify a bad habit and say, “What’s the cue for this? What reward is this bad habit delivering to me? And now can I find a new behavior that corresponds to that old cue that delivers something similar to that old reward?”

What would you like AB Show attendees to take away from your keynote?

We now know more about habits than we’ve ever known before. We’re living through the golden age of understanding the neurology and science of habit formation. And any habit can be changed. It doesn’t matter how old you are. It doesn’t matter how long you’ve been struggling with something. There is someone in New York City who is overweight who will start an exercise routine today, and five years from now they will still be running, and they will be in good shape, and they will have lost weight. Habits change all the time. We know how to do this. It’s just a matter of learning how they work so you can fiddle with the gears, and that gives us power over ourselves to have the lives that we want. @

What Habits Would You Change?



Ed Steele, risk and safety coordinator, Harrisonburg Parks and Recreation, Harrisonburg, Va.

“Making myself stay on track. After 31 years, I am in a new position in our organization. Part involves playground inspection and safety, with which, as a CPSI for 15 years, I am very familiar. The other areas are ADA and OSHA compliance, which I am not as familiar with. I have to stay on track to balance the ongoing work of playground safety, while using down time to research and study relevant ADA and OSHA regulations.”



C.J. Jones, coach, De Anza College Cheer and Dance team, Cupertino, Calif.

“More conditioning. Not just sport-specific training, but teaching student-athletes the skills needed for proper health. I see so many ex-athletes who are out of shape. When I work with them as a personal trainer, I find they don’t know how to balance training outside of their sport. I think adding this kind of conditioning would be helpful for life post-sports.”



Krystal McCain, student services coordinator, University of Wisconsin-Milwaukee Union Rec Center, Milwaukee, Wis.

“I’m hoping to be more organized! I have a bad habit of dumping files to be dealt with later, and I want them to be organized. I’m also trying to get out of the habit of doing things simply because we’ve always done those things, and really try some more innovative programming.”



Jared Matson, activities director, Crosby-Ironton Schools, Crosby, Minn.

“I would like to create a better habit of bringing energy and a positive attitude to the office every day. Also, I want to make it a habit to engage with our students more on a daily basis, outside of the office. A habit I would like to break is procrastinating on paperwork. Putting it off just leads to a larger stack to work through later.”

Which habits would you like to make (or break)?

Share your answer at www.athleticbusiness.com/perspectives917

AB SHOW : VISUALIZE YOUR PUBLIC REC SUCCESS

By Kate Rampone

As a public recreation professional, you have the opportunity and privilege to have a positive impact on the life of every member in your community, with programs ranging from learn-to-swim classes for babies to aerobics workouts for seniors – and everything in between. But has it ever felt like the impact of what you do is not fully understood by the community?



With 25 years of public parks and recreation experience, Lisa Paradis, director for the city of Brookline, Mass., knows the hardest part of telling your story lies in measuring the impact of your programs. Unfortunately, performance measurement is “the hottest topic that no one knows how to tackle, and coming at it from a social service/enterprise perspective is very difficult,” says Paradis, who has taken on this challenge and created a dashboard that quantifies the benefit of public recreation programming and facilities to the community.

According to Paradis:

1. If you're not a data person, don't fret.

“You don't have to be the person who is great at everything. Hire great employees who are data-driven and support them,” Paradis suggests. She says that she has an incredibly collaborative relationship with her new performance analyst, and together they created a dashboard that tells a captivating and informative story using big-picture data.

2. Your dashboard should show the value and tell a story.


Paradis says that she began the process of creating a dashboard because the community of Brookline has a thirst for knowledge. The dashboard is based on Brookline's basic fundamental pillars and built out from there, “constantly changing and evolving to respond to different community needs” based on surveys, evaluations and other feedback.

3. Be transparent with the data.

Paradis makes sure that the dashboard shows “the whole picture – from the good to the bad and the ugly – as well as how we're working to improve the bad and ugly.” Paradis says that transparency in the data has been appreciated within the community and has helped to build trust in her department.

4. Make your dashboard accessible to the community.

The dashboard is presented at public forums and budget reviews, but Paradis isn't stopping there – she's now working on adapting a web platform for an online dashboard. There is no application or program currently available that allows big data reporting in a way that shows the value and tells the story, which is an issue a lot of agencies face. Her department has gotten a lot of positive feedback from sharing this dashboard with the community, and Paradis thinks there is a need for “industry-wide benchmark metrics, with a subset of additional information tailored to each community.”

Join Lisa Paradis during her session at AB Show 2017 to learn how to create a dashboard for your community. Because AB Show hosts attendees from both the public and private sectors, you get the added benefit of “learning from your peers in all aspects of the industry and making important connections you can't find anywhere else,” Paradis says. Learn about more than 130 available sessions and register at abshow.com. 

Attend AB Show 2017 this November 8-11 in Orlando and get insights, ideas and fresh perspectives for your recreation facility and programming. Learn more at abshow.com.

AB ATHLETIC BUSINESS
SHOW 2017

IT'S ALL HERE.

NOV. 8-11, 2017 | ORLANDO, FL



INNOVATION MEETS INSPIRATION

LEARN MORE AND REGISTER AT ABSHOW.COM/SUMMER

2700+
ATTENDEES

250+
EXHIBITORS

130
Seminars

BROUGHT TO YOU BY:

Athletic Business

ABSHOW.COM

NOV. 8-11, 2017 | ORLANDO, FL

PHOTO COURTESY OF CANNONDESIGN

NEW AND IMPROVED



Sports Tutor

The **Volleyball Tutor** Silver and Silver Pro allow for ball trajectory variation on any desired set or pass, and can deliver serves up to 60 mph for the Silver and 80 mph for the Silver Pro. Both models have a release point of 5.5 feet to mimic the timing of a human setter as well as the downward angle of dig drills. Simple dial controls allow for quick speed adjustments and add topspin or underspin to serves. Non-marking caster wheels make the Volleyball Tutor Silver and Silver Pro models easy to move into position on the court.

www.sportsmachines.com
(800) 448-8867

FLIR

The FLIR Griffin G510 **Gas Chromatograph-Mass Spectrometer** (GC/MS) enables responders to sample all phases of matter to identify chemical hazards in the field. Versatile and portable, the Griffin G510 represents a new generation of GC/MS capability, with integrated sample inlets that simplify on-scene analysis and a technology core that delivers lab-caliber answers. The Griffin G510 comes equipped with an integrated heated sample probe and long-lasting, onboard, rechargeable batteries. Featuring a nine-inch touchscreen, the Griffin G510 can be operated while wearing full personal protective equipment. Designed to withstand harsh environments, the Griffin G510 is IP65-rated, dust-tight and spray-resistant.

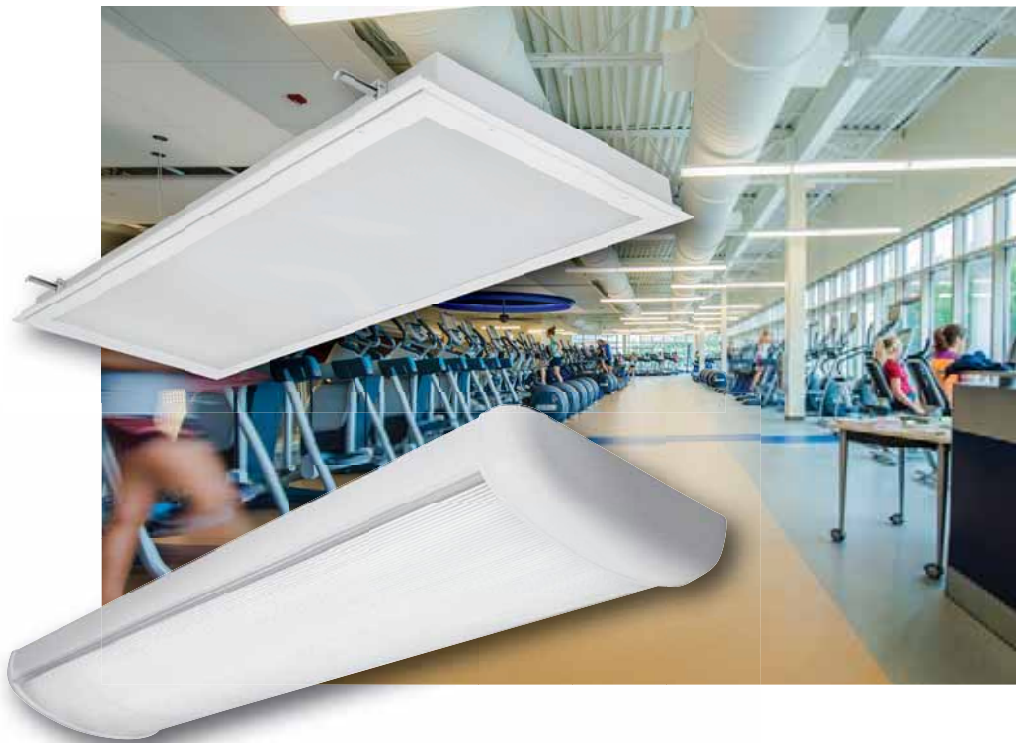
www.flir.com
(877) 692-2120



Matéflex

PlankFlex by Matéflex, America's original **modular flooring** company, can help facility operators create an original design statement. PlankFlex has a unique construction that allows for airflow and keeps dampness away from the surface. Each PlankFlex unit is based on a modular tile design that snaps together for easy installation. Ideal for basketball and volleyball courts, as well as aerobic and exercise flooring in schools, health clubs and community buildings, PlankFlex is available in five colors and carries a 15-year warranty.

www.mateflex.com
(800) 926-3539



Kenall

To combat the risk of infection from bacteria in locker rooms and restrooms and on equipment, Kenall has incorporated Indigo-Clean disinfecting technology into two of its best-selling, **sealed LED light fixtures**: the Millennium™ Stretch MLHA and the SimpleSeal™ HASEDI. Kenall's lights combine standard white light with safe 405-nanometer Indigo light to penetrate harmful bacteria, including Staph such as MRSA. It targets naturally occurring molecules in the bacteria to produce intracellular Reactive Oxygen Species (ROS). Similar to bleach, ROS create an oxidative environment that kills bacteria, disinfecting the area as long as the light is on.

www.kenall.com
(800) 453-6255

SPORTSBRANDEDMEDIA

Mirror Innovations' new patent-pending product, REFLEX, is a **thin graphics film** indistinguishable from a conventional mirror surface. The surface of REFLEX can be printed on and applied to any glass or glass-alternative flat surface. REFLEX is a tremendous revenue generator and sponsorship asset, with the ability to be installed and removed for an individual game, event or promotion – free of charge – by Mirror Innovations' national network of installers.

www.sportsbrandedmedia.com/reflex/
(516) 705-4366



Seresco USA Inc.

Seresco introduces the multifaceted R3 Expansion Module, plus a compact furnace add-on option for the NE Series of **indoor pool dehumidifiers**. The R3 is a plug-and-play, 18-inch module configured to match the newly reduced cabinet footprint of the NE Series. The R3 features three key goals of natatorium sustainability: Reduce the equipment size and footprint; Reuse exhaust and energy to increase efficiency; and Recycle energy by recovering it. The R3 components offer additional cost-cutting efficacies for space and water heating and heat rejection, beyond the already industry-leading performance of the NE Series. The R3 can be factory-installed or shipped separately.

www.serescodehumidifiers.com
(770) 457-3392

Voices

Insights and opinion you can find only in Athletic Business

Legal Action



[Photo of Jane Meyer by The Iowa Gazette]



Kristi Schoepfer
(schoepferk@
winthrop.edu)
is chair of
the Physical
Education, Sport
and Human
Performance
Department
at Winthrop
University.

Iowa discrimination cases costly, and easily avoided

By Kristi Schoepfer

In May, the University of Iowa settled two lawsuits filed by former members of its athletic department: Jane Meyer, former senior associate athletic director, and Tracey Griesbaum, former women's field hockey coach. Both Meyer and Griesbaum alleged the university was liable under the Iowa Civil Rights Act, Chapter 216, for sexual orientation discrimination, gender discrimination and retaliation. Further, Meyer's lawsuit alleged wage discrimination and unequal pay based on gender.

Both plaintiffs first filed charges with the Iowa Civil Rights Commission and were each awarded a Right to Sue letter from the commission. After a 14-day jury trial in May, Meyer was awarded \$1.43 million by unanimous verdict, with the jury finding the university liable on all claims. This plaintiff victory prompted the university to settle the Meyer case, as well as the Griesbaum case, which was scheduled to begin trial on June 5. The total settlement amount for both cases, including attorney's fees, was \$6.5 million.

Griesbaum had been a coach at the university for 22 years, serving as head coach for 14 years. In April 2014, Iowa athletic director Gary Barta received a complaint from the parent of a women's field hockey player regarding Griesbaum's coaching practices. This complaint was investigated in May 2014, with the university conducting more than 40 interviews. The investigation found no policy violations, however Griesbaum was terminated as head coach on August 4, 2014.

The Meyer and Griesbaum lawsuits both center on this termination.

Further, Meyer and Griesbaum are in a relationship, which the university reviewed and approved according to its nepotism guidelines. Both Meyer and Griesbaum allege that their relationship, as well as a culture of gender inequity, were the basis for Griesbaum's termination, Meyer's adverse employment consequences and retaliation against both former employees.

As a review of both cases will demonstrate, university athletics programs, as well as other employers covered by civil rights legislation, must be mindful of their responsibilities to ensure equity in the workplace and refrain from practices that could be deemed discriminatory or retaliatory.

The Meyer Lawsuit

Meyer was hired as a senior associate athletic director at Iowa in 2001. Throughout her 13-year tenure as the number-two-ranking administrator in the athletic department, Meyer received positive job performance feedback. However, in 2014, when Meyer questioned the potentially discriminatory firing of a female coach (Griesbaum), her work climate began to shift.

Specifically, on August 4, 2014 (the same date Griesbaum was fired),

Barta hired Gene Taylor as deputy director of athletics. Barta announced his intent to hire a new deputy director in May 2014, around the time Griesbaum's investigation began. Barta assigned many of Meyer's responsibilities to Taylor, and although Taylor's overall workload was less than Meyer's had been when she was the number-two-ranking administrator,

Taylor was paid \$70,000 more per year than Meyer.

Further, over the course of 2014, Meyer felt that Barta was becoming more discriminatory toward her and other female employees, as well as female student-athletes. (Her lawsuit cited many instances of such alleged discrimination.) Based on these allegations, Meyer filed



KILLER SEAM ADHESIVE

NEW NORDOT® ADHESIVE #34R-4(Super)

KILLS HOT MELT ADHESIVES! Less labor cost, fewer call-backs, less equipment = **BIG \$\$ Savings!** Installs faster in hot or cold weather (just open the pail and use).

Also, makes an outstanding repair and total glue-down adhesive because a properly set seam stays put during installation.

- Doesn't curl, slip, creep open, etc. even when windy.
- Excellent fresh and salt water resistance when submerged.
- Withstands sudden and unexpected rain during installation before it sets.
- Expect years of outstanding long-term exterior durability.

NORDOT® Adhesive #34R-4(Super) is a one-part, thixotropic, high green strength, low odor, solvent-based curing urethane that can be used for installations at any temperature the installer can work from below freezing to intense desert heat. Just open the pail and use. Meets SCAQMD Rule 1168 for outdoor use.

WANT THE FACTS? - Write, Call or Visit our Website:



P. O. Box 241
 Scotch Plains, NJ 07076 USA
 Tel: 908 233-6803
 Fax: 908 233-6844
 E-mail: info@nordot.com
 Web: www.nordot.com

a written complaint with Barta on December 4, 2014. On December 5, 2014, Barta put Meyer on administrative leave and removed her from the athletics department, announcing that Meyer had been removed because of a potential lawsuit from Griesbaum.

After her removal from the athletics department, Meyer lodged a formal complaint with the university, alleging wage, gender and sexual-orientation discrimination and retaliation. Specifically, she alleged that the university failed to treat her equally compared to male employees, allowed her to be discriminated against by her supervisor, subjected her to heightened scrutiny while paying her less than a male counterpart, removed her from her position one day after she made a complaint of discrimination, and retaliated against her after her partner, Griesbaum, went public with a potential discrimination lawsuit of her own.

Meyer claims that her complaint was ignored by Barta, human resources, the University of Iowa Equal Opportunity and Diversity Office and the Board of Regents, thus prompting a lawsuit.

Instead of appealing the verdict in the Meyer case, the university took the verdict as a sign that it was not likely to succeed in the forthcoming Griesbaum case, and moved toward settlement.

The Griesbaum Lawsuit

As stated, Griesbaum was a coach at the university for 22 years. During her tenure, she maintained a competitive program, leading the team to multiple Big Ten and NCAA tournament appearances, including the 2008 NCAA Final Four. Despite her coaching success, she contends that she was a victim of continued inequality, gender bias, gender stereotypes, and gender and sexual-orientation discrimination from 2006 to 2014.

Specifically, Griesbaum alleged that she was improperly fired because of a double standard in coaching. She claimed that the university had never fired a male coach because of a student-athlete complaint, and that Barta used his own biases and stereotypes about how women should coach when making the decision to terminate her. Further, Griesbaum alleged that Barta held her sexual orientation against her, as he had other female coaches. Griesbaum claimed that Barta had a history of terminating gay female coaches once their relationships were made public.

Griesbaum cited six instances where Barta undermined, forced out or terminated a female coach, and one instance where the same was done to an administrator (Meyer). Griesbaum alleged that the adverse employment decisions were based on a “lack of support or interest in women actually being competitive, female coaches requesting more equal facilities, overreaction to complaints of female student-athletes toward female coaches, and responses to women who directly challenged the administration.”

The lawsuit provided very detailed accounts of how each of the six coaches were treated unfairly or unequally compared to their male counterparts, as well as a thorough description of the treatment Meyer received.

Analysis

The Iowa Civil Rights Act, Chapter 216, makes it unlawful for an employer to discriminate against an employee on the basis of gender or sexual orientation, pay employees differently on the basis of gender, or retaliate against an employee for engaging in activity protected by the statute. Meyer and/or Griesbaum claimed a violation under every category of Chapter 216, and through either trial verdict or settlement, both plaintiffs were successful in their discrimination lawsuits.

While the settlement agreements contain standard non-admission of guilt clauses, and do not provide a legal analysis of the individual discrimination claims, those who advocate against gender discrimination in collegiate athletics see the settlements as a victory for the plaintiffs and a milestone achievement.

Further, these cases are unique in that the jury verdict in the Meyer case prompted the ultimate settlement of both cases. (The Meyer case was settled to increase the damages awarded.) Instead of appealing the court's decision, the university took the verdict as a sign that it was not likely to succeed in the forthcoming Griesbaum case, and moved toward settlement. The interwoven facts of both cases – and allegations of pervasive discrimination spanning almost a decade – were likely too much for the university to overcome. Thus, settlement was the university's best option.

Recommendations

Both the Meyer and Griesbaum lawsuits requested equitable relief in the form of orders requiring the university to take certain remedial actions relative to discrimination. Athletic departments (or other employers) seeking to ensure they are operating a workplace free from gender or sexual orientation bias can use this example as the basis for best practice strategies.

Specifically, as requested by the Griesbaum and Meyer lawsuits, employers should consider the following:

\$6.5 million

Total settlement amount in Meyer and Griesbaum cases

Collegiate Athletic Departments

- Create a standard coaching methods handbook that applies to all coaches regardless of gender or sexual orientation.
- Provide implicit bias training and monitoring to prevent bias or stereotypes from affecting female coaches regarding hiring, assessment, pay, performance, investigations or termination.


All Employers

- Provide training to supervisors regarding how to avoid engaging in gender-discriminatory practices.
- Monitor the workplace environment to ensure that employees are not being treated differently.
- Test and evaluate supervisors to ensure they do not act upon bias or tolerate disparate treatment.



[Photo of Jane Meyer and Tracey Griesbaum by The Des Moines Register]

Even if these specific strategies are not implemented, employers must be mindful of potential discriminatory practices in the workplace.

The Griesbaum and Meyer cases do not represent a new area of concern for employers, as equity and discrimination issues have been common for decades. More uncommon, however, is the outcome of the Meyer case and the resulting dual settlements, particularly in the area of collegiate athletics. These cases may signal a shift in the landscape of collegiate athletics regarding gender bias and other related claims and should prompt athletic departments to re-examine current practices. 



SOLE REVOLUTION
Premium Synthetic Turf Infill

HIGH-PERFORMANCE SYNTHETIC TURF INFILL

Made from the same rubber used by industry leading performance shoe brands.

Request a sample kit at sole-revolution.com/ab or call for a quote **503.457.5048**

 **100% Recycled Premium Rubber**

 **LEED Certifiable & Source Traceable**

 **Chemically & Physically Tested**

 **High Performance & Durable**

Our pivotal 2017, Part I: Operational uncertainty



[Illustration by Dylan Fowler]



Rob Bishop
(rob@elevationshealthclub.com)
is managing partner at Elevations Health Club in Scotrun, Pa.

By Rob Bishop

Because I write a column that often focuses on helping club owners and managers become more successful in their own clubs, everyone usually assumes that we have a great club (true) and are wildly successful (not necessarily true).

I wrote last year about the closing of our second location, how it came to be necessary, how we handled it and how it impacted the community, our staff and our members. Well, we have also experienced some tough times at our main location. Last year was easily our most difficult year since we started in 1995 – both professionally and personally.

The club experienced a slight decline in membership as 2015 progressed, but I assumed that we'd see renewed signs of growth by January 2016. When the New Year arrived, membership numbers were better, but certainly not great. February and March weren't great either. And then membership began to shrink again.

Revenue declined in almost every category. We didn't have enough new business (memberships, corporate clients, personal training signups, etc.), and we were starting to incur debt. Things were sliding downhill – fast.

We had been at our main location for more than 20 years. We had had our ups and downs, but for the most part we had grown as the area around us had grown. We had always been a part of this community. Something wasn't right, but I could not figure out what it was. What was the problem and how were we going to fix it?

Statistics and opinions

I examined my numbers to see what they showed. We were signing up new members, but far fewer than ever before. In 2016, we averaged 10 fewer

new members per month than in 2015 and 20 fewer members per month than 2012. Cancellations weren't increasing, but they weren't going down either. Our total membership base was eroding.

I turned to a friend who is a longtime member of the club and a successful businessman. I showed him my statistical evidence of our membership and revenue declines. He immediately pointed out that all of my statistics were looking backward. There were no projections for growth and no goals. I had no plan to move forward.

The next thing he said shocked me: "The club isn't the same anymore." I thought to myself that this couldn't be true. It's clean, we have great equipment, great classes and great staff. And I'm here every day!

So I went to another friend. He and his wife are also longtime members, and he and I often discuss business issues such as marketing, staff training and customer service. I asked him if he thought the club was different than in the past. His response: "Absolutely. It's not as friendly, there aren't as many staff people in the club, and I don't know the ones who are here now."

Personnel and competition

I had to take a hard, critical look at my club. We had lost several fulltime personal trainers in 2015 (all of whom were in their 30s and 40s), and two of our department heads (both with us for more than 15 years) had left the club business.

Revenue declined in almost every category, and we were starting to incur debt. Things were sliding downhill — fast.

We always try to promote from within, and we had filled these positions with a combination of new hires and younger staff people. I had moved off the floor and into an office as a result of some behind-the-scenes changes that took place in our business. We had fewer senior staff people on hand to show the new staff “how we do things” and to lead by example. The result was, in fact, a club that wasn’t the same.

But I knew that staff, training and customer service issues weren’t the only explanation for our recent decline. We also had increased competition — first from several small boutiques (personal training, Zumba, climbing, yoga, cycling), then from a large, low-priced franchise.

I wasn’t worried. We always said we were a great club that was worth a little more per month. We were fanatical about cleaning. We offered great classes that other clubs simply couldn’t match. And, other than an aging YMCA, we had the only indoor pool in our market. Was that not enough anymore?

Uncertain future

We were still marketing and advertising, and we were using methods that had worked for us in the past. We did a billboard campaign with a humorous theme, something that in other years had always generated a little buzz in the community. We took out a large ad in a direct-mail coupon magazine — “Enjoy a Free Week at Elevations” — that traditionally resulted in dozens of new members and lots of excitement in the club. We did a “refer a friend” promotion, allowing our current members to bring their friends to the club and offering members prizes if their friends signed up.

None of these marketing campaigns resulted in a significant increase in membership. As 2016 started to wind down, we were in danger of not surviving through 2017. I knew I had to make some significant changes.

How was I going to address our shortcomings when it came to customer service? How could I get my staff to see that we were falling short of our customers’ expectations and get them on board with new training procedures? Moreover, what could I do about our seeming invisibility in the marketplace? How could we become community members’ go-to place for help in meeting their health and fitness goals?

That’s the uncertainty we faced as

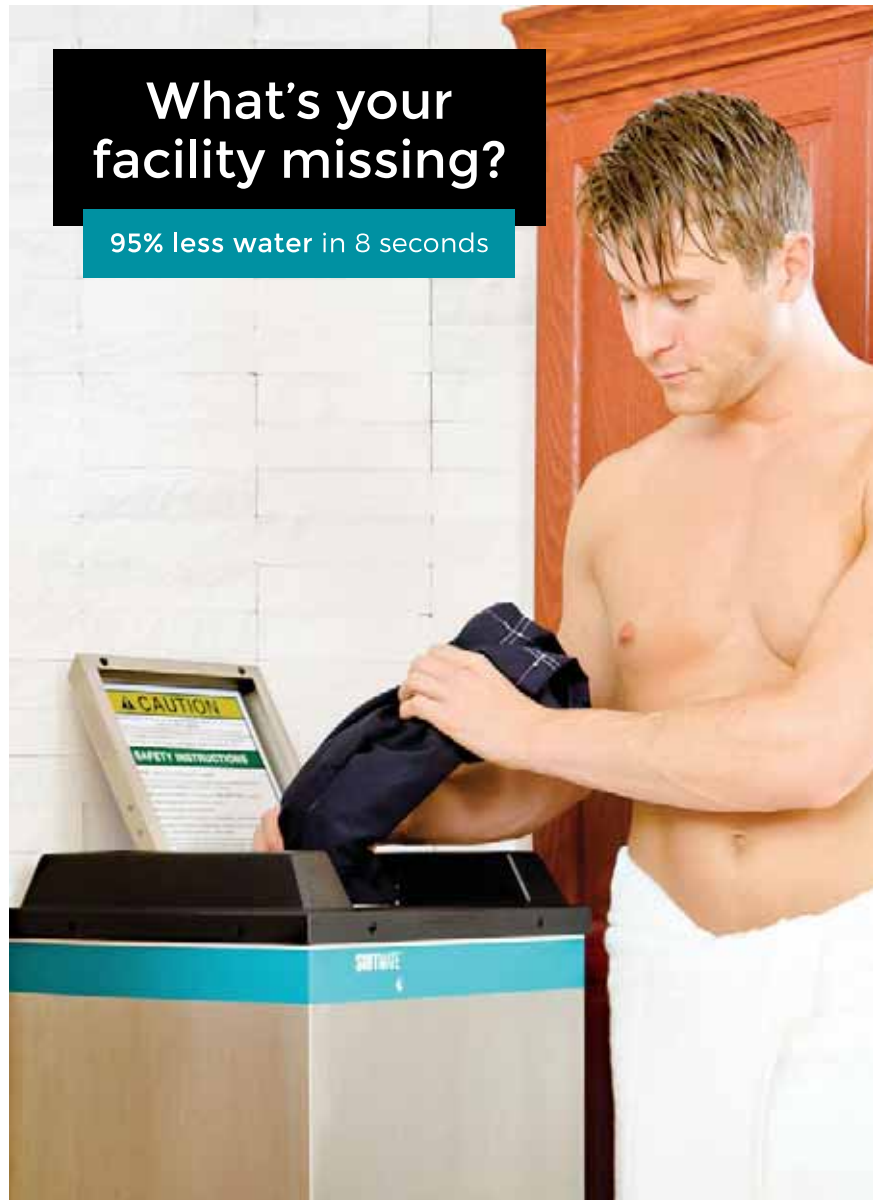
recent months unfolded in a year that could have easily unraveled — that is, were it not for advice I sought from outside our club’s inner circle.

Next month, I’ll tell you about the

person who convinced me to change our membership structure, pricing, services and marketing — and how well it’s working for us. And I’ll also reveal why I’m a little afraid of her. ☹

What’s your facility missing?

95% less water in 8 seconds



For additional information visit www.suitmate.com

SUITEMATE
Swimsuit Water Extractor

Manufactured by Extractor Corporation
685 Martin Drive, P.O. Box 99 • South Elgin, IL 60177 • USA
1-800-553-3353 • Fax: 1-847-742-3552 • info@suitmate.com

How one city beats the odds by breaking down barriers — and norms

By Mat Parker and Nick Povalitis



Mat Parker is director of athletics and activities for Rockford (Ill.) Public Schools District 205.



Nick Povalitis is sales manager for the Rockford Area Convention & Visitors Bureau.

Rockford, Ill., has seen its share of challenges over the past couple of decades — from rising poverty and crime to declining education and population — but a paradigm shift toward access is proving pivotal for the city's students and citizens alike.

The students of Rockford Public Schools District 205 (RPS 205) continue to benefit from the district's foresight during the 2011-12 school year, when officials eliminated the 2.0 grade-point average (GPA) eligibility minimum for students involved in athletics and co-curricular activities. Going off the beaten path is never easy and usually entails a good deal of criticism, but it was evident that the district needed to do things differently to better serve the community.

District officials were critiqued by ESPN's Outside the Lines (OTL) for their efforts to eliminate the eligibility requirement, and the naysayers said academic standards were simply being lowered or, worse, eliminated altogether. Despite these criticisms, the district was vindicated by the data.

Since dropping the 2.0 GPA minimum, activities participation doubled to an all-time high of 52 percent in 2016. As a result, student-athletes are challenging themselves more, as reflected in the 220 percent increase (from 1,883 to 6,027) in advanced-placement courses taken. Moreover, the grade-point average of students involved in athletics or activities (2.37) continues to trend far better than those who do not participate (1.37).

After delivering data that reflects a sound investment in Rockford's youths, OTL aired a follow-up segment earlier this summer commending RPS 205 for its counterintuitive yet progressive methods. It's a process predicated on forward-thinking that extends throughout the district's faculty, staff and coaches who serve as the support system for students wanting to compete both academically and on the field. Reinforced by

strategic hires of some of the region's best coaches and mentors, RPS 205's access-based model prepares area youths for life beyond high school.

With any success story, proper preparation is essential. In its latest strategic plan, RPS 205 magnified — in writing on the district's website — the significance of participation rates. The core belief is that athletics and activities are a positive intervention, and participation begets teamwork, accountability and results.

But Rockford didn't stop with its schools, choosing instead to take a holistic approach to bettering the community. Many of the U.S. Census Bureau's statistics about Rockford serve as a reminder of why promoting ease of access and opportunity for students is a priority for residents, too. These figures include a poverty rate of nearly 25 percent, a bachelor's degree rate of only 20 percent, high crime rates and a dwindling population.

In this context, athletics continues to be an important platform across the entire region, thanks in part to a deliberate build-out of sports facilities in all parts of town. Beyond the venues offered by RPS 205, partnerships involving the park district, Boys and Girls Clubs and other organizations continue to reinforce the narrative of progress through increased access.

Since 1984, the Rockford Area Convention & Visitors Bureau (RACVB) has hosted regional and national events in an effort to draw attention and revenue to the area. More recently, the bureau has integrated local success stories into its marketing programs, including the sports-specific Bring Your Game 2 Rockford (BYG2RKFD) campaign. Officially

Since dropping the 2.0 GPA minimum, activities participation doubled to an all-time high of 52 percent in 2016.

launched in late 2016, BYG2RKFD exists to serve the residents and visitors of Winnebago County. Actualized room nights and estimated economic impact from visitor spends are still standard tourism metrics, yet Rockford focuses as much on the positive impact on its successful sports participants as it does on the economics of such marketing initiatives.

RACVB and RPS 205 partnered most recently in June 2017, when the bureau and its first-ever sports brand ambassador, Fred VanVleet – Rockford native, Auburn High School (RPS 205) alum and Toronto Raptors guard – co-produced the FVV Summer Camp & Fan Fest in downtown Rockford. The event generated impressive numbers, including 2,700 attendees over three days, 220 youth participants in the two-day camp (including 47 who

had their registration sponsored by caring fans and businesses), and 156 stories about the weekend circulated through the media.

Again, the main concern was less about the immediate economic impact from hotel overnights and more about the opportunity to strengthen the Rockford community. Much like RPS 205 dropping a GPA minimum, this may seem counterintuitive within the traditional framework of tourism marketing. However, officials in both the RPS and RACVB remain certain that they provided access to another unforgettable experience for Rockford area residents because of partnerships that reflected the best interests of the community.

And to serve the unique needs of their hometown, these entities gladly intend to continue to lead from outside the industry norm. 📍

**LEADING
THE SPORTS LIGHTING
REVOLUTION**

Gold Edison Award Winner for innovation.

Construction Services available to save time and money.

Advanced Wireless Controls with commercial-grade network encryption.

Fixtures include protective outer lens for dirt, bugs, and birds.

THE ONLY COMPETITION IS THE SUN

GAMECHANGER
QLED

Qualite
SPORTS LIGHTING, LLC

Qualite.com | QualiteLighting

*RoHS compliant

When lightning strikes: Keeping your outdoor event safe

[Photo courtesy of Weather DTW]

By Brad Nelson



Brad Nelson is the Sports & Rec On-site Meteorologist and Safety Lead for Weather DTW.

Monitoring the weather, understanding the threat and making the call to evacuate for the safety of players and fans is no easy task, and it's one that venue managers must take seriously.

After all, the results of failing to act can be catastrophic. In the past 10 years, 313 people have been killed by lightning in the United States — an average of 31 people killed each year. And 64 percent of all lightning fatalities are attributed to leisure activities, with 15 percent coming from sports alone. Each year, more than 100,000 thunderstorms occur in the U.S., producing 25 million lightning bolts. Lightning averages two to three miles in length but can strike as far as 25 miles from the storm that produces it, making it very challenging to know when your sporting event may be in danger.

Sporting events are particularly challenging when it comes to weather safety. It takes time to evacuate players and fans to safety, and the size of the crowd and venue impacts how much warning time is needed to make an evacuation call. Venues that cover large spaces, like golf courses, can take a significant amount of time to evacuate. Major sporting events can take longer than 30 minutes to clear out.

So, what can venue managers do to be ready to protect the crowds at their events? Here are steps to take before a storm hits:

MORE

UPTIME

LESS UPKEEP



NEW HR600™
11.4-foot width-of-cut

The HR600 is built with uptime-boosting features designed to keep you mowing.



Save up to 50 hours of annual routine maintenance



InCommand™ onboard diagnostics for quick troubleshooting



Mow up to 13.8 acres per hour for increased productivity



SureStrength™ decks constructed with high strength structural steel



Exclusive Tilt Sensor Technology™ helps keep operators safe

JACOBSEN®

1.888.922.TURF | www.jacobsen.com

If Mother Nature doesn't cooperate with your best-laid plans and forces a cancellation of your event, NCS⁴ recommends you be prepared to follow these best practices:

Have a decision process in place, agreed upon with all related parties.

Decide ahead of time how a cancellation order will affect operations. Timing and notification are important factors to avoid confusion.

Include in the plan a description of actions to be taken by staff, public safety, participants and spectators.

Integrate evacuation, sheltering and reunification plans into the larger matrix to reunite participants with their personal items and families once the hazard has cleared, and ensure you provide them with adequate medical and amenity care.

Ensure that third-party and sponsor contracts have cancellation clauses, and decision-makers are equipped with knowledge as to financial implications.

Outline refund parameters ahead of time to ensure quick, effective communication.

1. Develop a lightning safety plan and protocols.

First, venue managers should develop a specific lightning and severe weather safety plan. Perhaps more important than any other step, simply going through the process of creating a plan can have a major impact on your ability to take action in the face of dangerous weather. A good lightning safety plan should be customized based on the location of your venue, the time of year, the size and type of event you are holding, and the time needed to evacuate. The only safe action during a thunderstorm is to get people into an enclosed structure or vehicle. There is no safe place to take shelter outdoors during a lightning storm.

2. Identify a responsible party to make the evacuation call.

Once a safety plan has been created, venue managers should designate someone to monitor the weather and be responsible for either making the evacuation decision or disseminating the information to the proper authorities who will make the decision to evacuate. If nobody on staff has the comfort level or expertise to fulfill this role, it can be filled by a consulting meteorologist who can provide information and recommendations to officials. The important thing is to have someone identified, to be sure that person understands their responsibility, and to empower that person to make the decision to evacuate if necessary. This person should review the lightning safety plan and become familiar with the script for announcements to visitors regarding any warnings and all-clear signals to be used.

3. Monitor the weather.

With a plan and a responsible designee in place, venue managers should monitor the local weather and plan ahead. Stay alert to severe weather watches, warnings and advisories, and overall weather patterns that could predict the potential for severe weather during your event. Staying on top of the weather in advance can help you have the proper mindset to take the warning signs of oncoming severe weather seriously. Don't let the pressure to host a successful event influence your judgment or cause you to ignore what your senses are telling you when it comes to the weather.

Accurate weather forecasts, lightning prediction technology, lightning detection apps, television news coverage, and alerts or watches from the National Weather Service are all great sources of information. There are also services dedicated to monitoring the weather for your event that can then provide alerts to help you make the decision to evacuate in time.

4. Plan your evacuation routes and locations.

The middle of an emergency is no time to realize you don't have adequate facilities to protect your crowd. Before an event occurs, it is critical that you determine the closest safe structure or location, as well as how much time you will need to evacuate everyone to that spot. Some venues may not have safe structures suitable for everyone or, due to the venue's size, it may not be possible to quickly get everyone to a safe location. In such cases, a completely enclosed vehicle is the next best option.

5. Take action as soon as you are aware of the risk.

Finally, venue managers should remember that lightning awareness begins at the first sign of a lightning threat, no matter how far away it is. This includes dark skies, rainfall, thunder rumbles or lightning flashes, and storm alerts. With the potential for lightning to strike many miles ahead of the storm, it is important not to ignore a potential threat when signs of lightning are present.

The expectation of a flawlessly executed sporting event can put a lot of pressure on venue managers, but it's important to remember that weather delays will not negatively impact the reputation of an event as much as being caught unprepared in the face of a weather emergency. The risk of endangering players, employees and fans is too high to ignore. Putting a plan in place before the storm and trusting that plan when the storm hits will go a long way toward ensuring that venue managers can respond safely and quickly in the face of danger. Ⓜ

GARRETT® — Providing Portable Protection for all of your fans!

Garrett PD 6500i
walk-through
metal detector
with NEW caster
set accessory.

Super Scanner® V
hand-held metal detector

Garrett walkthrough detectors can provide the flexibility your security team needs:

- Optional caster set enables full mobility for rapid deployment.
- Optional battery modules for 10 hours of continuous operation without the need for power cables or other wiring.

**Trust the expertise of
Garrett Metal Detectors.**

GARRETT
METAL DETECTORS

GSA Contract Holder

garrett.com • 800.234.6151 • 1.972.494.6151



Made in the USA

Making room for aquatics leisure and competition under one roof



Ted Watson
(twatson@mjma.ca)
is a partner at
MJMA in Toronto.

By Ted Watson

In developing a multi-use aquatic center, designers and operators are often met with a fundamental challenge – how to combine the demands of performance-based competition with those of community-based leisure offerings under one roof. To put it another way, how can your aquatic center train athletes, teach tots and entertain thrill-seeking bathers all at the same time? Two projects recently undertaken by our design firm and local partners have addressed this challenge.

[Images courtesy of MJMA]



www.recreonics.com
Phone: 800-428-3254




the evolution of waterplay

University of British Columbia Aquatic Centre

At the time of the UBC Aquatic Centre's 2013 conception, the existing varsity aquatics program had just sent more athletes to the 2012 London Olympic Games than had any other site in Canada. At the same time, development of lands surrounding the campus for new student, faculty and market housing had contributed to the university becoming one of the fastest-growing communities for families and youths in greater Vancouver.

The university had become its own municipality, responsible for a full range of services. This means not only providing memorable aquatic leisure and entertainment activities between classes for 50,000 students seeking memorable social outings – the kind of on-campus experiences that world-class institutions need to attract the best students and faculty internationally – but now community-based recreation, as well.

Research context

First, a survey of both campus and civic aquatic facilities throughout Canada and the United States revealed that these facilities were geared almost exclusively toward either competition or community, and the ones that did combine both programs were found to have clear drawbacks, significantly limiting their ability to deliver one or the other program to its full potential.

On American campuses, there appeared to be an extreme focus on competitive aquatic programming – often with multiple training basins, significant grandstands, event infrastructure and associated performance support spaces. Given the emerging trend for greater campus recreation and “aquatainment” offerings, it seemed leisure-focused aquatic spaces were often developed as distinct but cojoined aquatic halls or as entirely separate facilities.

On Canadian campuses, aquatic spaces were comparably focused as highly functional but “cold dark-blue rectangles” of competitive training programs. There was, however, noticeably less event capacity. These facilities creatively offered programming flexibility for other leisure-based group activities but none provided the leisure features that are now considered standard within community-based aquatic spaces: lazy rivers, Tarzan ropes, basin variety, water spray features and the like.

Coordinated use

What we have seen as a regional trend over the past decade is that municipalities throughout Western Canada have become pioneers in developing integrated competition and community-use facilities, showing numerous examples of successfully combining 50-meter competition programs with leisure-basin community offerings within a single aquatic hall. Understandably, due to the community bias of these facilities, it was found that various competitive aspects – such as event hosting and training functions – were significantly restricted at these venues due to acoustic, operational and user-space challenges.

Multiple water bodies and aquatic features viewed in close proximity also create a collective ‘wow factor.’ A child from a learn-to-swim program can watch an Olympic athlete train and imagine, ‘Maybe someday that could be me.’



PARAGON™ STARTING PLATFORMS SERIOUS PRODUCTS FOR SERIOUS SWIMMERS

- ▶ **Tops:** Solid polypropylene top is impervious to corrosion. Cross-grooves enhance drainage for the most solid start. Proprietary, standard sand top finish is non-skid. Non-metallic surface does not store heat from the sun.
- ▶ **Anchors:** Tool-less clamping anchors allow zero-movement. Wedge assembly is easily removed and stored in anchor when platform is not on deck.
- ▶ **Graphics:** Unparalleled graphics. Sand finish is applied to alternating colors inside the logo. Graphics can also be applied to a Track Start Plus+ Back Plate.

**Many upgrades available for your existing platforms.
Call us to discuss your custom solution.**

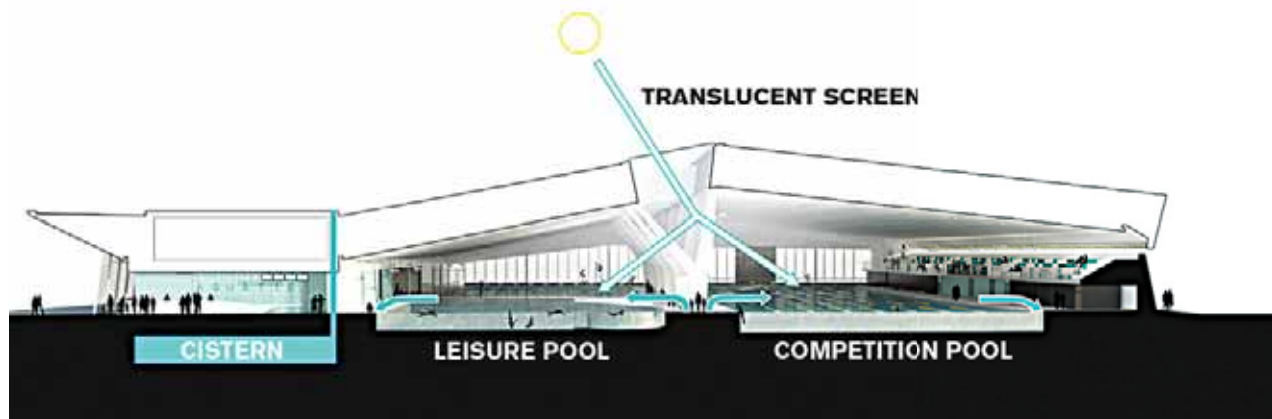


TRACK START PLUS+
DUAL LEG SIDE MOUNT
WITH HAND GRIPS

888.534.7946 • WWW.PENTAIRCOMMERCIAL.COM

©2017 Pentair Water Pool and Spa, Inc. All rights reserved.





For the University of British Columbia, the competitive aspect was a key driver for the facility, and in no way could it be compromised. The project was mandated and has now been seen as the state-of-the-art campus competition facility in the country.

The extremely tight budget for the project limited any opportunity for isolating the programs – they needed to be together, under one roof. It was also clear in the client’s agenda (and a truism seen in other Canadian examples) that combining multiple pool basins, varied user groups and flexible programming opportunities delivers the highest-value space by increasing participation, excitement and interest. Multiple water bodies and aquatic features viewed in close proximity also create a collective “wow factor.” From the university’s perspective, a child from a learn-to-swim program watching an Olympic athlete train and imagining, “Maybe someday that could be me,” would be the ultimate indication of success.

But how to design, program and plan to overcome the limitations associated with such close quarters? The following seven points illustrate some of the key strategies employed at the UBC Aquatic Centre to successfully merge the client’s goals within the tight budget constraints that many campuses and communities typically face:

Programming flexibility

The requirement to co-program elite-level training and competitions with daily community use led to a square plan with a two-sided natatorium. On one side, the 10-lane, 51-meter-by-2-meter deep basin with a moveable 1-meter bulkhead offers opportunity to host FINA and NCAA aquatic events and training.

The community side houses three basins – lap, leisure and hydrotherapy – for variety and flexibility of community programming. This space includes fun features for students, teens and children, such as a Tarzan swing, a current channel (for both fun and therapy), spray features, a hot tub, a sauna, a steam room, a water basketball court, and 3- and 1-meter springboards.

While a moveable floor in the lap pool did not fit the budget, the basin and tunnels have been designed to accommodate one in the future to further provide programming flexibility. The leisure basins intentionally do not take on curvilinear shapes, but rather retain rectilinear

planning to allow for maximization of learn-to-swim programming, while still providing variation in depth, islands and other planning to offer exploration opportunities and intrigue.

Clear planning

The lobby, which contains the building’s single point of control, provides participants and spectators access to either the dry corridor or the viewing and bleacher spaces.

Spectators can bypass the lobby and intuitively enter the bleachers from the exterior, while not disturbing community functions. Change rooms are designed with a central universal change space, completely transparent from the exterior, providing for a clear, bright and inclusive community space. Gendered change rooms are also provided to accommodate competition events, as are team athletic locker spaces.

The location and access to and from these spaces minimizes overlap of the two populations.

Daylighting

Community programming welcomes controlled natural daylight with a preference for low-glare top lighting. Competition spaces conversely desire conditions anywhere from limited controlled daylight to complete blackout.

The UBC Aquatic Centre employs a central Y-shaped bank of columns that splits the structural roof span with a 21-foot-wide glazed slot down its center, delivering light into the center of this deep plan. A translucent Barrisol screen filters and diffuses light to the competition side while reflecting and amplifying light into the community basins. Perimeter glazing provides operable blinds to fully control daylight conditions for events.

Separation and identity

A large bench structure and translucent screen creates a luminous but open barrier between the two spaces. While no actual physical or acoustical separation exists, there is a subtle balance and delineation of space that is achieved – differentiating and providing identity and character for both sides, while also remaining welcoming and open. Important team branding and varsity identity can happen on one side without creating an overall dominant or exclusionary feel.

SUCCESSFUL MEETS. POWERED BY ATHLETES. BACKED BY ACCURACY.

GEN7 technology exceeds current timing standards by offering you cutting edge technology with unrivaled precision and an all new software-driven experience; providing you with accurate results each and every time.

**CALL TODAY AND LEARN MORE ABOUT
ENHANCING YOUR FACILITY WITH THE
NEXT GENERATION IN TIMING AND SCORING**

www.coloradotime.com | (800) 279-0111 | info@coloradotime.com

© Colorado Time Systems 2017



RecSupply.com
The Pool Supply Specialists!™

**EVERYTHING YOU
NEED FOR YOUR
COMMERCIAL POOL!**

**TWO
DISTRIBUTION
CENTERS!**

**FREE SHIPPING
ON ORDERS
\$100 OR MORE!**

CALL NOW OR SHOP ONLINE!
1.866.831.0048

FREE standard shipping on orders over \$100 within the 48 contiguous US states.
In order to offer our very best prices, some restrictions apply. Visit www.recsupply.com/terms for details.

Wet Floors?

Some solutions...
are better than others.

A photograph of a small, white dog with brown spots, standing on a white surface. The dog is wearing a pair of bright yellow rubber boots on its front legs and a pair of colorful, multi-colored rubber boots on its back legs. The dog is looking towards the left of the frame.

Dri-Dek
Free Samples dri-dek.com 800-348-2398

A small inset image showing a person's hand using a brush to apply a liquid product from a bottle onto a textured, light-colored surface, likely a floor or mat.



Metro Sports Facility, Christchurch, New Zealand

In 2010 and 2011, a series of deadly earthquakes devastated Christchurch, New Zealand's second-largest city. The recovery was unprecedented and included the 300,000-square-foot, \$160 million (U.S.) Metro Sports Facility as the key community-focused recovery project.

While this was to be one of the focal social venues to bring people and vitality back to a downtown that lost 80 percent of its building fabric, it was also to be one of the South Island's top regional, national and international sports destinations. The facility features a 100,000-square-foot multi-use aquatic hall, along with a comparable bar of community and competition sport courts. Other programs such as fitness, movement and community studios, national sport partner offices, a daycare and numerous retail outlets round out the project.

The program is structured within an iconic and highly functional H-shaped design expressing the parallel dry- and wet-bar programs, with the community and social spaces conveniently inhabiting the space between.

Large linear volume

While the budget and scale of this project vastly outstrip those of the UBC Aquatic Centre, many of the same issues in combining community and competition are present, and many of the technical strategies developed for UBC are similarly employed. The notion of the "wow factor" – having immediate visual and physical access to all the basins and aquatic offerings – was also a primary driver for this aquatic hall.

The strategy in this case was to place the community and competition aquatics end to end as a singular linear volume. Once completed, this will be one of the largest aquatic rooms in the Southern Hemisphere, measuring 430 feet in length and upwards of 50 feet in interior height.

However, due to the scale of the event operations for the 3,000-seat venue – which overlooks the 10-lane, 79-meter competition basin with a complete Olympic diving center – a 40-foot-high clear glazed and operable partition is used to separate the competition and leisure volumes. This provides a physical and acoustical separation during events, while retaining access and visual continuity. A series of south-facing skylights (keep in mind, we're "down under") run the entire length of this grand natatorium and provide a rhythmic continuity of diffuse daylight, connecting the two program spaces through the use of light, form and material.

Acoustics

Anyone who has spent time in the notoriously hard and reverberant environments of an aquatic hall will appreciate the need to carefully manage the sonic component.

With hordes of gleeful children or students adjacent to competition training, the jobs of the lifeguard, swim instructor and coach become a challenge in what needs to be an instructional environment. To help control reverberation and reduce noise, the UBC ceiling is sloped downward to its minimum functional heights and the entire ceiling surface – including the sides, which tessellate downward to capture the glazed walls – are a highly absorptive fiberglass acoustical paneling system called Techstyle, designed by Hunter Douglas for humid environments.

Reports on audibility have been extremely positive. Coaches have indicated that they can position themselves anywhere in the facility for optimal instruction.

High-quality air

Low-level displacement air is delivered along the central bench that acts as both a seating space and a physical separator. This air is drawn across the water surface to the opposite perimeter gutter, where return air is captured back into the heat recovery system to remove chloramines and deliver fresh air to the athletes and bathers.

Integrated function with campus spaces

The exterior spaces are used to help manage users. Ramps parallel both sides of the aquatic hall, rising to the level of the bleachers on the east. This affords students dynamic views into the pool, creating a sense of openness and invitation. Free access through the doors at the top of the ramp allows students to casually use the bleacher space, shortcut to class or arrive at a competitive meet without the need to enter and disrupt community lobby functions.

A 35-foot-wide space is created on the north side of the building, functioning as a terraced campus laneway, but it can also be captured as space for use by the aquatic centre as an outdoor sunbathing area, a marshaling zone or a dry-land training space.

University of British Columbia Aquatic Centre Vancouver, B.C.

LEISURE SQUARE FOOTAGE: 19,300 (includes 25-meter pool and diving)

COMPETITION SQUARE FOOTAGE: 21,850

COST: \$34.5 million (Canadian)

Metro Sports Facility Christchurch, New Zealand

LEISURE SQUARE FOOTAGE: 30,600

COMPETITION SQUARE FOOTAGE: 32,900

COST: \$160 million (U.S.)

Think of it as a Volume Control for Your Pool



ECKEL
NOISE CONTROL TECHNOLOGIES

Pools can be noisy places—very noisy. In fact, they can be so noisy as to be distracting and unsafe. Eckel's noise control panels can drastically turn down the volume in pools, gyms and other recreational facilities. Call us today and wade into a world of silence.

www.eckelusa.com | email: sales@eckelusa.com | tel: 617.491.3221

BALLARD***KING**

& ASSOCIATES LTD
Recreation Planning and Operation Consultants

**SPECIAL PROJECTS REQUIRE
STRONG TEAMS. LET US
DO THE HEAVY LIFTING
FOR YOU.**

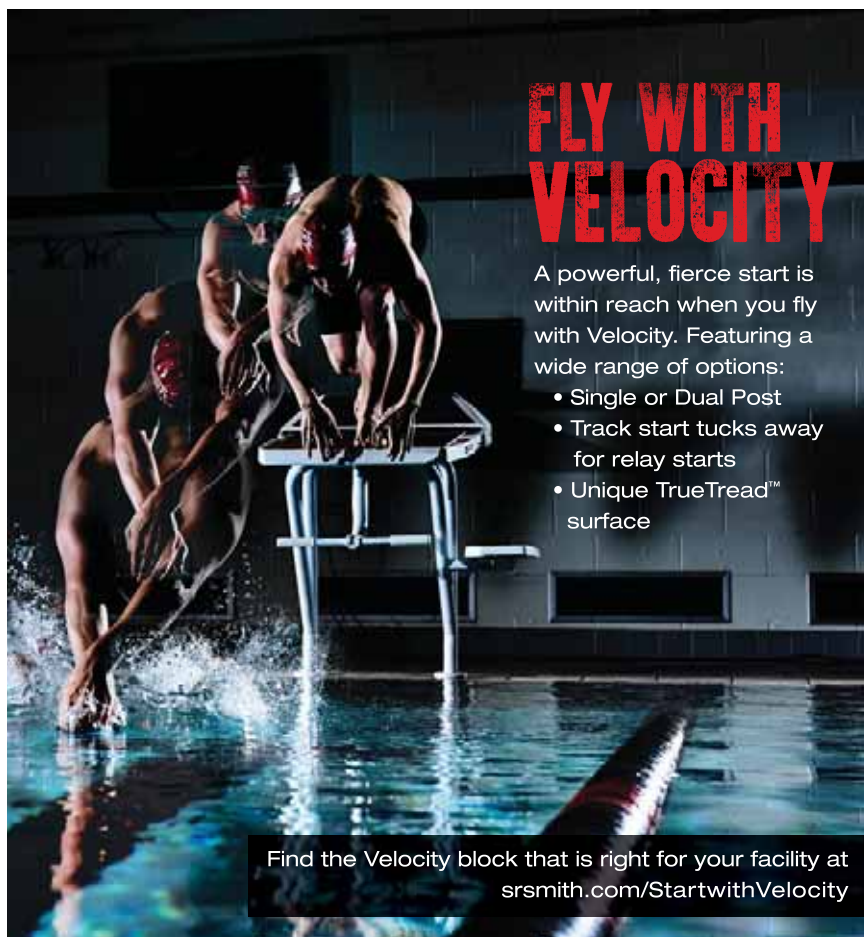
Over 600 projects completed
nationally. We specialize in:

- Master Plans
- * — *
- Feasibility Studies
- * — *
- Needs Assessments
- * — *
- Audits
- * — *
- Public Engagement

www.ballardking.com

303-470-8661

bka@ballardking.com



FLY WITH VELOCITY

A powerful, fierce start is within reach when you fly with Velocity. Featuring a wide range of options:

- Single or Dual Post
- Track start tucks away for relay starts
- Unique TrueTread™ surface

Find the Velocity block that is right for your facility at srsmith.com/StartwithVelocity



Outrageous indulgence

In addition to delivering the most comprehensive high-performance aquatic facility in New Zealand, there was an equally important agenda to deliver the country's most ambitious leisure water and play zone, with inventive and outrageous flourishes of indulgence and aquatic enjoyment.

Many of the operational design strategies implemented at UBC Aquatic Centre were undertaken here to help merge these dual goals. Further innovative aquatic programming was developed to help create unique and memorable competition and community programs. The express intent was to provide the entire spectrum of aquatic experiences.

The following features express the facility's fun side:

HydroSlides

A series of six HydroSlides and a tall glassy tower penetrate the front facade and become the facility's key outward expression of community fun and engagement. A grand canopy to the street architecturally contains these sleek black serpents, and provides shade and shelter for a connected outdoor splash pad and café below.

From the sidewalk, one sees jubilant sliders climbing the tower, and through the full height glazing down the length of the hall, one can also see the diving towers: "sentries" that mark the far end of the site. The clear message of these iconic bookends is an invitation for amateur thrill-seekers to engage with elite athletes.

Shallow-water play / beach café

This space is highly dynamic and charged to engage families and children. The bulk of the open leisure water is here, along with considerable shallow-water play space that includes an 18-foot-high inhabitable play structure. A beach entry and deck chairs surround a café.

Private experiences

In addition to providing a large, open community leisure space, three partially separate and more private spaces were also developed as part of the holistic aquatic experience.

Warm-water space specifically for adults to relax and undertake therapy is located adjacent to but acoustically separate from the leisure hall. Operable walls allow this area to be opened as part of the full leisure space. In addition, a learn-to-swim space is acoustically isolated off the main leisure area, allowing for security and auditory control for young students. Finally, an innovative sensory water center has been developed as a wellness and special treatment therapy space. This healthcare offering within the aquatic space is closely associated with a rehabilitation therapy provider located off the lobby.

Dry-land training and dry diving

In addition to the fully flexible competition basin designed to be capable of hosting future Commonwealth Games, a dry-land training space is located (along with performance coaching spaces) immediately off of the competition deck. Dry diving is also located in proximity to the dive towers to allow for viewing and participation of athletes both in and out of the pool.

The UBC and MSF projects were undertaken by MJMA in association with local partners Acton Ostry Architects (UBC), and Warren and Mahoney Architects and Peddle Thorp Architects (MSF). While these projects differ greatly in scale, they both focus on maximizing programming flexibility while maintaining dual community and high-performance functionalities. Both projects have been carefully designed to ensure that all members of the community – regardless of age or ability – are capable of participating and are encouraged through proximity to take further steps toward greater and more advanced participation. ☺

Once completed, the Metro Sports Facility's competition component will be one of the largest aquatic rooms in the Southern Hemisphere.

PRACTICE OR PLAY YEAR-ROUND IN A

CLEARSPAN FABRIC STRUCTURE

FOR NEARLY 40 YEARS CLEARSPAN FABRIC STRUCTURES has been supplying athletic facilities with the most versatile line of building solutions.

SPACIOUS INTERIORS - With no internal support posts and high clearances, ClearSpan structures ensure plenty of room for any athletic activity.

COST-EFFECTIVE BUILDING SOLUTIONS - Reduce construction costs, monthly utilities and maintenance requirements, while getting a superior structure in quality and functionality.

FINANCING AVAILABLE - Ask your Truss Arch Specialist today.



VISIT WWW.CLEARSPAN.COM OR CALL 1.866.643.1010
TO FIND OUT HOW WE CAN HELP WITH YOUR STRUCTURE NEEDS



ADMISSION TICKET

You are invited to complete the
ACADEMY FOR YOUTH SPORTS ADMINISTRATORS
to earn the



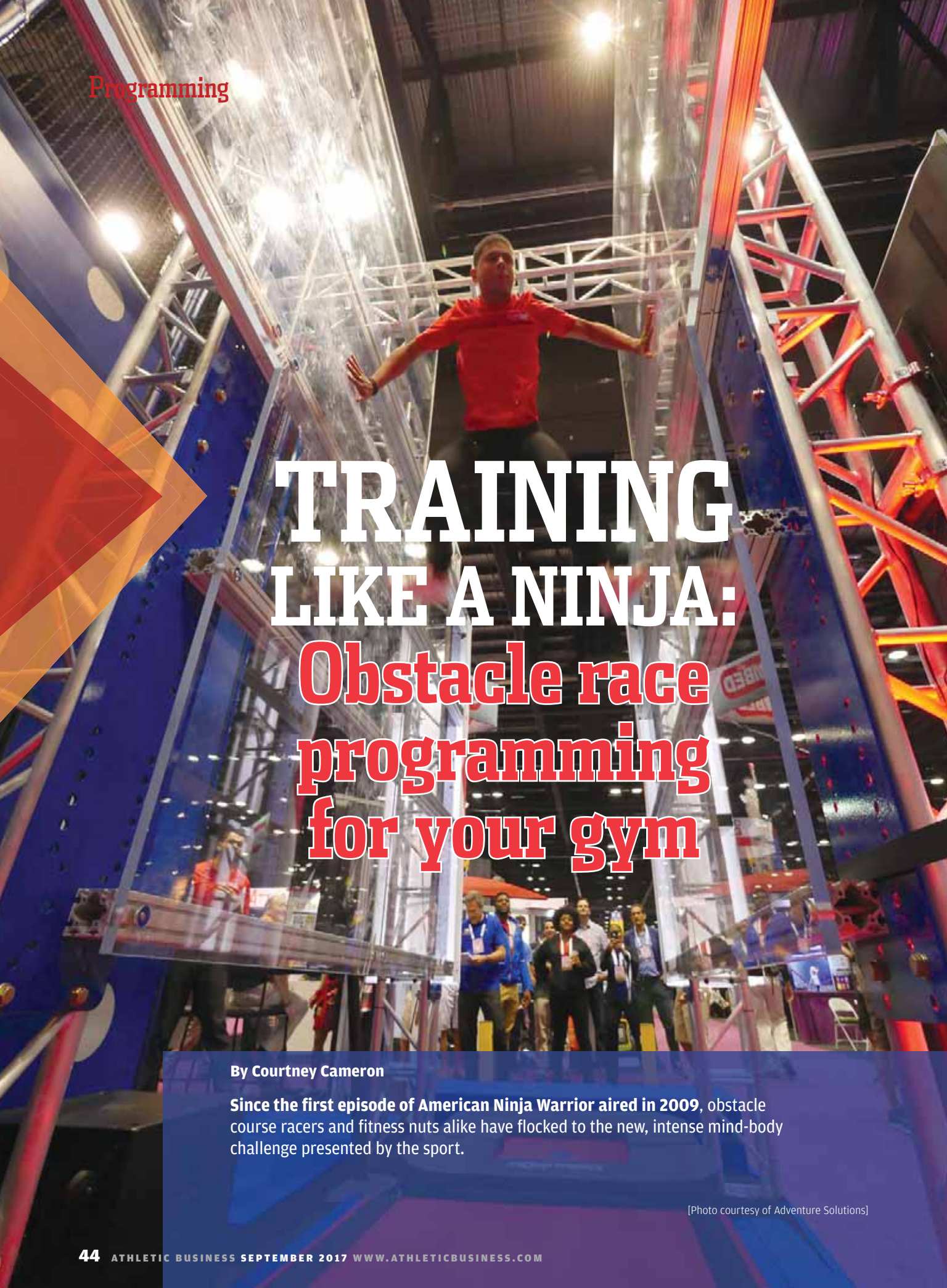
The Academy is held in conjunction with the NAYS Youth Sports Congress
& the Athletic Business Show on Nov. 8-11, 2017 in Orlando, FL

Every community should have at least one CYSA!

REGISTER TODAY AT NAYS.ORG/CONGRESS

SPECIAL CERTIFICATION

SPECIAL CERTIFICATION

A man in a red shirt is captured mid-air, performing a high jump over a complex obstacle course structure. The structure is made of metal beams and is illuminated with bright lights. The background shows a large indoor arena with other people and structures.

TRAINING LIKE A NINJA: Obstacle race programming for your gym

By Courtney Cameron

Since the first episode of *American Ninja Warrior* aired in 2009, obstacle course racers and fitness nuts alike have flocked to the new, intense mind-body challenge presented by the sport.

[Photo courtesy of Adventure Solutions]

Inspired by American Ninja Warrior, Chris Wilczewski founded the nonprofit National Ninja League (NNL), a testimony to the growing popularity of the ninja challenge course. The goal of NNL, like that of many dedicated ninja gyms, is to make the sport accessible to athletes who might not be eligible to compete onscreen. NNL facilitates ninja training by teaching the necessary skills to complete strength, endurance and flexibility challenges posed by obstacles as seen on American Ninja Warrior. To that end, NNL aids athletics facilities and recreation spaces in organizing ninja events such as local competitions or workshops taught by pro athletes.

Ninja inspiration

Although eligible facilities can be either indoor or outdoor, permanent or temporary, NNL president Wilczewski says most applicants are from dedicated obstacle course racing (OCR) gyms. One such facility owner, Warrior Playground founder Sam Banola, says of the emerging sport, "It's exploding. We've got kids who are dropping out of other sports to do this full-time."

Warrior Playground is a 5,000-square-foot training facility with a permanent, 30-obstacle outdoor ninja course on the property. According to Banola, his original goal was to appeal to the OCR crowd, such as those who wanted help preparing for Spartan Races or Tough Mudder. But, as the popularity of American Ninja Warrior continues to grow, Warrior Playground has found an unexpected niche in the youth market. Says Banola, "The youths are giving us a much more consistent attendance base, and therefore membership base."

As more climbing gyms and parkour-focused recreation centers begin to expand into the new world of ninja obstacles, Banola notes the collaborative nature of the sport's proprietors. "With all of these gyms in Colorado, we are trying to turn it into a sport for these kids, where they can actually have meets," he says. "So each gym has a team, and we can have adult teams and youth teams and travel around and compete on each other's courses."

Although Warrior Playground is not affiliated with the show, Banola says he and other facility owners keep in contact, increasing awareness for the sport through a collaborative marketing approach. Many facilities even use the term Ninja Warrior in their branding and on social media. According to Banola, inspiration for new ninja obstacles has become a two-way street between American Ninja Warrior and its copycat

Planning a ninja course

In the early stages of a Ninja obstacle course build-out, it's important for facility owners to give the same priority of thought to the logistics of installation as to the design. The succinct advice given by Adventure Solutions CEO Scott Hornick is, "Evaluate site conditions early on." This means taking note of factors such as each point of access to the site, as well as allowing time for course builders to come in during the early phases of a new construction, so as not to damage the building's interior finishes.

When planning a ninja course installation, Adventure Solutions advises site owners to consider the following factors:

SITE ACCESS – Is the loading dock at street level, or above? What is the width of the available entry points? Are there stairs or other obstructions in the path of delivery?

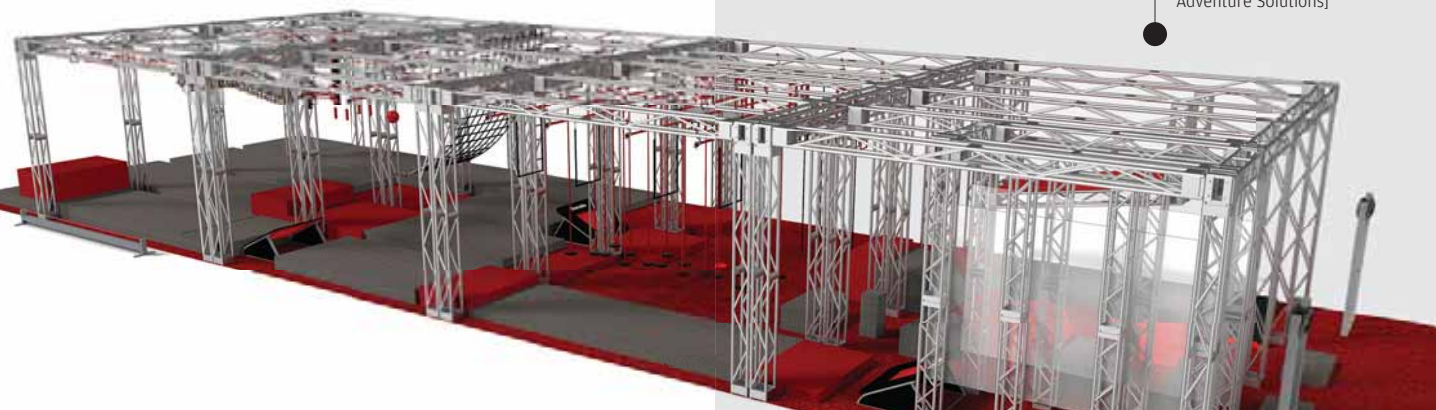
STORAGE CAPABILITIES – Will construction materials be stored on site, and are storage areas secure?

BUILDING INFORMATION – Are there other businesses sharing space that will need to be accommodated during construction? Will the site floor accommodate drilling to anchor the installation? Will the site ceiling accommodate attaching the installation, and does it meet the minimum clearance requirement of 14 feet?

Adventure Solutions also provides potential clients with a list of equipment and services that will need to be provided on site, including:

- electrician services
- adequate lighting
- a Shop-Vac
- a two-man scissor lift
- a fork lift and extensions
- a team of semi-skilled laborers equipped with basic hand tools and able to lift 75 pounds

Adventure Solutions courses are designed to fit the designated space.
[Rendering courtesy of Adventure Solutions]





Modular obstacle units can be moved and modified within the permanent frame.

[Photo courtesy of RecROC]

organizations, with spin-off gyms providing the show with new ideas and vice versa.

“As far as the obstacles go, there are so many ideas out there. We have a project list three pages long of obstacles we want to create. Some of them are obstacles we’ve seen on the show or on social media that someone somewhere in the world is doing. Others are completely novel ideas that we’ve dreamed up and we just haven’t had time to build them yet,” Banola says. “There are so many creative minds out there, always thinking about how to tweak an obstacle to make it a whole new challenge or a little bit more difficult or possibly even a little bit easier. And the show is relying on the fan base to do that. They’re even featuring that now. They had a contest last year to ‘submit your idea for best obstacle,’ and if they used it, I think they let you run the course.”

Course-setting

Not all facility owners have Banola’s confidence to create new obstacles on their course. Some prefer to leave that to the experts, and that’s where Adventure Solutions comes in. Launched a little more than two years ago, Adventure Solutions was the first commercial business to design obstacle courses based on the concept of American Ninja Warrior, according to CEO Scott Hornick. Now, Adventure Solutions is installing facilities all over the world, and Hornick projects the installation of close to 100 new courses in the coming year.

Adventure Solutions courses are modular, engineered to be hooked into place within the frame of a permanent installation and rearranged to adapt to different skill levels as well as keep things interesting. “We have over a hundred different activities, and we’re constantly creating

Train like a ninja in the off-season

In the event that you don’t have a secret project budget of \$75,000 to \$1 million stored away for the express purpose of building a ninja obstacle course, fitness equipment supplier Power Systems has launched a new, in-gym training program for obstacle course racers. The program is designed to teach facility managers how to use equipment they are already familiar with in ways that may appeal to the ninja community. In partnership with elite athlete Yancy Culp, Power Systems has developed an approach to training that capitalizes on the community element of OCR and maximizes results by focusing on grip strength, grip endurance and muscle endurance.

“We’re offering [facility owners] some new, innovative tools that they’ll be able to incorporate into the training that’s really going to take it to the next level,” says Jon Walker, marketing director at Power Systems, which charges no program implementation fee. Equipment kits range in price from \$5,500 to \$20,000, depending on square footage.

Some specialized gyms have already recognized the gains that can be made in ninja obstacle completion and race times through specialized strength training. At Warrior Solutions, where low winter temperatures make the outdoor ninja course nearly impossible to execute, founder Sam Banola routinely holds a “Build a Better Ninja” class for his most dedicated competitors. There, athletes learn how to use cross-disciplinary fitness training to develop the necessary skills to complete more challenging obstacles faster. Through strength and conditioning, says Banola, his competition team continues to improve during the off-season.

Among the equipment central to Power Systems’ newly developed OCR training program are products such as:

- THE POWERWAVE
- SANDBAGS
- SANDBELLS
- STEELBELLS
- THE 2-IN-1 FLIP AND PLYO
- BUCKETS
- ROPES
- PULL-UP BARS AND RACKS
- THE FOAM PLYO BOX STATION
- BOSU BALLS
- PREMIUM SLAM BALLS
- THE MOSTFIT CORE HAMMER
- MEDICINE BALLS
- VERSA LOOPS
- KETTLEBELLS
- DUMBBELLS

For ideas on how facility staff can use familiar equipment to supplement its OCR training offerings, visit blog.powersystems.com.



CLIMB ZIP JUMP

**Add unique adventure experiences
with Head Rush Technologies**

Free Fall Devices | Zip Line Braking | Auto Belays for Climbing | Tree Climbing Systems



headrushtech.com | +1-720-565-6885 | info@headrushtech.com | [#climbzipjump](https://twitter.com/climbzipjump)




[Photo courtesy of Warrior Playground]

“It’s exploding. We’ve got kids who are dropping out of other sports to do this full-time.”

— Sam Banola
Warrior Playground

more, because I think that’s what makes it fun – being able to interchange the activities over time,” Hornick says. “I think that’s going to be a big part of the staying power with it. You have all different kinds of activities and you’re constantly adjusting the spacing or height, so it really just changes constantly to throw you off.”

So far, the majority of Adventure Solutions’ clientele have been privately owned gyms, while universities and municipalities – with their more formal procurement process – have been slower to catch on. However, Hornick expects to expand into that market in the near future, saying, “I suspect that there will be a craze in the next five-to-10 years with colleges putting these in for their students.” The company has also begun preliminary talks with a few community recreation centers.

When pressed about the market competition aspect of the ninja business, experts from all corners of the sport say the same thing: it’s hard to keep up. While certain obstacles – such as the salmon ladder or the warp wall – are staples of ninja training, other challenges are evolving so quickly that staying up-to-date with the latest and greatest is no small task. Fortunately, for the ninja athletes who love the thrill of being thrown – sometimes literally – for a loop, the variety and innovation seen within the sport have resulted in training environments that are next to impossible to replicate. As NNL president Wilczewski puts it, “Each facility is a completely unique experience.” 



**WE BRING OUT
THE NINJA
IN YOU!**



We are the world leader in Ninja Warrior course design and construction. Our company has completed projects across the nation and in multiple countries. Let us bring the next Adventure to your facility.

855.855.0150

ninjawarriorsolutions.com



**POWER
SYSTEMS**
A PLAYCORE Company

**BRING OCR TO YOUR CAMPUS AND
CONNECT YOUR STUDENT BODY**

See OCR Training in action: **Booth 1011**

GET THE TOOLS:

powersystems.com/athleticbiz

Group training pulling its weight in the marketplace



[Photo courtesy of Technogym]

By Paul Steinbach

Pulsating beats and elevated heart rates. A full array of step platforms or stationary bikes. An instructor working as hard – or harder – than anyone in the room while exhaling instruction into a microphone headset.

For decades, group exercise didn't stray far from this model, and while such classes remain popular, there's another trend taking shape – one that addresses multiple pillars of fitness: cardio, strength, power and endurance. A modern-day circuit might include biking, hand cycling, rowing, running on a treadmill and reps on a suspension rig. Group exercise has become group training.

“We have now seen a group training environment emerge,” says Erica Tillinghast, global education

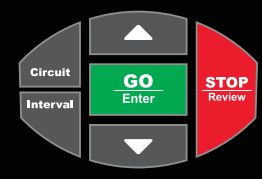
High Performance. Low Stress. No Impact.
Work Harder. Recover Faster.
Self-Powered.



INTRODUCING **SPARC** AMP UP TRAINING ZONES AND SGT

Deliver true sprint-like mechanics in a non-impact environment with the industry's most advanced HIIT solution.

Developed by our world-class exercise science team, SPARC is incomparable to traditional functional exercise equipment – offering unparalleled results from the most athletic resisted cardio machine ever built. With an easy-to-use console and get on and go experience, SPARC is designed for all populations and fitness levels.



EASY-TO-USE
CONSOLE

SPARC MOVES MEMBERS IN WAYS OTHER HIIT OPTIONS CAN'T:





“Nearly a third of club members tried a small group training session last year.”



manager at fitness equipment manufacturer Precor. “Group training environments are typically led by a coach – a personal trainer rather than a group exercise instructor – and often have different equipment stations that exercisers rotate through. Rather than participating in the workout, the coach manages the flow of the workout, provides cues to exercisers at different stations, and offers some personalized coaching.”

“We’ve found the circuit format to be an increasingly popular trend, especially in the U.S.,” adds Marco Zambianchi, president of Technogym North America. “Trainers and fitness facilities are embracing the variety that group fitness classes can offer.”

Even the “group” in “group fitness” is evolving. “Generally, that means four to 12 people,” as opposed to upwards of 60 in some traditional group exercise settings, according to Ashley Haberman, marketing manager for the U.S. commercial division at Matrix. “Because there are fewer people, it builds the community a little more. It provides more personal attention from the trainer, so it’s a good blend of personal training but in a group training format. You’re still getting assistance on the proper movements. You’re getting the programming direction. And then you also have the camaraderie, because you have a smaller group and you’re holding each other accountable.”

Most importantly, Haberman adds, “You’re still getting results.”



The movement comes equipped

Entire franchises – most notably CrossFit and Orangetheory – have been launched from the group training platform. But many of today’s best-recognized fitness brands have brought to market their own group training products and turnkey programming solutions.

“Facilities are seeking to do more with bodyweight training and simple training tools. These tools are often less costly and take up less space than more traditional equipment,” says Tillinghast, whose company offers 19 models of Queenax modular functional training equipment – one with two functional and suspension

Though group training equipment can be simple, it often occupies a space from floor to ceiling.

[Photos courtesy of Precor]



SPIRIT ENGINEERED



How well do you know Spirit? Explore the 900 Series of cardio equipment that features outstanding innovation, quality and durability to maximize your equipment investment. Built to withstand the rigors of any fitness facility, these machines feature stunning and intuitive electronics to provide an outstanding workout experience.

- Low maintenance double-sided, .5mm phenolic deck with 3" rollers
- Reliable oversized pulleys and 12-groove poly-v belt
- Powerful 5.0 hp AC drive system
- Roomy 22" x 62" workout surface



Get to know more about Spirit Treadmills at spiritfitness.com/AB-Treadmills.html

800-258-4555

COMMERCIAL.SALES@SPIRITFITNESS.COM

40th Athletic Business
ATHLETICBUSINESS.COM/SUBSCRIBE

NEVER MISS
AN ISSUE

Renew your complimentary subscription at
Athleticbusiness.com/subscribe



stations, another with 28, and just about every configuration in between. “Functional equipment can be attached or removed in seconds, and can accommodate different training styles – whether that’s circuit training, partner or team circuit training, or class training.”

Cybex offers PWR Play, which the company’s website describes as “a flexible and configurable strength and functional training solution for individual, personal and group training. It can be configured for traditional cable-based training, functional and bodyweight workouts – or a combination of both.” PWR Play comes with 27 add-on options, including storage solutions.

But even this “back to basics movement,” as Tillinghast calls it, has room for technological assistance.

Technogym introduced a digital product called TEAMBEATS™ earlier this year specifically to enhance the group training experience for patrons and providers alike. “TEAMBEATS allows operators to create an engaging and fully connected experience with the brand’s fully connected equipment, or without,” says Zambianchi, adding that the tool “tracks your heart rate in real time and allows the trainer or instructor to customize the timer for warm-up, work time, intervals, rest time and cool-down, allowing users to follow their progress.”

Moreover, trainers can manage their classes using Technogym’s UNITY™ SELF kiosk, which allows for control of timing, music and large-screen display of participants’ performance metrics.

Matrix, meanwhile, has connected pieces of its existing product line – a rower, a self-propelled

“Retention rates surge when members feel a sense of belonging within a community, find their routine fun and challenging, and are achieving results.”

treadmill and a crank cycle, to name a few – into a self-contained package called The MX4 Training System, which debuted in the U.S. last year and rolled out globally this past March. MX4 programming and goals are communicated by coaches on equipment-mounted chalkboards and, when classes aren’t in session, on magnetized workout cards that coaches can leave behind. A higher-tech complement to these tools is Matrix’s Personal Trainer Portal, which allows trainers to communicate workouts and track clients’ results through any internet-connected device while inside or outside the class setting. “We’re seeing a lot of YMCAs and other facilities repurposing racquetball courts, and this system fits right into a racquetball court,” Haberman says of MX4. “Just put this product in there, and then you have a whole new revenue stream for small group training.”



Group training combines one-on-one attention from an instructor with accountability among peers. [Photo courtesy of Matrix Fitness]

Profit center

Group training can improve the financial health of fitness providers, with certain advantages over the traditional group exercise format.

“It’s flexible in that we have the programming to offer classes, but that space can also be utilized as a zone-training or personal-training area,” Haberman says. “If you look at an indoor cycling class, that space is largely unused unless there’s a class going on, whereas if you’re using floor space for this, you can run classes but you can also offer it as an additional level of VIP access.”

Access to instruction is key. “Equipment is being designed not only with group training in mind, but also with coaching capabilities in mind,” says Tillinghast. “Nearly a third of club members tried a small group training session last year, and products that require additional instruction and allow the fitness professional to provide added value are very important.”

Make no mistake, establishing a group training environment requires commitment by the club and its personnel, Tillinghast adds. “Most instructors find it more difficult to manage circuits, where each exerciser has a unique piece of equipment and is performing a unique exercise, versus a class environment, where each person is performing the same exercise and where variability comes in personalization cued by the instructor,” she says. “However, we are seeing circuit programs being used in many clubs because they require less equipment and therefore less investment.”

Selecting the right equipment is no less important. “Equipment that is easy to get on and off, highly adaptable and scalable to different ability

levels is ideal for group training,” Tillinghast says, adding that safety is paramount, but the “cool factor” can’t be discounted, either. “Is it new? Does it challenge me? Would I want to share the experience on social media?”

Such questions can inform providers on just who they should target with their group training programs. “People want to be a part of the latest exercise craze, and in many cases are willing to pay more money to be involved in a program,” she adds. “Millennials, in particular, are looking for a personalized, unique experience and not just exercise. Members of this generation have a large fitness wallet, and they seek experiences that encourage community, camaraderie and variety. Additionally, mid-market facilities need to continue to offer compelling program alternatives to retain members as boutiques and boutique programming offerings continue to grow.”

Whether provided as part of membership – the model of many big-box clubs – or sold separately, group training is now viewed as vital to remain competitive in today’s fitness marketplace. The old adage that “it’s less expensive to retain a member than attract a new one” still applies.

“Group exercise offerings set clubs apart from each other by creating unique user experiences that keep members engaged,” Zambianchi says. “Retention rates surge when members feel a sense of belonging within a community, find their routine fun and challenging, and are achieving results. We find it is common for members to go to a certain club specifically for the group classes the facility offers. If members are not engaged with their routine and their progress, they will look to other options.”

Robots May Be the Next Line of Defense in Venue Security



[Photo courtesy of Knightscope]

By Andy Berg

When thinking about venue security, R2-D2 is likely not what comes to mind, but that could change.

Knightscope, probably the most prominent player in what is still a small market, hopes its cone-shaped rolling security robots will catch on as a high-tech surveillance option. The company's robots are already being deployed in shopping malls, Silicon Valley offices and large sporting venues. Sacramento Kings fans who attend games at the Golden 1 Center might have caught sight of that facility's unofficial mascot — a Knightscope robot that's frequently featured on fans' social media accounts. Friendly, fearless and as vigilant as their battery life will allow, robots are slowly but surely taking on the role of security guard.

Autonomous Data Machines

Knightscope robots, which the company calls Autonomous Data Machines, come in two models with loads of features. According to the specifications listed on the company's website, the ADM sensor payload includes light-detection and ranging (LIDAR) devices; high-definition, low-light video cameras; thermal imaging; automatic license plate recognition (ALPR); directional microphones; proximity sensors;

an inertial measurement unit; speed and distance monitoring; and a global positioning system (GPS).


Although the K3 and K5 models are capable of faster speeds, Knightscope says they primarily operate in the 1- to 3-mph range under normal circumstances. The machines are programmed and operated from a browser-based dashboard and are designed to monitor their battery life and return to a charging station when they run low on power.

But perhaps their greatest asset is that they're simply not human.


"I think it's pretty easy for people to relate when you see the mall security guard," says Stacy Dean Stephens, vice president of marketing and sales at Knightscope, when asked about some of the advantages of enlisting robots for security. "There's a couple things you see. You see the gentleman who is unkempt, doesn't tuck his shirt in, not entirely brand enhancing, not necessarily on top of his game in terms of what he's capable of reviewing."

To be fair, Stephens' description may be a bit of a stereotype. Obviously, there are some excellent security guards out there, but none who can

CEIA Metal Detectors for Stadium Protection



PD240
Hand-Held
Detector



PMD2 Plus
Elliptic
Detector

Our threat detection and screening systems take the guesswork out of security screening. Incorporating the latest in threat detection technology, CEIA sets the standard for safety, convenience and accuracy.

THE CEIA DIFFERENCE

- Superior detection and throughput
- Exceptionally high discrimination of non-threat items
- Compliant with the strictest security standards
- Unmatched reliability
- Walk-through, hand-held and table-top models to fit facility needs

For more information, contact your CEIA USA representative at security@ceia-usa.com or call us today at **888-532-2342**.



CEIA[®] USA
WWW.CEIA-USA.COM

CEIA USA, Ltd. All rights reserved. CEIA USA reserves the right to make changes, at any moment and without notice, to the models [including programming], their accessories and options, to the prices and conditions of sale.



The NBA's Sacramento Kings have embraced robotics as another line of defense in securing the Golden 1 Center. [Photo courtesy of Knightscope]

overcome being a flawed human being, limited by *Homo sapiens'* physiology and psychology. Human guards only have two eyes and a memory with limited capacity. As far as temperament, when presented with a threat or crisis, it's possible a human guard could be paralyzed by fear or react irrationally – which is to say nothing about the monotony of security work. Often guards are the first and last line of defense in multimillion-dollar facilities, and yet they're woefully under-incentivized. According to PayScale.com, the average security guard makes between \$8 and \$15 per hour, with an average annual salary somewhere around \$30,000.

Stephens contends that in terms of surveillance and data collection, robots cannot be beat. "The memory capability of a human being isn't anywhere near that of a machine," he says. "Each one of our robots has four cameras that are capable of reading 1,200 license plates a minute, that a user can then recall two weeks later, and they can do that at any given time."

Vigilant as they might be, a robot's presence alone might be a sufficient deterrent. "If you take the data out of the equation, and you're just looking at force multiplier effect, the machines are constantly on patrol," Stephens says. "Their visibility – being five-feet tall, three-feet wide and anywhere from 350 to 400 pounds, depending on the model – they're quite conspicuous. Bad guys don't like to be caught on video, so you're really expanding the visibility of your guard force."

In terms of cost, Knightscope robots are leased rather than owned. The company is vague on pricing, saying it tailors plans to a given customer's needs. Stephens says even smaller venues, such as

high schools, can afford a Knightscope robot. "If you talk to anybody in security, cost never comes up, because it's so much less expensive than having guards," says Stephens. "That's never a discussion point that we have. Do I think that high schools could benefit from this? The answer is unequivocally yes. That's actually part of the company's foundation. We wanted to help out in situations where patrols in schools were amplified. Do I think the price is going to come down? Probably the other way around. I think the price will probably stay the same but the feature set will continue to grow."

Surveillance of Kings

Perhaps the best endorsement for using robots as security guards lies in the fact that large-scale facilities are already using them to supplement their existing security strategies.

"The Knightscope robot supplies our safety and security teams with another set of reliable, consistent data," says Ryan Montoya, the Sacramento Kings' chief technology officer. "The Knightscope identifies a baseline of what is normal for the arena environment and autonomously patrols the concourse looking for deviations from that baseline – for example, if a bag is left where there normally isn't one, or there is elevated heat or CO₂ levels in a certain area."

Stephens agrees that at least for now, robots are only one piece of the equation. "This is software plus hardware – plus human. This is not a one-to-one replacement. We are not going to replace all the guards, but what we can do is give them the tools they need to make better decisions and do

The Knightscope robot's sensor payload includes:

- light-detection and ranging (LIDAR) devices
- high-definition, low-light video cameras
- thermal imaging
- automatic license plate recognition (ALPR)
- directional microphones
- proximity sensors
- an inertial measurement unit
- speed and distance monitoring
- a global positioning system (GPS)



For some security experts, technology is no match for the nose of a canine. [Photo courtesy of MSA Security]

that through alerts. We can make guards happier in their jobs, safer in their jobs, because now they have the tools they need to do their job better.”

Knightscope says its clients are already seeing results. Stephens cites the example of a client that averaged two criminal activities a week between January and September of 2016. The crimes ranged from criminal mischief to assault. “Since we’ve deployed our robots, that number has dropped to absolutely zero,” Stephens claims. “The robots mitigate that decision process. The bad guys decide, ‘You know what? I can do business elsewhere, and I really don’t know what these robots are capable of, and I really don’t want to find out while I sit in jail tonight.’”

The hope is that robots can help out in an event as small as recovering a fan’s lost item to something as ominous as a terrorist attack. “If anomalous levels of heat, smoke or CO₂ are detected, then a major threat can be avoided,” says Montoya. “These are threats that may be harder for a human to detect, but are still major. It’s always helpful having another set of eyes around the arena at all times so that we can react both smarter and faster to both minor and major threats.”

Security’s best friend?

Jeffrey Miller is senior vice president of MSA Security, which provides everything from consulting services to explosive-detecting dogs. Miller spent 24 years with the Pennsylvania police and was formerly senior vice president and chief security officer for the National Football League.

Miller says technology continues to evolve, in some cases driving entirely new approaches to security. When he started with the NFL in 2008, the league was still doing manual pat-downs at stadium entrances, which eventually evolved to the use of handheld metal detectors and finally the generally frictionless use of walkthrough metal detectors. That said, Miller hesitates to crown

technology a security panacea.

“The federal government has spent literally billions of dollars trying to replicate a canine’s nose and ability to detect dangerous articles or substances or explosives, and really hasn’t been able to do it,” Miller says. “So, to me, in what I have seen on the ground all over the world, you really can’t beat the canine.”

Robots, Miller concedes, could be useful, suggesting that there “will be and there always are technological improvements that help with security.” One of the areas in which Miller believes technology will play a role is in mitigating the threat from another kind of robot – the Unmanned Aerial System (UAS), otherwise known as a drone. “I think technology can and will play an important role in detecting and disrupting potential drone UAS attacks that could be perpetrated by carrying a larger payload, or the threat of multiple UAS platforms at one time coming toward an outdoor venue,” Miller says. “One way or another, I think there’s a technological solution there that’s going to aid event organizers and police in detecting those kinds of attacks at large-scale outdoor venues.”

To be sure, technology is part of what will keep us safe from the bad guys. However, it’s probably also a mistake to envision robots as completely infallible. In July, a Knightscope robot decided to take a break and cool off while patrolling outside a Washington, D.C., office building. More specifically, the Knightscope K5 model landed in an outdoor fountain and had to be fished out by human security guards.

A frictionless, friendly solution

As human beings, we’re inclined to project a personality onto almost anything. (Think Tom Hanks’ character befriending a volleyball in “Cast Away.”) Knightscope and its clients are well aware that robots are as much an attraction (and branding opportunity) as they are a deterrent.

“Our robot is certainly intriguing to visitors when we tour them around the Golden 1 Center,” Montoya says, adding that he expects robots will be coming to more venues in the future.

Stephens agrees. “If you just do a cursory search of social media, I think you’ll find that the fans have embraced it. The Kings were the first organization to conduct a Facebook Live during one of their games through a robot. It’s become its own kind of mascot.”

Aside from being seen as friendly novelties, robots are also frictionless. They add to the fan experience, as opposed to detracting from it, which is part of the balance sought in providing security for any modern facility.

Miller says that he’s always on the lookout for new ways to “screen people, where they don’t even know they’re being screened. You’re not slowing them up at all, so you’re really not impacting their fan experience. But we’re not there yet.”

Whether robots are an ideal surveillance solution or a passing fad is still very much up for debate, but given the kinds of threats seen at venues around the world, humans would be wise to consider any help they can get. @



[Photo courtesy of akansasrazorbacks.com]

By Paul Steinbach

It's not uncommon for the history of decades-old stadiums to include a renovation that removed their running track in the interest of increased seating and better sightlines for the venue's primary purpose – football. The result has been an uptick in the design of self-contained track-and-field facilities. When football (and/or soccer) is out of the picture, a track's interior is free to host field events in a manner both operationally efficient and optimal for athlete performance.

And nothing in a track and field facility influences performance more than the surfacing underfoot. Choosing a system that best fits the facility owner's needs and athletes' abilities is a decision that can't be rushed.

What is state of the art?

Most modern tracks are built in three layers: a paved asphalt substrate, a rubber performance layer and a textured rubber top layer. Ideally, laser-leveling the asphalt to within a 3-millimeter tolerance is the first step toward making a consistent running surface across the entire oval. The middle layer can

be poured on site or manufactured in advance and delivered to the site – the latter scenario ensures the greatest consistency in terms of thickness.

The top layer is applied on site in one of three ways: sprayed as a mixture of polyurethane and rubber granules; sprayed as polyurethane only, with a broadcast of rubber granules embedded during a second step (a process known as “flood and chip”); or as a factory-manufactured rubber roll that is vulcanized to the performance layer and delivered to the site as one. In all, the performance and top layers may comprise a thickness of roughly 13 or 14 millimeters, or slightly more than a half-inch.



MONDO | TRACK & FIELD

MONDO TRACKS. DESIGNED TO HOST WORLD-CLASS EVENTS AT ALL LEVELS.

WWW.MONDOWORLDWIDE.COM

MONDOTRACK WS SUPER X 720 SUPER X PERFORMANCE

 **MONDO**



“We want to make sure that we’re bringing to market what clients need. When the athletes are going to be there every day, they need to like what they run on.”

The same Mondo track surface covers both oval and infield at Louisiana State University’s Bernie Moore Stadium.

[Photo courtesy of Mondo]

Not only are manufacturers tweaking those measurements based on desired performance levels for individual clients and installations, they continue to invest in the research and development of entire systems. Mondo, whose tracks have produced 265 world record times (as of this writing), found that incorporating a honeycomb structure within its performance layer returned more energy to runners than the company’s previous waffle pattern, and this translates into increased speed, according to Michael Tovar, director of Mondo’s track division.

But not all tracks are created equal, and that’s by design. The neighborhood high school is not hosting the next Olympics, and each track should be specified to best suit its use. “I could tell my clients, ‘I will make more money if you go with a premium surface,’ but most often these are athletes who are training hours per day, so safety is a concern, too,” Tovar says. “We want to make sure that we’re bringing to market what clients need. When the athletes are going to be there every day, they need to like what they run on. They need to be safe.”

The running surface itself is textured for both safety and performance. And because today’s tracks are nonporous, the entire oval is pitched slightly for drainage (at no more than a 1 percent slope) toward an infield perimeter gutter system.

Selection and care

Manufacturers might offer several variations on this layered theme, with formulations tweaked based on the level of competition. Tracks can be certified by the International Association of Athletics Federations (IAAF) in two ways – at the point of manufacture and through a process of on-site testing – or a combination thereof. The type of track used during Olympic or World Championship competition is out of the budget reach of most institutions, which are better served by tracks built to strike a balance between safe training and competition performance.

“A running track needs to perform and last and do well for the owner, and the athletes need to be

able to compete according to who they are,” says John Aten, a vice president at surfacing manufacturer Regupol America. “Not every high school needs to have an IAAF-approved running track, but the owner is making an investment in the surfacing system, and they want it to be worry-free.”

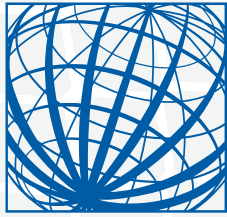
Most tracks are expected to last 10 years – longer if care is taken to distribute wear and maintain a clean surface. Steps such as occasionally moving starting blocks and dictating lane use during training (odd lanes on odd days, for example) will lengthen the lifespan of a track’s high-wear areas. “If you let everyone run on the inside lane, guess which lane is going to wear first?” Aten says. “A lot of it is commonsense practice. Even though they’re made from rubber and are durable, the surfaces won’t last forever. They will wear. The rubber tires on your car will wear, and if you don’t rotate them, you’ll wear them out faster.”

Aesthetics is another consideration during surface selection. A range of colors can be specified for both track and field surfacing, but terra cotta remains the popular choice. Specifying a custom color – or colors, in the case of alternating lanes – will add cost to any project.

Maintenance and repair

In the event that a certain area of a track becomes too worn, it can be resurfaced, often with excess material stored on site at the time of initial installation. Field event surfacing is likewise subjected to heavy wear in certain areas (for example, the foul line of the javelin approach), and at a relatively higher rate of degradation, requiring more frequent replacement. Manufacturers’ recommendations should always be adhered to in terms of which type of spikes are appropriate for the specified surface.

Manufacturers’ recommendations should also be followed when cleaning track and field surfaces. This might entail power washing with pure water twice a year or every few years, depending on the surface provider, to remove accumulated dirt from the



INCOR

*The custom
netting experts!*



Track & Field Netting



UV Resistant



Custom Fabricated

860-531-1049

incord.com

sports@incord.com



**SYNTHETIC TURF
MAINTENANCE EQUIPMENT**



SPORTCHAMP



TURFKING



TURFCARE

SMG Equipment
*"passion for sports grounds"
since 1975*

2002 West Valley Hwy. N. Ste 200
Auburn, WA 98001
www.smgequipment.com
info@smgequipment.com
(253) 249-7050



S I N C E 1 9 6 5
800-723-TURF (8873) | www.astroturf.com



NOW OFFERING:
STATE-OF-THE-ART TURF SYSTEMS
LEGENDARY REKORTAN® TRACKS
E-LAYERS®
& MORE

In 2016, SportGroup purchased AstroTurf and ProGrass,
forging the world's leading sports surfacing company.
Now our clients have one point of contact
for *all* of their sports surfacing needs.

GLOBAL THINKING. AMERICAN MANUFACTURING. LOCAL SERVICE.



[Photo courtesy of Mondo]

“Not every high school needs to have an IAAF-approved running track, but the owner is making an investment in the surfacing system, and they want it to be worry-free.”



[Photo courtesy of Regupol America]

textured rubber. Larger debris can be addressed with a leaf blower. Chemicals should be avoided, but a mild detergent with a neutral pH may be permissible. Lane lines will likely need to be repainted at least once during any track's lifespan.

Meanwhile, some performance layers are designed to survive the top layer's lifecycle, with a new running surface applied to the old one, adding millimeters of thickness in the process. “We did a project at a university in Pennsylvania that is now 27 years old, and the original base pad installed in 1990 is still there,” Aten says. “We came in and rejuvenated the top surface after 23 years of service.”

Infield considerations

When field events are held within a track's infield, the same surfacing materials are often used on such areas as the high, long and triple jump approaches, the javelin and pole vault runways, and the steeplechase course. (One notable exception is the shot put pad, which is typically concrete.)

Between those areas, facilities may choose

natural grass or synthetic turf. Less common is the track infield that is covered entirely with the same surfacing as is used on the track oval – a decision based largely on aesthetics, according to Tovar. “Most of the time, the infields are natural grass or they go with a synthetic grass, but if you build synthetic grass in the infield, then you cannot have your throwing events there,” he says. “Your javelin, your shot put – you have to find an area close to the track where you have your throwing events.”

Just as synthetic turf isn't designed to sustain the blunt forces of certain field events, a track stadium's rubber surfaces are susceptible to damage from the heavy loads of vehicles and equipment carts. “If you drive over the system, you need to drive over it in a straight line. You don't want to make sharp turns that could cause any type of shear or damage to the surface,” says Aten, who recommends placing a temporary layer of rubber over the surface to accommodate such wheel traffic.

The speed at which track and field surfacing technology has progressed is evidenced by the fact that the Mondo track installed for the 2012 Olympics in London was replaced for the IAAF World Championships held there last month. “I'm telling you, I go to that facility often and it was perfectly fine. They just wanted to have the latest technology,” says Tovar, who says the new surface in London is the type of track that debuted at the 2016 Rio Games. “It's funny, because in this sport, the difference might be milliseconds, but we never stop trying,” he adds. “Our goal is to always give the best for the athletes.” @

TLC *for* LED™

Total Light Control™

Control

from foundation to poletop...

from the light source to the field, preserving the night sky...

assuring the results you expect, day 1...year 1...and for 25 years.



We Make It Happen.®

Learn more at www.tlc4led.com

PRODUCT SPOTLIGHT

Stadiums & Outdoor Surfaces



A-Turf

Pottsgrove (Pa.) High School chose A-Turf® Titan for transforming a section of land into a PIAA regulation-sized field for soccer, field hockey and lacrosse based on the company's reputation for turf playability and longevity. The school's athletic director was struck by Titan's realistic look and the feel of the fibers. The field construction process also impressed him, particularly A-Turf's efficient communication, attention to detail and depth of product knowledge.

www.aturf.com
(888) 777-6910



Accella Polyurethane Systems

Accella Polyurethane Systems recently launched Tru-Motion™ custom flooring solutions for the athletic, play-safety and multipurpose markets. Products include indoor multipurpose surfaces, playground safety surfaces and outdoor running tracks. The holistic set of solutions combines years of technical expertise to deliver high-quality products that perform consistently from the laboratory to each installation site. Accella Polyurethane Systems' distinguished customer support ensures efficient, successful installation of each unique Tru-Motion application.

www.accellacorp.com
(888) 899-9665

See ad on page 63

AstroTurf

Despite many independent studies, some users are reluctant to accept a common turf system component: crumb rubber. The Green Series from AstroTurf features no rubber. Instead, these systems feature a shock pad and an extremely dense pile – at least three times more dense than AstroTurf's next-heaviest system. For ballast and cooling, AstroTurf adds ZeoFill, which absorbs 81 percent of its weight in water and evaporates over time. The Green Series is a solution for clients seeking high performance and durability in non-controversial turf systems.

www.astroturf.com
(800) 723-8873



Reach the High School Athletic Market! 48th National Athletic Directors Show

The **ONLY** national conference exclusively for high school athletic administrators.

- Approximately 300 booths.
- More than 1,800 athletic directors in attendance.
- Reach high school athletic directors – the decision-makers in the high school athletic market.
- Advertising available in the NIAAA's *Interscholastic Athletic Administration* issue dedicated to the conference.



Phoenix Convention Center

Phoenix, Arizona | December 10-11, 2017

Shane Monaghan | NFHS
317-822-5721 | smonaghan@nfhs.org

Sherrice Dubose | NIAAA
317-587-1450 Ext. 3 | sdubose@niaaa.org



BEAM CLAY®

THE STANDARD OF EXCELLENCE: Everything you need to maintain and improve your infields is supplied by BEAM CLAY®, makers of infield mixes, mound & batter's box clays, and red warning tracks for every state and climate from regional plants nationwide. BEAM CLAY® also supplies hundreds of ballfield products "from bases to windscreen" and has supplied every MLB team, most minor league and college teams, and thousands of towns and schools from all 50 states and worldwide!



BEAM CLAY® RED INFIELD MIXES

Available Nationwide from the:
Northeast, Midwest, South & West

Partac Peat Corporation
One Kelsey Park | Great Meadows, NJ 07838
800-247-BEAM (2326)
sales@beamclay.com | www.BeamClay.com



QUALITY BLEACHERS, BENCHES, & PICNIC TABLES FOR OVER 25 YEARS



www.bleachers.net | 888-568-9064



Brock International

One in five concussions results from a head-to-turf impact. Brock Shock Pad technology has revolutionized the synthetic turf industry and ushered in an era of safer turf field design. The PowerBase/YSR and PowerBase/PRO panels are engineered specifically for turf sports and use a patented polypropylene material that allows synthetic turf fields to closely mimic the safety, performance and feel of pristine natural grass.

www.brockusa.com
(303) 544-5800

See ad on page 67



Beam Clay/Partac

Everything needed to maintain and improve infields is supplied by BEAM CLAY®, makers of infield mixes, mound and batter's box clays, and red warning tracks for every state and climate from regional plants nationwide. BEAM CLAY also supplies hundreds of ballfield products – from bases to windscreens – and has supplied every MLB team, most minor league and college teams, and thousands of municipalities and schools from all 50 states and around the world.

www.beamclay.com
(800) 247-2326

See ad on page 57

CEIA USA

The PMD2 Plus Elliptic walkthrough and multizone metal detector is ideal for checkpoint locations that require rapid installation and ease of system use for screening personnel. The PMD2 Plus provides superior detection of a full range of metal weapons while applying cutting-edge discrimination technology to metal personal items, a rapid transit flow of individuals, and versatile visual and acoustic signaling capabilities. Its exclusive elliptical shape allows security personnel to have a clear view of individuals passing through the detector. Meanwhile, the PD240 and PD140N handheld detectors combine high reliability with advanced detection and operator signaling features.

www.ceia-usa.com
(888) 532-2342



Century Industries

Century's TSP15-450 series of 15-row TranSport mobile grandstand bleachers offers increased flexibility and utility for stadiums and athletic fields, allowing for quick and easy reconfiguration of seating to suit the event. Featuring the same single-person setup of Century's popular 10-row highway-mobile bleachers, TSP15-450 bleachers provide 50 percent more seating capacity per frontage foot – per delivery and per setup – plus 50 percent greater visibility for spectators.

www.centuryindustries.com
(800) 248-3371

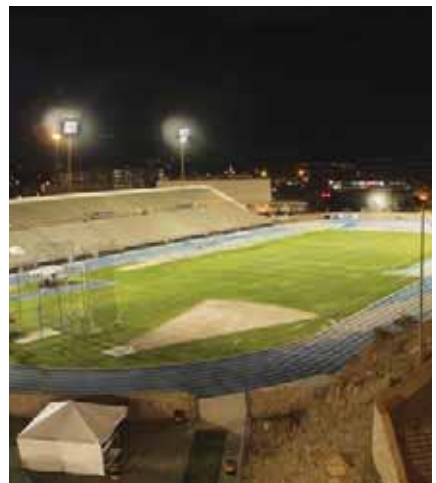
See ad on page 39

Colorado Time Systems

Since 1972, Colorado Time Systems has provided premier athletic facilities with top-quality timing, scoring and display solutions. CTS provides timing and scoring for almost every sport, with a full line of video boards and LED numeric scoreboards for stadiums large and small. Each scoreboard is conformal coated to protect against the elements and provide a long-lasting solution.

www.coloradotime.com

(800) 279-0111



Connor Sports

Made from rapidly renewable materials, ProTraxx is a durable and resilient track surface designed for safe, comfortable training and competition. Its waffle-like base layer provides a shock-absorptive surface that reduces muscle fatigue and creates a consistent feel. The highly weather-resistant material also provides excellent traction with its non-slip texture.

www.connorsports.com/rubber

(800) 283-9522



Covermaster Inc.

In January, BMO Field in Toronto needed new sod to prepare for Toronto FC's March 31 opener – a challenging task during winter in Canada. Thanks to Covermaster's inflatable MacLeod Cover – featuring translucent fabric and heated air blowers – the stadium defied mother nature by meeting the deadline. With heated, forced air circulating underneath and sunlight passing through, the cover creates a micro-climate, allowing photosynthesis to take place. This all-weather cover also extends the growing season.

www.covermaster.com

(800) 387-5808

See ad on page 33

Garrett Metal Detectors

Garrett Metal Detectors' new Walkthrough Caster Set is ideal for stadiums, special events and school use. The casters, which can be permanently attached, allow full mobility of a Garrett PD-6500i walkthrough metal detector by one person. Detectors can be moved to a secure location when they are not in use, allowing for an unimpeded exit at the close of an event. The caster assembly is constructed of durable, powder-coated steel for use in all types of environmental conditions.

www.garrett.com

(800) 234-6151



See ad on page 13

GT Grandstands

GT Grandstands designs and manufactures premium-quality grandstands, bleachers and other spectator seating options. Its selection includes permanent grandstands, press boxes, existing structure renovations, standard portable bleachers and team benches. GT Grandstands offers a variety of bleacher styles with optional ADA accessibility features. Understanding the importance of a trusted agreement between customers and suppliers, GT Grandstands is committed to quality and efficiency.

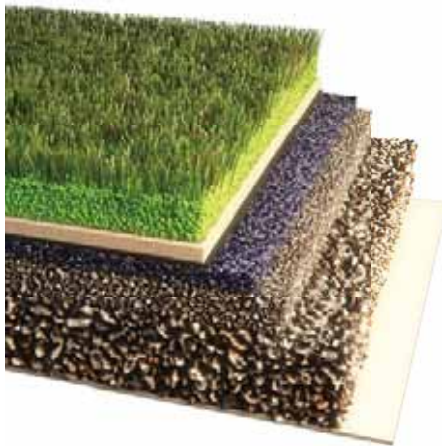
www.gtgrandstands.com
(866) 550-5511



Daktronics

With 50 years of experience in the industry, Daktronics is recognized worldwide as a designer and manufacturer of complete scoring systems. These systems help facility operators create an unforgettable gameday experience and enhance students' academic success by finding new ways to utilize displays for multiple sports.

www.daktronics.com/highschoolsportsblog
(800) 325-8766



GreenFields USA

The GreenFields MX 3-STAR turf system, which made its debut inside Atlanta's Mercedes-Benz Stadium this summer, is one of the most advanced turf systems on the market. Its multilayer construction – featuring GreenFields' MX turf, STAR infill and the TenCate ECOCEPT base – not only replicates the playability of natural grass but delivers a more consistent surface. No grain and reduced glare also contribute to an authentic, natural appearance.

www.greenfieldsusa.com
(855) 773-6668

See ad on pages 63

InCord

InCord safety netting systems for stadium and outdoor applications are custom-built to suit clients' specific facilities and requirements. With exceptionally high standards in performance and appearance, InCord has been the North American industry leader in sports safety netting for more than 20 years, offering an extensive range of materials and services. InCord can help protect spectators and operations while keeping the action where it belongs – on the field.

www.incord.com
(860) 537-1414





Putterman Athletics

Putterman Athletics offers a variety of custom-made athletic field covers to fit the specific size, fabrication and budget of individual projects. The Elite Vinyl AFC can cover an entire field or protect targeted spaces such as the pitching mound and bases. A quality cover can help protect the investment made in a quality field. Clients can also demonstrate team spirit by adding a custom logo. Putterman Athletics' eco-friendly ReGard™, in use at Wrigley Field, is featured in the image.

www.puttermanathletics.com
(800) 621-0146

See ad on page 4-5

Eaton's Ephesus Lighting

Eaton's Ephesus All Field Series, available in 750- and 550-watt models, provides high schools, colleges and municipalities with a high-quality, cost-effective, versatile and controllable outdoor LED sports lighting solution. Engineered to satisfy a client's specific needs, its low weight and low Effective Projected Area (EPA) make it the first LED fixture designed to easily retrofit into existing sports lighting infrastructures. Additionally, the self-contained electrical junction box and easily deployed lighting control system dramatically reduce installation costs. The enhanced engineered optics efficiently deliver uniform light on the field to significantly reduce unwanted light spill and sky glow.

www.ephesuslighting.com
(315) 579-2873



See ad on page 31

Jacobsen

Jacobsen's new ultra-efficient HR800 16-foot rotary mower offers the best of all worlds. It cuts an acre of grass in less than four minutes while using 33 percent less fuel than the previous HR9016 model. The HR800 weighs nearly 2,000 pounds less than its direct competitor and features SureStrength™ decks constructed using high-strength structural steel, as well as an exclusive tilt-sensor technology that helps keep operators safe.

www.jacobsen.com
(888) 922-8873



Southern Bleacher Co.

Since 1946, Southern Bleacher has helped school districts and colleges create venues that stand the test of time, season after season. Whether a project involves renovation and expansion of existing bleachers or new construction, the company's expertise and dedication to excellence result in first-class grandstands. Customized color options are available.

www.southernbleacher.com
(800) 433-0912

See ad on page 3



John Deere

The John Deere 8900A PrecisionCut large-area reel mower offers turf professionals a productive and versatile reel mower solution. The 8900A features a broad width-of-cut (114-inch or 130-inch) and 8 mph mowing speed, allowing operators to cover more area in less time. A shorter wheelbase (62.4 inches) makes the 8900A more maneuverable in tighter areas. Additionally, an operator station with easy-to-use fingertip controls and air-ride seat offer operators improved productivity and comfort. www.johndeere.com/sportsturf
(608) 821-2000

See ad on page 13

Kay Park-Recreation Corp.

New customizable bleacher wraps by Kay Park are a multifunctional way to display school spirit in any spectator venue. Customizable bleacher wraps block views of unsightly trash that falls beneath bleachers and prevent children from climbing under bleachers, while also providing a place for extra storage. Bleacher wraps are made of heavy-duty, printable mesh fabric with durable grommets to attach to the bleacher frame.

www.kaypark.com
(800) 987-2313



See ad on page 61



Mondo

Mondo's Super X 720 track combines the wear layer of the company's renowned Super X Performance track and the backing of Mondotrack – the two elements vulcanized together to form one seamless piece of material that delivers performance, traction, durability and safety. The backing provides exceptional shock-absorbency and energy return, which further helps the performance layer enhance athletes' comfort. This enables them to achieve faster times than when running on other surfaces, as evidenced by more than 250 world records being set on Mondo tracks. www.mondoworldwide.com
(800) 361-3747

See ad on page 65

Musco Sports Lighting LLC

Musco has shaped the history of sports lighting since 1976, with innovations in light control responsive to the needs of facility owners, players, fans, neighbors and the night sky. Musco's TLC for LED™ technology can be used everywhere – from community fields to collegiate and professional stadiums and arenas to international superspeedways and the Olympic Games. Musco's 25-year parts and labor warranty and Control-Link® remote on/off system management service provides 24/7 peace of mind.

www.musco.com
(800) 825-6020



Spectrum Scoreboards

Spectrum understands the impact a new scoreboard can have on its audience. Spectrum's custom-designed scoreboards are the crowning jewel of a new stadium, unique to each facility and available to meet any budget. With guaranteed product longevity and lifetime service and support, Spectrum has one of the best warranties in the scoreboard industry.

www.spectrumscoreboards.com
(800) 392-5050

See ad on page 67



Varsity Scoreboards

The VSBX-742 from Varsity Scoreboards features a 20-foot-wide cabinet with the same rugged, high-quality, heavy-duty galvanized steel construction and powder-coat finish as the company's permanent scoreboards. The 20-inch, super-bright, 100,000-hour LED displays provide maximum visibility on and off the field.

www.varsityscoreboards.com
(866) 575-0577

National Recreation Systems

National Recreation Systems provides high-quality seating systems that include small, portable bleachers, large seating systems, team benches and custom designs. NRS also offers renovation options to update noncompliant bleachers to current building and safety codes. The company is committed to exceeding customer expectations by fabricating quality products and meeting customer contract requirements in a timely manner.

www.bleachers.net
(888) 568-9064





**SUCCESS
STARTS HERE**

Renew your complimentary subscription at
Athleticbusiness.com/subscribe

See ad on page 29

Qualite Sports Lighting LLC

Qualite's award-winning, Q-LED GameChanger™ is a sports lighting revolution with unique proprietary optics, beam shapes, durable housing, advanced controls, a modular system platform, a protective outer lens and driver technology. Qualite has been a trusted sports lighting partner for high schools, colleges, parks and recreation departments, and minor and major league professional sports franchises for more than 30 years.

www.qualite.com
(800) 933-9741

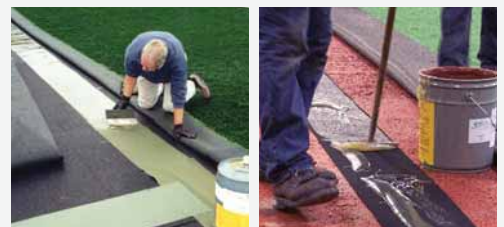


See ad on page 23

Synthetic Surfaces

For 43 years, NORDOT® Outdoor Adhesives have been used to install outdoor synthetic turf athletic fields and recreational surfaces worldwide. They have a well-earned reputation for long-term durability in all types of climates. Additionally, a new adhesive that replaces hot melts is now available. All NORDOT® one-part urethane adhesives are easily applied by glue box, trowel, squeegee or airless spray, can be used in sub-freezing to desert-like temperatures, and have superior "green strength" (grab) and outstanding water resistance.

www.nordot.com
(908) 233-6803



See ad on page 63



SMG Equipment

For more than 40 years, SMG has been a leading manufacturer of equipment for the installation and maintenance of synthetic turf fields and running tracks. SMG Equipment offers a complete line of turf maintenance tools, including drag brushes, ground-driven tow-behind sweepers, tractor-mounted PTO-drive sweepers, and the top-of-the-line SMG SportChamp.

www.smgequipment.com
(253) 350-8803

See ad on page 25

Sole Revolution

Sole Revolution is a synthetic turf infill made from 100 percent recycled athletic shoe rubber. The optimized chemistry and emphasis on player safety ensures fields will yield high-performance results for athletes – while its recycled content gives clients an environmental edge. Sole Revolution offers a practical solution that can be tailored to meet a wide range of sport and field system requirements, making it a premier infill solution for installers, architects, purchasers and players alike.

www.sole-revolution.com
(503) 457-5048



See ad on page 84



Sporturf

Sporturf PowerHouse is designed to offer the most use for the dollar. PowerHouse pairs the most durable grass blades in the world with the strongest secondary backing on the market to create extreme durability. With more than 5,000 field installations worldwide, PowerHouse also provides a multicolor look for a natural appearance.

www.sporturf.com
(800) 798-1056

ADVERTISER INDEX

Adventure Solutions.....	49	www.ninjawarriorsolutions.com	Extractor Corp./ SUITMATE.....	27	www.suitmate.com	National Recreation Systems Inc.....	67	www.bleachers.net
Aquatic Design Group	80	www.aquaticdesigngroup.com	Garrett Metal Detectors.....	33	www.garrett.com	Pentair Commercial Aquatics	37	www.pentaircommercial.com
Aquattica Pools & Water Parks, Inc.	80	www.aquattica.com	GT Grandstands Inc.	13	www.gtgrandstands.com	Perkins+Will	81	www.perkinswill.com
AstroTurf	63	www.astroturf.com	Hastings+Chivetta Architects Inc.....	80	www.hastingschivetta.com	Power Systems Inc.	49	www.power-systems.com
Athletic Business Show	19, 77	www.abshow.com	Head Rush Technologies	47	www.headrushtech.com	Qualite Sports Lighting LLC	29	www.qualite.com
Ballard*King & Associates	41, 80	www.ballardking.com	HOK	80	www.hok.com	RDG Planning & Design.....	81	www.rdgusa.com/sports
Barker Rinker Seacat Architecture.....	80	www.brsarch.com	Hughes Group Architects	80	www.hgaarch.com	Recreation Supply Co. Inc.	39	www.recsupply.com
Beam Clay/Partac Peat Corporation.....	67	www.beamclay.com	InCord.....	63	www.incord.com	Recreonics Inc.....	35	www.recreonics.com
Bona Vita Architecture.....	80	www.bonavitaarchitecture.com	JACOBS	80	www.jacobs.com	S.R.Smith.....	41	www.srsmith.com
CannonDesign	80	www.cannondesign.com	Jacobsen, A Textron Company	31	www.jacobsen.com	Sasaki Associates Inc.	81	www.sasaki.com
CEIA USA	57	www.ceia-usa.com	John Deere	3	www.johndeere.com	Sink Combs Dethlefs	81	www.sinkcombs.com
ClearSpan Fabric Structures.....	43	www.clearspan.com	Kay Park-Recreation Corp.....	13	www.kaypark.com	SMG Equipment LLC.....	63	www.smgequipment.com
Colorado Time Systems.....	39	www.coloradotime.com	Matrix Fitness.....	2, 14-15	www.matrixfitness.com	Sole Revolution	25	www.sole-revolution.com
Combat Turf	84	www.combatturf.com	Mondo	61	www.mondoworldwide.com	Spirit Fitness	53	www.spiritfitness.com
Cybox International Inc.....	51	www.cyboxintl.com	Moody Nolan Inc.	80	www.moodynolan.com	SportsPLAN Studio.....	81	www.sportsplanstudio.com
Dewberry.....	80	www.dewberry.com	MSA Sport	80	www.msaarch.com	Synthetic Surfaces Inc.	23	www.nordot.com
Dri-Dek	39	www.dri-dek.com	Musco Sports Lighting LLC.....	65	www.musco.com/ab	TDA Architecture.....	81	www.thendesign.com
Eaton's Ephesus Lighting	4-5	www.ephesuslighting.com	National Alliance for Youth Sports	43	www.nays.org	Technogym.....	9	www.technogym.com
Eckel Industries Inc., Acoustic Division	41	www.eckelusa.com	National Federation of State High School Assoc.....	67	www.nfhs.org	Varco Pruden Buildings	83	www.vp.com
ELS Architecture and Urban Design	80	www.elsarch.com				Williams Architects	81	www.williams-architects.com

PRODUCT INDEX

NEW & IMPROVED

FLIR	20
Kenall	21
Mateflex.....	20
Sports Tutor	20
SPORTSBRANDEDMEDIA	21
Seresco USA Inc.	21

SPOTLIGHT

A-Turf.....	66
Accella Polyurethane Systems.....	66
AstroTurf	66
Beam Clay/Partac	68

Brock International	68	Jacobsen	71
CEIA USA	68	John Deere	72
Century Industries	68	Kay Park-Recreation Corp.....	72
Colorado Time Systems.....	69	Mondo	72
Connor Sports	69	Musco Sports Lighting LLC.....	73
Covermaster	69	National Recreation Systems.....	73
Daktronics.....	70	Putterman Athletics.....	71
Eaton's Ephesus Lighting	71	Qualite Sports Lighting LLC	74
Garrett Metal Detectors.....	69	SMG	75
GreenFields USA.....	70	Sole Revolution	75
GT Grandstands.....	70	Southern Bleacher Co.	71
InCord	70	Spectrum Scoreboards	73
		Sporturf.....	75
		Synthetic Surfaces	74
		Varsity Scoreboards.....	73

AB ATHLETIC BUSINESS
SHOW 2017

IT'S ALL HERE.

NOV. 8-11, 2017 | ORLANDO, FL



**THE ULTIMATE DESTINATION FOR
ATHLETIC, FITNESS & RECREATION PROFESSIONALS!**

LEARN MORE AND REGISTER AT ABSHOW.COM/SUMMER

BROUGHT TO YOU BY:

Athletic Business

ABSHOW.COM/SUMMER
NOV. 8-11, 2017 | ORLANDO, FL

Breaking Ground



[Renderings courtesy of Opsis Architecture]

The **University of Idaho** has received a Wood Innovation Grant, allowing it to begin construction on a \$30 million sports arena to house the men's and women's basketball and volleyball programs. Designed by St. Louis-based **Hastings+Chivetta Architects** with architect of record **Opsis Architecture** of Portland, Ore., the 4,700-seat arena will feature signature timber and mass timber construction. The project is expected to be complete in 2020.

Elyria (Ohio) High School broke ground late this summer on a \$13.5 million multisport complex on the site of the former Ely Stadium. The design, provided by **Architectural Vision Group** of Westlake, Ohio, features a 5,000-seat accessible grandstand, synthetic turf football and soccer fields, a competition track, eight tennis courts, two baseball fields and a practice space for the marching band. A planned field house will enclose indoor batting cages, a multipurpose arena, locker rooms, offices and concessions stands. Along with increased parking, the complex will offer a series of walking paths connecting the distinct spaces. The complex will be completed in 2018.

The Bend-La Pine School district in Oregon is hoping to begin construction later this month on a \$5.2 million restoration of **Kenwood School's** historic 1930s-style gymnasium. Funded by insurance money collected from a collapsed roof, the new facility will feature expanded bathrooms and LED lighting, while preserving the character of its predecessor with hardwood maple floors, wooden bleachers and salvaged brick. The 11,500-square-foot gym by **BBT Architects** of Bend, Ore., will encompass one standard basketball court and two volleyball courts. Bend-La Pine hopes to have the new facility available for use by the start of the 2018-19 school year.

The **City of Burlington, Wis.**, broke ground last month on a new aquatic center. The former municipal pool will be replaced with a \$5.6 million waterpark and service building, complete with locker rooms, staff offices, concessions areas and a multi-use rentable space. The center will offer a recreation pool with a zero-grade entry, a splash pad and a resistance current channel, as well as a training pool with lap lanes, a diving board, a water slide and a climbing wall – all surrounded by a spacious pool deck with tables, umbrellas and lounge chairs. The center, designed by architecture firm **Ayres Associates** of Eau Claire, Wis., is expected to open in summer 2018.



[Renderings courtesy of the City of Burlington]

First Pitch

The **City of Austin, Minn.**, has recently finalized a construction timeline for a \$35 million community recreation center. After receiving millions in funding through private donations, the city has chosen the architecture firm **BWBR** of Madison, Wis., and plans to break ground on the seven-acre site secured for the project in May 2018. The center is expected to open in fall 2019.

This summer, the school board commission at **Florence (S.C.) Darlington Technical College** approved a \$40 million budget for a new athletic complex to be built on the Southeastern Institute for Manufacturing and Technology campus. A construction timeline for the complex – complete with new baseball and softball fields – has not yet been set.

The **Smithville, Texas**, school board has recently approved the design of architecture firm **PBK** of Houston for a 5,000-seat stadium with an eight-lane track, a soccer field and a synthetic turf football field. A 500-square-foot press box with a covered field deck is planned for the site, as well as bathroom facilities and a concessions stand. The project is expected to be complete within a year after construction begins.

Logan County High School in Russellville, Ky., has gained approval to begin the design phase of a 27,000-square-foot indoor practice facility. **JKS Architecture and Interior Design** of Hopkinsville, Ky., was chosen by the school board to implement designs for the practice facility, which constitutes phase one of a two-step athletics improvements plan and will feature the practice space, restrooms, changing rooms and a concessions stand. Phase two will include a track and soccer field. The project is estimated to cost a little more than \$900,000 per phase.

Grand Openings




[Photos courtesy of Scott Delony]

Wildcat Stadium is scheduled to open for its first game September 16 at **Abilene Christian University** in Abilene, Texas. The \$50 million football stadium by **HKS Architects** of Dallas will have a total seating capacity of 12,000 spectators, including berm, club level and suite accommodations. A 10,000-square-foot club level will feature a multipurpose room and balcony seating with a combined capacity of 350 for events. The stadium's three-story press box is lined on the second floor with 10 distinct suites, and features a press area on the top level. Each side of the stadium can accommodate approximately 6,000 spectators, with access to separate restrooms and concessions stands. The home locker room is located under the seating area to the west, with an HD video board at the north end of the stadium and visitors' locker rooms and an official's dressing room to the southeast.

The **City of Oshkosh, Wis.**, will hold a grand opening this fall for the 3,500-seat arena built for the Wisconsin Herd minor league basketball team. The city received a \$250,000 grant from the Wisconsin Economic Development Corporation to help fund \$2.5 million in infrastructure improvements in support of a new \$20 million arena. The project, under management by developer **Fox Valley Pro Basketball Inc.**, will feature a multipurpose facility for concerts, youth sporting events and expos, as well as a sports bar and team store.

Ontario (Ohio) High School hopes to unveil renovations to its football stadium and track at the first home game this month. In June, the district board of education approved a \$700,000 budget for construction of a new ticket booth, a track and a pedestrian path connecting the school's athletics facilities. The ticket booth, by **MKC Architects** of Powell, Ohio, is phase two in the school's three-part athletics improvement project, which began with a new wrestling room and a weight room update and will now look forward to an indoor turf arena, new locker rooms and a community room.

PROFESSIONAL DIRECTORY



AQUATIC
DESIGN GROUP
aquaticdesigngroup.com \ 800.938.0542

E|L|S
sports & high performance architecture
510.549.2929
www.elsarch.com



Expert design, engineering,
and consulting solutions for
aquatics facilities.
Call 518 456-6015 or visit us online at aquattica.com



Hastings+Chivetta
ARCHITECTURE • PLANNING • ENGINEERING
888.659.2724
www.hastingschivetta.com
St. Louis, MO | Columbia, MO | Tulsa, OK



*Needs Assessment
*Feasibility Studies
*Operations Pro-formas
*Start-up Planning
*Community Input
*Operational Audits
303-470-8661 * www.ballardking.com



816.472.3360 | JAMES.BRAAM@HOK.COM
FORMERLY 360 ARCHITECTURE



WE BRING PEOPLE TOGETHER
DENVER & DALLAS | 303.455.1366 | BRSARCH.COM




SPORTS & RECREATION
DESIGN SPECIALISTS
703 437 6600
WWW.HGAARCH.COM


HEALTH and architecture interior design WELLNESS
buildings that change lives
bonavitaarchitecture.com
BONA VITA
ARCHITECTURE

JACOBS
Sports & Recreation Facilities
michael.pratl@jacobs.com / 800.325.7910

CANNONDESIGN
Sports Architecture
Boston, MA 617.742.5440
Los Angeles, CA 310.229.2700
St. Louis, MO 314.241.6250
Washington DC 703.907.2300
cannondesign.com



MOODY•NOLAN
SPORTS & RECREATION ARCHITECTURE 877.530.4984
moodynolan.com

Specializing in Sports, Wellness
and Recreation Architecture
J. Thomas Seymour, AIA
309.282.8198 - tseymour@dewberry.com
www.dewberry.com




MSA SPORT
a division of MSA Architects
www.msa-sport.com CINCINNATI | COLUMBUS

PERKINS+WILL
 IMPROVING HEALTH AND WELL BEING THROUGH DESIGN
 +71 www.perkinswill.com

- architecture
- branded environments
- interiors
- planning + strategies
- preservation + reuse
- urban design

more
 800.RDG.6766
 rdgusa.com/sports
RDg...
 PLANNING • DESIGN

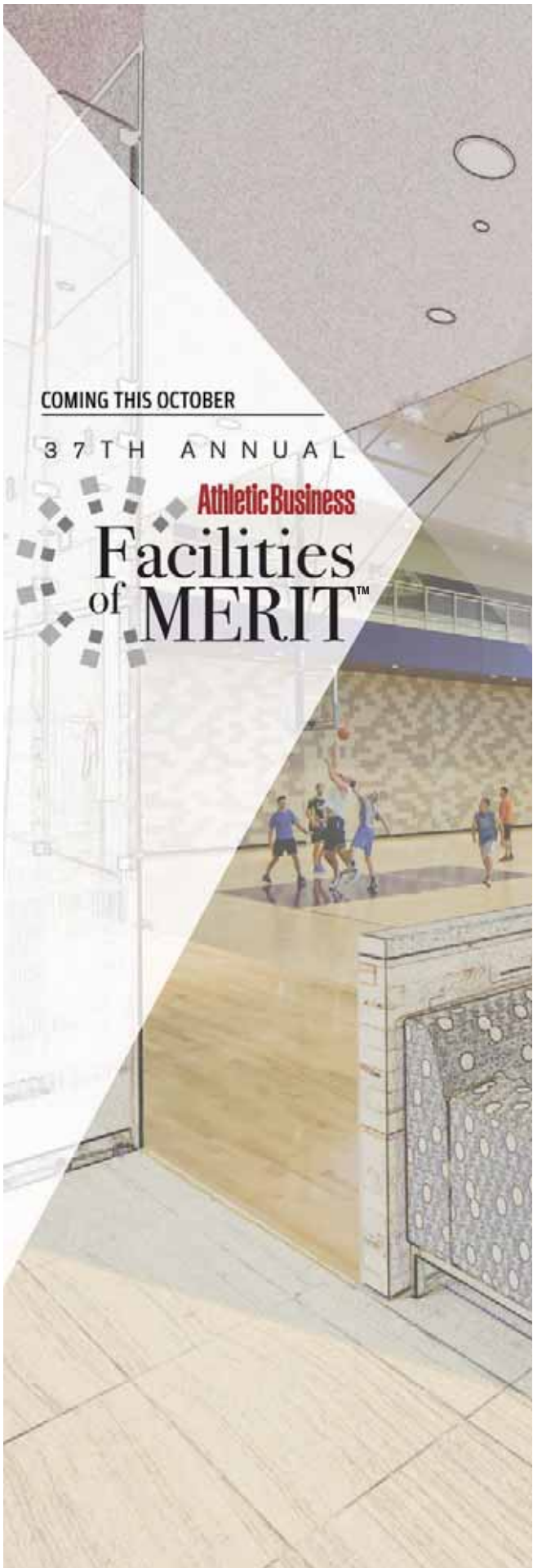
Prove what's possible.
SASAKI
 architecture, landscape architecture, interior design,
 planning, urban design, civil engineering, graphic design

 **SINKCOMBSDETHLEFS**
 SPORTS ARCHITECTURE
 55 Years of Outstanding Sports Facility Design
 sinkcombs.com | 866 535.5653

 *Imagine the Possibilities!*
SportsPLAN
 Feasibility
 Programming
 Master Planning
 Design Consulting
 816-842-5200
 sportsPLANstudio.com

tda
 thendesign architecture
 440.269.2266
thendesign.com

 **WILLIAMS**
 ARCHITECTS
 630.221.1212
 www.williams-architects.com
 architecture | planning | aquatics | interiors





[Photo @ VanceFox.com, courtesy of Hastings+Chivetta Architects]

Stairs Take Functional Fitness Emphasis to New Heights

By Paul Steinbach

Roughly a third of the fitness space within the University of Nevada, Reno's E.L. Wiegand Fitness Center is dedicated to functional training. At more than 10,000 square feet, it's more functional training space than Hastings+Chivetta Architects had ever designed into a single building, according to senior vice president Steve Dehekker. Moreover, the school's emphasis on functional training inspired designers to heighten the experience with **four stories of stadium stairs** off the facility's main-level reception area. Flanking a separate staircase featuring code-compliant seven-inch risers and 11-inch treads, each stadium stair is 14 by 22 – akin to taking two traditional stairs at a time. "We thought, 'What's the most original and timeless functional training tool that we know of?' It's the staircase, and to take it a step further, it's the stadium stair," Dehekker says. "We had a pretty vertical building, so we came up with the idea that the centerpiece of the design would be this cascading functional training element. It was so representative of the facility's functional training aspect – another dimension to it – that they embraced this as a program element as well as a design element." 📌

BUILDING SOLUTIONS...

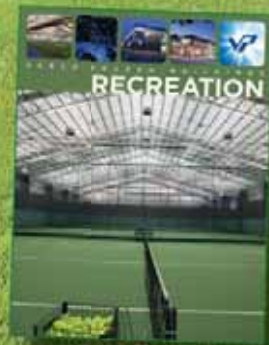
On budget, on schedule, on campus

Cost-efficient building solutions from Varco Pruden Buildings provide attractive and affordable structures for

- gymnasiums,
- spas and indoor pools,
- ice hockey and skating arenas,
- indoor soccer
- football practice facilities for college and professional teams.

With our value-engineered steel framed building systems, recycled material content and long-life "cool paint" choices, VP Buildings can provide energy-efficient structures to help curb operating costs. Find out more. This free brochure is available at www.VP.com/ad/ATHBIZ

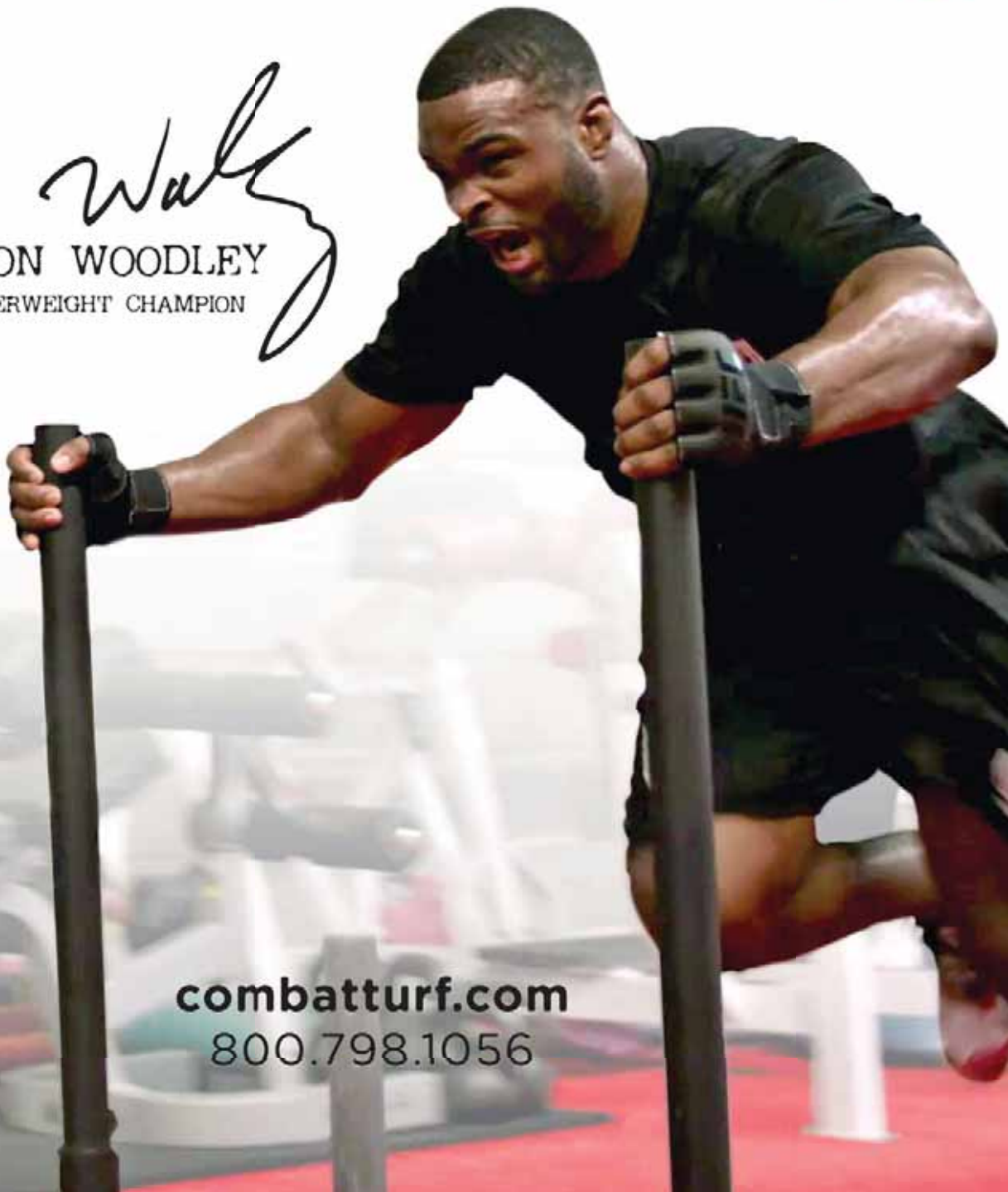
Varco Pruden Buildings is a division of BlueScope Buildings North America, Inc.



COMBAT TUFF™

WITHSTANDS ENDLESS
GROUND-POUNDING **PUNISHMENT.**

Tyron Woodley
TYRON WOODLEY
WELTERWEIGHT CHAMPION



combatturf.com
800.798.1056