

INDUSTRY UPDATE



**WINNING BEGINS
FROM THE
GROUND UP**



If you want to engage a company to provide riding arena planning, construction and the installation of the world's most advanced footings, to whom do you entrust your dreams and hard-earned budget? Perhaps the president of an internationally-renowned leading construction company, and a former Olympic equestrian team manager? Karen Leeming explains why Footing First is leading the field in arena surfaces

US-based Footing First LLC has been a leader in the development of synthetic equestrian footings for many years. As president of the family-run Lawton Adams Construction Corp, Co-Proprietor Lawton Adams has constructed and designed every aspect of indoor and outdoor arenas, from drainage to finish footing. His business partner at Footing First, Co-Proprietor Karen Leeming, a former Canadian Olympic equestrian team manager, brings an in-depth knowledge-based of horses, riders and stable managers to the Footing First team. "I had worked in the industry for many years as a groom and assistant trainer," says Karen (who is British), by way of introduction to the inception of Footing First. "Many of the arenas I knew were built by Lawton Adams Construction; all the good ones, I should say! After the Sydney Olympics in 2000, where I was the Canadian team manager, I started my research into footing characteristics and design," Karen continues. "I continued that work through to the 2002 World Equestrian Games (WEG) at Jerez, and was subsequently introduced to Lawton Adams, who is American, by a good friend." Lawton and Karen shared the same vision and morals, and discussed many aspects of the equestrian arena business after their introduction; the business moved on apace from there.

BETTER FOR THE HORSE

The company's perspective is to completely stand behind their products, with no excuses or questions. "This comes from our total commitment to creating a footing that will always be better for the horse, and doing this with direct input from riders. However, perhaps our over-arching goal is to educate our clients, and always bring them the best product for their climate, budget and riding needs," Karen continues. We asked Karen to explain the benefits of a good footing in a riding arena. "It should support the hoof, both vertically and horizontally," she says. "It should achieve good cushioning and stability without too much movement, or becoming too firm. A superior footing is one that requires less maintenance than a traditional footing, but does not give out when a horse's hoof pushes against it. In take off at a jump for instance, the footing should give and allow for a slight slide forward, but not

so much as to have the hoof dig in, creating a hole." Engaging a company to install advanced footings, provide arena plans, and construct the project is a big financial commitment - so, does Footing First cater to all client bases? "We do understand that many of our clients have restricted budgets. So, this is where our real level of understanding of sand and additives is a huge advantage for us," says Karen of the company's broad reach across the market sector. "We do not sell only one type of footing, but provide many options for our customers."

TROUBLE-SHOOTING

Customers are often quick to complain when an installed riding surface doesn't work for them. So, what are the most common problems that Karen and Lawton see, that relate to existing footings and foundations? "An unlevelled base and stone dust that isn't properly compacted are two of the most common issues," Karen explains. "Many times, it is not a bad footing as such, but an incorrect base that is the culprit! However, we often find that people really do not know how to articulate the issues. They often use the wrong terms, and it sometimes becomes a lengthy discussion of questions, to get to the root cause or problem! Other times, we find that incorrect processes and equipment can lead to poor performance. So, we don't confine ourselves to just the footing material. This all underscores our emphasis on helping educate the customer," she explains of the process to ascertain the client's exact needs and requirements.

DIFFERENTIATING THE KEY PRODUCTS

Footing First's unique selling point in a growing market place is its dust-free products. "Over time, we have developed many different products as we manufacture our footings, and take great care in quality control," Karen continues. "We listen intimately to our customers, which directly drives the evolution of our product family. We have developed various different cost points, as we see the need for dust-free products at all levels. The high-performance footings offer good break over and sheer strength, plus less day-to-day maintenance. The blends at a lower price point are more versatile and will provide a more traditional type of footing, but still



Co-Proprietor Karen Leeming.



Bank jumps build by FootingFirst.

THE FOOTING FIRST RANGE IN DETAIL

TravelRight is the company's oldest product, and a very high performance footing. "It provides excellent traction, stability and cushioning for the horse. This blend has excellent longevity," Karen Leeming explains. "TravelBright was created when customers requested a brighter, lighter footing. It provides the same high performance value as TravelRight." We also have a more cost effective, dust free blend that is called TravelLite. This is a more versatile blend that is great for a barn with many different levels of horse and rider. It is designed to have more break-over and shear than TravelRight." The newest dust-free footing is the All-Right dust free sand. "It is excellent for all disciplines, even western reining. It is cost effective, and when groomed, works well for reining horses; when rolled and compacted, it gives extra stability for dressage and jumping," Karen explains. Footing First also offers water-dependent footing, whereby water is used for both dust suppression and material binding. "We have many different options here again; the differentiating factors being price and performance," Karen says. "We have our Superior Blend, and from that point we change the blends by using only one type of sand and perhaps a recycled fiber that is more cost effective. Superior Riding Surface (SRS) is our highest-performance product. SRS will provide an excellent, high performance surface, again with 'life' and forgiveness. These two qualities are very difficult to achieve while still providing enough traction for take-off and landing."

have very good traction and stability; however, they do require more grooming and day-to-day maintenance," Karen explains. (See the boxed section, 'The Footing First range in detail').

talking about an 'old' sand arena; how old? What life is left in the sand? This is when I will have the customer send me a sample. Then I can evaluate the sand, and try to help them to spend wisely. You have

"Fiber is a wonderful additive used at the right time and the right place."

There's obviously a market for fiber to be used as an addition to an existing arena. But why can't customers just add fiber to an old sand arena; surely a very cost-effective option? "You can do this. I have added fiber to many old sand arenas with great success. But again, it comes down to education," Karen emphatically states. "If we're

to again make sure that your customer is educated, and understands the pro and cons of any decision. They may get another good couple years out of the sand, but they may not. So, is the cost of adding fiber worth that risk? Fiber is a wonderful additive used at the right time and the right place, and in the right amount."

ADDITIONAL PRODUCTS AND SERVICES

There's also a need for education about Ebb and flow systems, of which there are many. The basic concept is to irrigate the riding surface from the bottom, rather than spraying water in the air, above the surface. The Ebb and flow irrigation systems use the natural capillary action of the riding surface material to draw water up into the footing. "Footing First brings many different systems like this to the client. Again, as the USA is so large, the climate plays a huge part as to what will work best where. Education is what is needed. Ebb and flow systems and the HIT system are excellent products, especially for large arenas that need consistency in moisture. Ebb and flow uses one-third of the water supply than any other system with irrigation needs. As water becomes a commodity, this is extremely useful in areas like California and Arizona," Karen



A good footing should support the hoof, both vertically and horizontally.

advises. Footing First also offers specialized installations such as grand prix fields and derby obstacles, such as table tops, bank jumps and grabs, for many clients in this area. "This is popular with the show jumping clients, as this is useful for their preparation for the large shows," Karen adds.

RESEARCH PROJECTS

The company is also involved in various research projects, including a joint project with the University of Guelph in Canada, the University of Maine in America, and the Swedish University of Agricultural Science - the institutions are pooling their expertise for an independent study of different types of surfaces, which Karen and the team hopes will take the opinion out of footing. "We have been working with many Universities, and still this is all a work in progress - I am sure they will be supplying results soon," Karen continues. "Footing First has also invested the money in a hoof drop machine that we will use for more research with Footing First products, as well by the Universities if needed, for more data." The company is also working closely with the team at Coyote Spring Farm in Lee, New Hampshire, owned by Joecelyn Hawe. Joecelyn trains and competes professionally in three-day eventing, and over the last several years, Bill Hawe, her father, has been doing his own scientific research on arena footings. This delves into the detailed material science of riding surface materials, their performance, as well as performance measurement technologies. In addition, Bill is leading a joint-research project on equestrian riding surface science with Dr. Jean Benoit of the University of New Hampshire Civil Engineering Department - a white paper has been released. "This work has already produced perhaps the industry's first comprehensive shear strength evaluation of a wide range of synthetic dust-free arena footings, hybrid footings and all-natural footings, using accepted best practices in material science laboratory measurement methodologies and instruments," Karen explains. "We have Footing First's Superior Riding Surface installed both outdoors and indoors at Coyote Spring Farm, and the outdoors is integrated with a water complex and Derby field," says Joecelyn Hawe. "It has been wonderful that Footing First and myself are now fully involved and supporting the research being conducted by Bill Hawe and Jean Benoit, which will represent what the industry needs."



Photo: Cealy Teley

Footing First was supplier of the footing at the Royal Winter Fair in Toronto, Canada.

WHITE PAPER

The team's white paper has been released by the University of New Hampshire, based on the aforementioned research with Dr. Benoit and Bill Hawe. "That work is moving forward with more research in shear strength characteristics and moisture sensitivity. A new report on the behaviour of synthetic footings and their moisture sensitivity is about to be released,"

too quickly and not too slowly. So, shear performance will also relate to torque and impact characteristics. Shear strength also is the basis for the hoof being able to push off the surface as it propels forward. This research that I've mentioned is providing real world insights into one of the most important performance aspects of these synthetic, hybrid, and all-natural surfaces."

"Footing can make or break an athlete"

Karen says. "That team is trying to create science that we can all understand! Often, academic research is not easy to understand by lay persons. So we are working hard at helping explain this novel work in lay person's terminology, in easy to follow articles," she adds. "I believe shear strength or weakness is one of the most important overall performance factors for riding surfaces. It's useful to think of the roll of the footing as acting to decelerate the hoof as it lands - not

Karen concludes that maintaining the arena footing is just as important as changing the oil in your car. "If you don't maintain it, you'll have drainage issues, changes in depth, and inconsistencies throughout," she warns horse owners. She adds that the footing can make or break an equine athlete. "Here at Footing First, it's our job and our passion to create the best surface in the industry. We'd like to help our customers' horses be the very best they can be," she says. ■

ELITE RIDER ENDORSEMENTS

McClain Ward, American Show Jumper - "The Footing First surface is amazing; perfect in every way and weather condition. It is not only a far superior surface to train on, it is a huge aesthetic improvement to our farm." Ian Millar, Canadian show jumper - "The Footing First range is as good as it gets for competing indoors." Lendon Gray, American dressage rider - "TravelRight has lived up to all of its claims. After many steps travelled, it is by far a superior footing, and I would recommend it to any fellow equestrian." Todd Minikus, American show jumper - "The true test of a footing is that it stays the same whether you are the first to jump or the last to go, and these footings do that remarkably well." President of Canadian tournament hosts organisation, 'Angelstone Tournaments', Kean White - "The response from our exhibitors regarding our facility and competition has been tremendous. We are thrilled with the new footing from Footing First, and thank them for the fantastic dedication and service to deliver the best competition surface available."