How to Build the Perfect Arena for Your Horses and Riders

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THERE ARE A NUMBER OF FACTORS to think about when building a new riding arena. Like many aspects of the equine industry, a new arena can be costly, so it's important to take all of your wants and needs into consideration in order to get the most out of your investment.

Although it is possible to upgrade an existing arena, it's generally more challenging to replace existing infrastructure and work within the established size constraints than to start fresh. Plus, having a customized arena can make your training more productive and enjoyable. Sharn Wordley and Craig Martin, international Grand Prix riders and co-founders of arena design and equestrian surfaces company Wordley Martin, share their expert advice about what to consider when building a new arena with The Plaid Horse.

FOOTING

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"As horse lovers, we are always looking to protect and do the most we can for them," says Wordley, who has represented New Zealand at the Olympic Games. Even in the pursuit of competition success, we want to give our horess the longest and healthiest careers possible. One of the most basic ways to achieve this is to minimize the stress put on the horse's body by supporting the concussion of each footfall."

Aside from turf arenas, most arena footing is a sand mixture requiring water as a binding agent to facilitate the proper moisture level and resulting texture. The quality of the sand and the ability to add or remove water determine the overall quality of the surface. Having a consistent product to fill your arena will help minimize irregularities, which could also cause additional physical stress to the horse.

"The main repercussions of riding on bad footing would be soundness issues, which ultimately impact the horse's competitive ability,' says Martin, who has ridden with notable athletes including Tim Stocklade, Barry Taylor, and William Funnell. "If your home footing is bad or inconsistent, then the horse's ability to perform decreases and it also increases their chances of injury. The footing being too hard, lacking concussion absorption, being too slippery or too deep

are all common problems that will cause unnecessary wear and tear on a horse." Wordley also notes that different sands require different watering routines to keep the footing optimally dampened. Some sands will hold moisture a little more and a little longer, so watering does not need to be as frequent. Other sands are a little more pronts, requiring a more extensive watering schedule.

"In general, the footing isn't really

rideable without a binding agent like water, making an irrigation system more essential," says Wordley. Tit's no good if there's no moisture in it. Adding water also takes any sort of dust implications out of the equation. That can be particularly important in cases where the footing is a traditional river sand or something similar, because the sand particles break down and become dust powder. In our arenas, we use a



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SPOTLIGHT





LEFT: The multiple levels of construction can take more time and be more costly depending on the geographic location and topography of the property RIGHT: Quality footing is important to prevent unnecessary wear and tear on the horse

proprietary 99% silica sand mixture, so it's not dusty at all because the sand particles don't break down."

LOCATION, LOCATION, LOCATION

The climate can vary drastically across the United States, which can greatly affect structural decisions for the arena. Humidity and precipitation contribute naturally to the moisture of an arena, while more arid conditions make the footing dryer. Adding and removing water allows the user to regulate the quality of the surface during almost any natural weather conditions. Water can be added with an irrigation system that sprays water over the complete surface. On the other hand, water can be removed through a drainage system. In both cases, adding and removing water evenly is key to maintaining consistent footing.

"In Florida, with four inches of rain in five minutes, you have to have a very robust drainage system to be able to manage that level of potential precipitation. Really, the whole eastern seaboard experiences a lot of rain, so drainage is extremely important for arenas in those areas," says Martin.

Those with arenas in naturally dryer geographic regions might consider a different watering mechanism, such as an ebb-and-flow system. The ebb-and-flow system maintains a reservoir of water, similar to a bathtub, under the footing surface instead of spraying water over

the top. When the footing needs to be watered, the reservoir level is increased to allow the water to rise through the sand footing and provide a consistent moisture content throughout the whole arena. When it rains, the water flows down into the reservoir.

"In a place like California, you don't have as much rain, so water for the arena is a much bigger concern; you have to think a little differently," adds Martin. "The ebb-and-flow system is a good solution for this compared to the common sprinkler irrigation system with a free-flowing drainage base, better at helping excess water escape."

Another solution Martin suggests is to direct draining water to large tanks for storage, so the water can be recycled back onto the ring. When it rains, the tanks collect water and fill to keep the process going.

The terrain, dictated by the geographic location of the arena, as well as the arena's placement on a particular property, can also affect how expensive the project becomes and how long it takes to complete. In a place with more undulating ground, excavating to create a flat area can be more challenging and time consuming compared to a naturally flatter, more clear space.

"Because of the excavation, creating the flat site of the arena, which we call the pad, is often the hardest part of the project," says Wordley. "If you're in Ocala, Florida, where the ground is naturally really sandy versus in New York on the side of a hill where it's more rocky, the amount of excavation definitely changes the cost and the timeframe of how long it takes to create an arena."

THE PURPOSE OF YOUR ARENA

In addition to determining the right location for your arena, factors like size, shape, and the inclusion of any special landscaping features are personal decisions based on the kind of riding you will be doing. The number of horses using the space and activities it needs to accommodate can be determining factors. For example, if you're not expecting many horses to train simultaneously, perhaps a more standard sized arena is enough. If you have a busy facility, a more expansive ring could be beneficial. Similarly, if you're training over fences for show jumping or eventing, you might need more space to build and practice technical courses. You could also consider additional elements like extending one side of the arena to make a more unique shape or adding a gallop track to increase training possibilities.

After taking everything into consideration, having experts to guide the design and construction process will help turn your dream arena into reality. Having an individualized, high-quality arena will not only increase the caliber of training you can accomplish, but also can give you peace of mind knowing you have done your best to protect your equine partners from injury.

ONCE YOU HAVE BUILT YOUR ARENA, the subsequent step is maintaining it to the original installation standard. Stay tuned for the next part of our Ask the Arena and Footing Experts series with The Plaid Horse to learn more. Que

For more about building your own Wordley Martin arena, visit WordleyMartin.com/Welcome