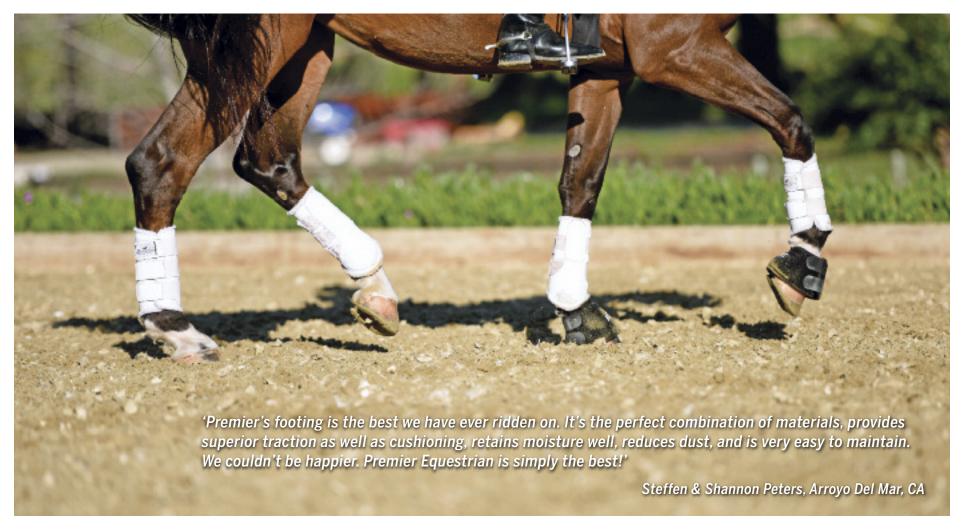


ENGINEERING THE PERFECT RIDE



Footing and Arena Surface Guide











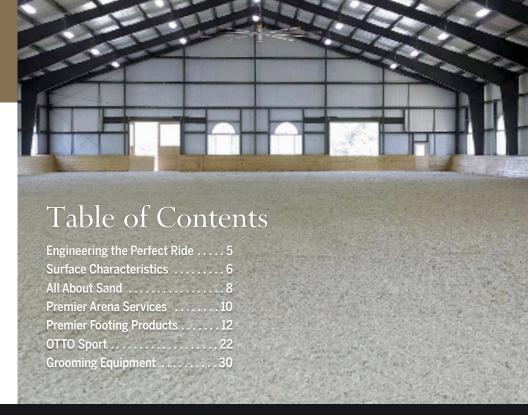
Proper Arena Footing –

The Key to Your Horse's Safety & Optimal Performance

It's extremely important that horses are comfortable on an arena surface. Poor arena footing can decrease performance, decrease confidence, and increase injury. Soundness, quality of performance, and safety are motivators for creating a proper arena surface.

Premier Equestrian can construct or rehabilitate your riding arenas, round pens, turnouts, and paddocks. We'll work with you and your builder, we can recommend a qualified builder, or you may choose to do your own installation.

Our products are formulated to give you the very best in safety, injury prevention and optimum performance. Many competitors and arena builders will only prescribe what they sell and not what you need. We will design what's best for you and your horse.



Good footing is safer for your horse and can boost its confidence and performance, while minimizing injury.

We Are Horse People

We understand horses and how important it is to keep your equine partner safe and sound. Premier Equestrian is dedicated to promoting a safe and enjoyable riding experience for you and your horse. For the last 15 years we've been studying how arena surfaces interact with horses' biomechanics. Our experience and knowledge about horses is what separates us from competitors. Do you want horse people designing your arena surface or an excavator?



Premier Equestrian is the Official Footing Supplier of US Equestrian Premier Equestrian offers free sand analysis and consultation to help you make an informed and educated decision on what footing is right for you.

Call 800-611-6109 to speak with a footing specialist.



Meet the Premier Equestrians

These are some of the top-level equestrians training on Premier Equestrian footing and using our products.



Laura Graves
Olympic Bronze Medalist, Dressage
Custom Blend and Premier Pro Groomer



Steffen Peters
Olympic Bronze Medalist, Dressage
OTTO-PerforatedMats, Premier ProTex, ArenaAid, and
Premier Pro Groomer



Olympian, Dressage
OTTO-PerforatedMats, ArenaAid, and Athletex,
Premier Pro Groomer



Kim Severson
Olympic Silver Medalist, Eventing
Athletex



Gina Miles
Olympic Silver Medalist, Eventing
ArenaAid



Tamra Smith
CCI**** Event Rider
ArenaAid

ENGINEERING THE PERFECT RIDE

Engineering the perfect arena requires a lot more science than just adding a footing product. Premier Equestrian uses scientific data to formulate a footing blend that enables horses to perform at their best. These are just a few of the areas we evaluate when determining the optimal footing formula:

- Geology sand and aggregates
- Surface qualities of sand and footing products
- · Deflection Test Quantifies cushion and rebound
- Gradation and Compaction Tests the particle size tells us the degree a surface will compact
- Shear Test Quantifies the amount of grip
- Horse Biomechanics how arena surfaces affect the whole movement of the horse



Sand qualities



Cushion & Rebound



Stability & Grip



Gradation Tests

How Arena Surfaces Affect Horse Biomechanics

Breaking Down The Horse's Footfall Phases

Landing Phase

The hoof touches the ground and comes to a stop. As the hoof stops, sliding forward and downward into the surface, bones in the leg collide. Concussion can cause shock waves and vibrations to be distributed throughout the ground and leg.



Loading Phase

The whole hoof is in contact with the ground, carrying the full weight of the horse and rider. The fetlock, flexor tendons, and suspensory create a shock absorbing effect. Pressure under the frog stimulates blood circulation through the hoof.

The loaded weight increases depending on movements, such as collection, landing from a jump, and galloping.



Rollover/Push-Off Phase

The heel rotates off the ground, rolling over the toe for push off into the next stride.



Surface Characteristics

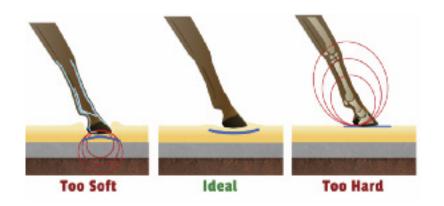
An ideal arena surface allows horses to move efficiently through the three phases. Damage to joints, soft tissue, muscles, hooves, and the respiratory and vascular system is greatly increased in poor footing.

The surface should minimize concussion, absorb shock, provide support, and return energy back to the horse. To accomplish this the surface should have a combination of firmness, cushioning, cupping, rebound, and grip.

Achieving the ideal characteristics from you arena surface can be done through proper construction, choice of materials, proper watering, and maintenance. Most existing arenas can be cost-effectively rehabilitated to develop an optimum riding surface.

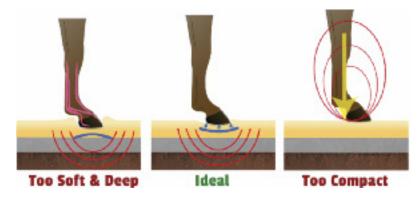
Firmness

The firmness or hardness of the surface affects the amount of support and how shock wave forces are distributed during the landing phase. A surface with ideal firmness offers support with minimal concussion to the bones and joints, and is soft enough to aid in absorbing shock.



Cushioning

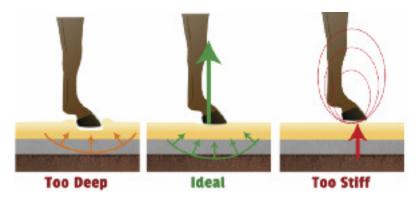
Cushioning refers to how the arena layers dampen shock during the loading phase. An ideal amount of cushion should distribute shock through the arena layers, and provide enough resistance under the hoof for the horse to balance and move into the rollover-push off phase.



Rebound

Closely related to cushioning is responsiveness and rebound. This refers to the resiliency of the surface to return to its original form, returning energy after the weight of the horse is applied.

An active and springy surface with ideal rebound returns energy to the horse at the same rate it was applied. This reduces the horse's need to use it's own additional energy for momentum. Rebound time is dependent on how the surface is used, for example, dressage vs. jumping.



Cupping

During the loading phase the hoof capsule expands. Pressure under the frog and digital cushion aid in supplying blood to the structures in the hoof capsule. As the weight is released the hoof contracts, pumping blood up the leg and through the body. This process is called hoof mechanism.

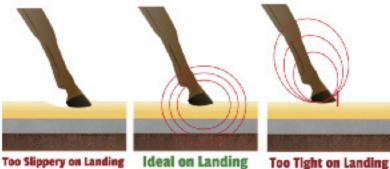
To benefit from hoof mechanism, the surface should cup into the sole and collateral grooves of the frog. Resistance in the surface supports the

weight and force placed under the foot, while the pressure under the frog and digital cushion encourage blood flow through the hoof capsule.

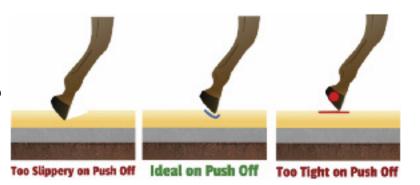
Grip

The tightness of the surface affects grip. Grip aids in absorbing shock during the landing phase, and provides support and traction during push off and on turns. The amount of grip is dependent on how the surface will be used.

During push-off and on turns, the tightness of the surface must provide stability for the horse without causing concussion or sliding.



During landing and stopping, the hoof must be allowed to slide enough for the ground to absorb impact forces.



All About Sand

Sand is the general term for the broken down granules of rocks. Sand is smaller than gravel, but larger than silt or clay. Over 10,000 different sand names are used in the U.S. alone. It is very important to understand the qualities of the sand and not go with just a name.

Why is the right sand so important?

Sand is the key ingredient in all good arena footing; however, not every kind of sand is suitable for all riding arenas. Choosing the wrong sand can create problems and be very expensive over time. There is a wide array of sand types. A Premier Footing specialist can help trouble shoot the pitfalls of getting the wrong sand type.

Particle Size Classification



Coarse 19.0 mm to 76.2 mm Sieve 3/4" to 3"

Fine 4.76 mm to 19.0 mm Sieve #4 to 3/4"



Coarse
2.0 mm to 4.76 mm
Sieve #10 to #4



0.42 mm to 2.0 mm Sieve #40 to #10



Fine 0.074 mm to 0.42 mm Sieve #200 to #40



Super Fine less than 0.074 mm Sieve smaller than #200

Particle Shape affects how the grains nest together, which affects stability underfoot.

Round particles create voids and offers cushioning. However, they are typically unstable and can roll like ball bearings, decreasing stability and traction.

Angular particles have sharp edges and fit together tightly. This provides stability and traction, but angular particles can compact and become hard.



Round



Angular

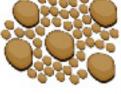


Sub-angular particles have the sharp edges worn off. They will nest while still allowing some movement. This lessens compaction and provides traction.

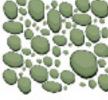
Particle Gradation is a representation of different sized particles. When particles are all the same size the sand remains loose, may become shifty, or feel deep. Sand with equal amounts of differing sizes will separate and become packed on the bottom and loose on top. A happy medium range of medium to small particles will help keep your footing firm, but not compacted.



No Grading



Gap Grading



Good Grading

Understanding Your Sand

There's a vast amount of information pertaining to sand and aggregates. Geologists and soil engineers are employed for large projects like damns, highways and buildings. For that same reason, we employ a soil engineer to help determine the quality and compatibility of our customers' sand.



Gradation reports help us to determine how the sand will perform alone or with a footing product. Sand gradation is measured by vibrating a sample through a set of numbered mesh screens, or sieves, from large to small. Lower sieve numbers mean larger grain size, and higher sieve numbers mean smaller grain size. The percentage of sand that passes each numbered sieve is measured to create a sand gradation report.

Important: The sieve size range to look for will depend on what type of additive you are adding, or if you want a sand-only arena.

Talk to a Premier
Footing Expert before
you order sand.
800-611-6109

Free Sand Report

Mixing the correct footing product with your new or existing arena sand provides your equine athlete with an ideal surface to train and perform on while helping to prevent injuries. Premier Equestrian offers a complimentary sand analysis report* and phone consultation to help you narrow down the issues you may be having with your arena surface and gets you started in the right direction.

How to Improve an Existing Arena

Many of our products can improve existing sand whether it's too hard, compacted, dull, dusty, unstable, doesn't hold moisture, and more. We'll analyze your sand and give you a detailed report of the sand particle sizes and shapes.

- 1. Submit a Sand Sample Form online at PremierEquestrian.com/sand-report
- **2.** Collect **2 cups** of sand from your arena. We need a good representation of all the particle sizes. Small sand particles tend to settle while larger particles tend to be on the top. *Be careful to not go through your base.*

Put the sand sample in a durable plastic bag with your name and phone number.

Print your form and mail with your sand sample to:
 Premier Equestrian Sand Lab, 8915 S. 700 E. #102, Sandy, UT 84070



How to Find New Sand and a Premier Footing Product

Not all sand is suited for riding arenas. Let us help you find the correct sand in your area, and a Premier Footing Product to meet the needs for your arena surface.

Most sand quarries will have a sieve or mesh report on the sands they sell. If you intend to use new sand with a footing additive, we suggest sending us a sample. We will analyze the sand to verify compatibility with the chosen additive. You want to make an informed and educated decision about your arena footing and Premier Equestrian is here to help guide you through the entire process of doing so.

* We offer one free sand report to our customers in order for our sales staff to properly guide you through the process of getting qualified sand for your additive. Additional sand analysis reports are \$45 each.



Our Services

Premier Equestrian offers a wide array of services to meet your needs. Anywhere from advising you on do-it-yourself installations to complete construction services. We have the knowledge, resources, products, and services, to help you make an informed decision about your arena.

Building an arena correctly is one of the best investments you can make for you and your horses. Obtaining a proper riding surface will consist of a variety of components. When you understand these components, it's relatively simple to improve your arena surface. Understanding your needs and how to best achieve them is our specialty.

Things to consider:

Budget

Use existing sand or buy new

Watering capabilities

Maintenance time & capabilities

Type of arena base

Drainage

Seasonal weather conditions

Discipline

Traffic

Usage (Personal, lunging, turnouts,

horse shows, clinics, etc.)





Let's get started...

We can guide you over the phone, consult with you and your contractor on-site, or employ a team of builders to construct and install your arena surface. We've helped thousands of customers improve their existing surface for a fraction of the cost of a new arena. See page 11 for details about each of our arena services.

FOOTING SAMPLE KIT

Includes our footing information booklet, the USDF Underfoot book, and a sample of each of our footing products: Premier ProTex, Master's Blend, ArenaAid, Athletex, ProStride, and Hydro-Keep.

11-001 Footing Sample Kit \$20* 11-001.1 Kit with Underfoot book \$30*

UNDERFOOT BOOK

The USDF has produced this guide, with help from Premier Equestrian, because a proper footing surface is imperative in the training and performance of horses. This book describes the construction process in detail.

13-089 Underfoot Book \$12.95*

FOOTING TEST STRIP

Determine if the footing product you want will work in your arena by testing a 50 or 100 sq. ft. area. Consider it an insurance policy before you make the commitment to purchase a full load. Call our office for more details at 800-611-6109. Footing Test Strip \$99/ea.*

To order call 1-800-611-6109, or visit PremierEquestrian.com
*Free shipping in contiguous US and Canada

How can we help you?

Premier Equestrian is ready and willing to help you with your arena riding surface at any stage.

Do It Together

We'll guide you through the process of installing and maintaining your own footing.

Improve Existing Surface

Improve your sand with a footing product and/or groomer.

Need New Sand

You have a base and need new sand, or your existing sand isn't repairable.

This service includes:

- Free sand report
- Free phone consultation
- Sand and product recommendations
- · Access to Premier's sand quarry library
- Do it yourself installation instructions
- Grooming and maintenance instructions

Consultation

Service

Premier Footing Experts will visit your farm, design an arena, and recommend materials.

Arena Design

This service includes:

- · On-site consultation and survey
- Arena design recommendations
- Architectural drawings
- Sand and product recommendations
- · Base materials and sand sourcing
- Builder recommendations

Construction

Service

Complete arena construction and footing installation by a Preferred Premier Builder.

Build a New Arena

This service includes:

- Free phone consultation
- On-site survey
- Sand sourcing and product recommendations
- Free sand reports
- Arena design
- Arena construction and footing installation
- Footing surface test for specific discipline
- In-depth grooming and maintenance training
- On-going arena consultant support

Whether you're adding to your existing arena or building a new arena, talk to one of the arena experts at Premier Equestrian.

Call 800.611.6109 or visit us at www.PremierEquestrian.com

Premier Footing Products

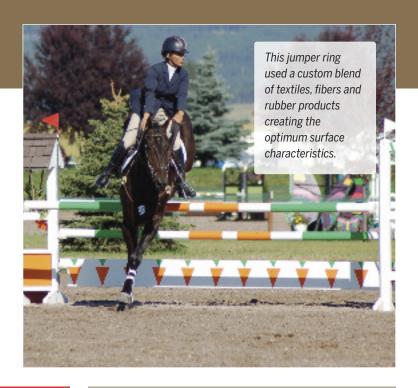
Our products are listed in three categories: High-Performance, Performance and Enhance. Many factors go into creating a high-quality arena surface. Ideally we want to design a footing solution to meet your budget, discipline, maintenance program and promote the best biomechanics. We have been successful in rehabilitating old arenas, as well as building new state-of-the-art arena systems. Working with a Premier Footing Specialist will help you to reach your goals, saving you time and money

Footing Qualities to look for:

Firmness Grip
Cushion Lifespan

Cupping Moisture Retention

Rebound



HIGH-PERFORMANCE

- · Premium footing additives
- Designed for optimum performance, high traffic and superior function for biomechanics
- Requires specific grooming equipment
- · Requires moisture
- · Requires a specific blend of sand
- A professionally constructed base and drainage system will optimize these products

PERFORMANCE

- Increases performance and biomechanics
- Ideal for new or existing arenas
- Moderate to high traffic
- Can be installed on a variety of different base surfaces
- Blends with an assortment of sands
- Requires some moisture and maintenance
- · Works with a wide range of grooming equipment

ENHANCE

- Enhances a specific quality in your existing arena surface
- Aides the performance of your sand
- For new arenas, performs best when mixed with the correct sand type
- Requires lower maintenance
- Works with most types of grooming equipment

Note: All of our footing products are designed to be mixed with sand. There are, however, significant varieties in sand types and qualities available on the market. Not all sands are appropriate to use as footing for your equestrian arena. Combining additives with the correct type of sand is required in order to build a safe arena surface. Mixing and installation is the responsibility of the customer. Premier Equestrian is not liable for your installation. However, we can make recommendations and have your sand analyzed to qualify its integrity. If you have concerns about mixing and installation, we can also recommend a qualified contractor or arena builder.



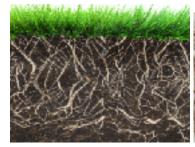
What do the footing materials do?

All of our footing products are designed to be mixed with sand. Combining the proper sand with the proper footing product is a key factor to your arena's success. When comparing other footing additives, be aware that many competing products contain post-consumer waste, i.e. used carpet fiber, used upholstery, and even urban waste. These waste products may contain mold, bacteria, and residue and may be harmful to you and your horse. Premier Equestrian distributes only new and pre-consumer materials recycled from the textile industry.



Textiles & Fibers

Textiles and fiber products retain moisture and stabilize sand by binding loose particles. Fibers mimic the effects of the rooting system found in a grass surface. The horses hooves ride on top of the surface rather than in it. These materials require a specific blend of sand, as well as water and specific grooming equipment.







Rubber

Rubber products will enhance sands that compact very hard. The rubber creates a void, thus reducing the ability to compact fully, improving cushion and drainage. It's great for well-graded, angular sands that are prone to compaction. Rubber is ideal when you don't have access to water as it isn't required to bind to sand particles.





Custom Blends

A custom blend of textile, fiber and rubber, will greatly improve a silt/clay type soil. This type of soil can get very hard and when wet become very slippery. The custom blend of Premier products can turn this dangerous sand surface into a spectacular footing.



Premier Equestrian is dedicated to promoting a safe and enjoyable riding experience for you and your horse. Call 800-611-6109 for a free consultation.



- · Carefully-chosen textile fabrics and fibers
- Provides good shear support
- · Retains moisture
- Prevents over-compaction
- · Reduces dust
- · Durability for long life
- Safe for you and your horse
- Good for high-performance dressage & jumping arenas

SAND SPECIFICATIONS

A fine silica sand with sub-angular particles is best. Particle size will be the most important factor in sand requirement.

REQUIRED SAND PARTICLE SIZE

Medium Fine – Fine, 0.30 mm to 0.075 mm (#50 – #200)

PRICING 69¢ per square foot in 3.5" of sand Average delivered price within the U.S.

Width	X	Length	=	Sq. Ft.	x .69	Price	
	χ		=		x .69 =		*

*Estimate, based on 3.5" of qualified sand. Total price varies depending on individual arena needs. Consultation suggested. Prices are subject to change.



Olympian Adrienne Lyle riding Wizard



Footing that protects your horse

Premier ProTex is a premium arena footing product that is mixed with sand to mimic a sod surface by providing a rooting system. Premier ProTex is made from a consistent blend of carefully-chosen recycled, non-woven textile fabrics and fibers. We then add cushioning components to prevent over compaction of the surface. Premier ProTex is specifically formulated for optimal biomechanics. When mixed with the proper sand, it provides professional-level surface characteristics. Excellent firmness and shear support, cupping, rebound, grip, and traction are achieved with this high-performance footing.

Premier ProTex requires a specific sand gradation, the ability to water, and the correct grooming equipment. Call your Premier Equestrian footing expert today to get the details on these requirements and to answer any other questions you may have about Premier ProTex.

"I can't believe how much life Premier Equestrian was able to put back into our footing. The ProTex stabilized our surface, minimized the dust, it now retains more moisture thus reducing the need to water, and kept the surface from compacting. What a huge improvement. The cost was a fraction of a complete redo." You guys are simply the best!! Thank you from all of us at River Grove!"

Adrienne Lyle - Olympian & International Dressage Competitor



Master's Blend is a mixture of our best non-woven textile and cushioning additives. This multi-purpose blend features all five of the surface characteristics to achieve ideal biomechanics, equine performance, while supporting the overall health of your horse. It combines the stability, grip, and shear strength qualities of Premier Textiles, and adds the cushion, cupping and rebound of our cushioning agents.

Master's Blend creates an all-around surface that can be adjusted for jumping, dressage, or any other type of performance arena. Ideal for extremely fine sands that contain silt or clay. Prevents compaction and provides a non-slip surface. Talk to a Premier Equestrian Footing Expert to help you design a quality surface that meets your needs.



Rebecca Farm in Kalispell, MT hosts The Event at Rebecca Farm and is proud to offer their competitors a top-quality arena experience. Master's Blend arena footing, supplied by Premier Equestrian, gives competitors a slip-free ride as it is designed for traction but also provides movement and cushion. Competitors were thrilled with the quality of the arena surfaces.

"The rings at Rebecca Farm have been fantastic. I have been practicing all week and the rings remained stable with no dust or deep spots. It was a joy to ride on!"

– Gina Miles Olympic Silver Medalist, Eventing

- Mixture of textile and cushioning additives
- Stabilizes sand particles
- Excellent resistance to compacting
- Excellent shock absorption for less concussion and more energy rebound
- Stability, additional traction and grip
- Improves & balances moisture retention
- Lasts up to 10 years, depending on usage & maintenance

SAND SPECIFICATIONS - A fine silica sand with sub-angular particles is best. However, any type of sand with the required sand particle size will work. Particle size will be the most important factor in sand requirement.

REQUIRED SAND PARTICLE SIZE

Fine, 0.250 mm to 0.063 mm (#60 - #230)

PRICING 1.09¢ per square foot in 4" of sand Average delivered price within the U.S.

Width	Х	Length	=	Sq. Ft.	x 1.09	Price	
	Х		=		x 1.09 =		*

*Estimate, based on 4" of qualified sand. Total price varies depending on individual arena needs. Consultation suggested. Prices are subject to change.





- Nylon and polyester fibers
- Stabilizes a wide range of sand particles
- · Increases firmness and stability
- · Provides cushion, cupping and rebound
- · Retains moisture and reduces dust
- · Suitable for indoor and outdoor arenas
- Great for mixing with existing sands



A fine to medium sand with sub-angular particles is best. Particle size will be the most important factor in sand requirement.

REQUIRED SAND PARTICLE SIZE

Medium – Fine, 0.60 mm to 0.105 mm (#30 – #140)

PRICING 55¢ per square foot in 3.5" of sand Average delivered price within the U.S.

Width	X	Length	=	Sq. Ft.	x .55		Price	
	χ		=		x .55	=		*

*Estimate, based on 3.5" of qualified sand. Total price varies depending on individual arena needs. Consultation suggested. Prices are subject to change.



ArenaAid has become one of our most popular footing additives. The combination of nylon and polyester fibers stabilizes a wide variety of sands; new or existing. The unique formula of fibers gives sand structure by trapping loose, rolling particles. This results in increased stability and grip, cushion, cupping, rebound, and reduced shear. As an added benefit, the nylon fibers hold moisture in your arena surface.

ArenaAid is a perfect solution if you want the performance of a fiber-textile arena surface without the cost of replacing all the sand. ArenaAid is easy to install and very affordable. It is a neutral, non-toxic, non-allergenic material that will not affect humans or animals. ArenaAid is environmentally safe and made in America.

"We installed ArenaAid into our arena and could not be more thrilled. It has the attributes of the footing we had at our last farm without the negatives. That prior footing, while fantastic for competition, could be a bit firm for every day riding. ArenaAid has given us high performance footing suitable for daily training at an unbelievably competitive price."

- Gina Miles Olympic Silver Medalist, Eventing





Athletex is a blend of textile and rubber made from recycled athletic shoes. Athletex will help with hard, compacted, and dead surfaces by introducing voids to increase cushion, cupping and rebound. Rubber enhances cushioning, while textiles increase stability and help retain moisture.

Athletex has the advantage of working well with a wide range of sand sizes. It can stabilize coarse sand or perform great in fine sand. Little maintenance is required and most types of grooming equipment will work. The qualities offered by Athletex make this an excellent multi-purpose type footing additive suited for dressage, jumping, western pleasure, vaulting, and other types of disciplines.



"I was thrilled to work with Premier Equestrian on our new jumping arena. The Athletex provided stability cushioning and required minimal maintenance."

- Kim Severson Olympic Silver Medalist, Eventing

- Mixture of recycled rubber and textile
- Excellent resistance to compacting
- Excellent shock absorption
- · Enhanced energy rebound
- Increased stability
- Improves & balances moisture retention
- · Suitable for most types of sand
- Suitable for indoor and outdoor arenas
- Low maintenance

SAND SPECIFICATIONS - A coarse to fine sand with angular to sub-angular particles.

REQUIRED SAND PARTICLE SIZE

Coarse – Fine, 4.75 mm to 0.075 mm (#4 – #200)

PRICING 52¢ per square foot in 3" of sand Average delivered price within the U.S.

Width	Х	Length		Sq. Ft.	x .52		Price
	X		=		x .52	=	*

*Estimate, based on 3" of qualified sand. Total price varies depending on individual arena needs. Consultation suggested.

Prices are subject to change.





Recycled tires

• Excellent resistance to compacting

- Excellent shock absorption
- · Enhanced energy rebound
- Improves moisture absorption
- · Suitable for most types of sand
- · Low maintenance
- Suitable for indoor and outdoor arenas
- Clean, dust-free, and metal-free

SAND SPECIFICATIONS

A sharp and angular particle shape and the ability to compact will be the most important factor in sand requirement

REQUIRED SAND PARTICLE SIZE

Coarse - Fine, 4.75 mm to 0.075 mm (#4 - #200)

PRICING 43¢ per square foot in 2.5" of sand Average delivered price within the U.S.

Width	Х	Length	=	Sq. Ft.	x .43		Price	
	Χ		=		x .43	=		*

*Estimate, based on 2.5" of qualified sand. Total price varies depending on individual arena needs. Consultation suggested. Prices are subject to change. ProStride crumb rubber is an affordable answer for an arena that is hard packed; contains large, sharp or angulated particles; and is in need of extra cushion and rebound. Adding cushion and rebound to your arena keeps your horse healthy by minimizing bone and joint concussion and tendon strain.

ProStride is made from recycled tires and is sized specifically to be mixed with sand for horse arenas. ProStride rubber undergoes several more recycling processes than competing rubber products. This results in a cleaner, more consistent and uniform material with no dust, metal or residue.

ProStride will last for many years, requires minimal maintenance, and works with most types of grooming equipment. We ship from many points around the country to minimize freight costs.

"I called Heidi and Mark at Premier Equestrian and found them both knowledgeable and very pleasant to deal with. I had them ship me a sample of their rubber and was very impressed. Another dressage enthusiast in my town had gone with the rubber with the filaments still in it. On seeing her ring with all the filaments raised to the surface, and the quality of Premier's footing I knew which one to pick. Thank you."





Custom Footing Blends





Premier footing products are formulated for your specific discipline and needs.



Just as one saddle does not fit all horses, the same rings true for your arena footing. Type of discipline, volume of traffic, climate, type of sand in your area, watering options, grooming and maintenance will all play a critical role in how your arena functions.

Our expert staff can formulate a custom footing blend to meet the specific needs of your facility. Get started by calling us at 800-611-6109 to talk to a Premier footing expert.

"I've ridden on many footing surfaces all over the world. Some venues will create a very stiff, tightly-bound surface. You then have horses with sore feet. Other surfaces may be too deep, which can cause soft tissue injuries. I love my surface from Premier Equestrian. It's a happy-medium of softness with rebound, but it's incredibly stable."



WATER RETENTION ADDITIVE

- Retains water in your arena
- Reduce watering intervals
- · Helps reduce dust
- Used indoors and outdoors
- Lasts up to three years, depending on usage
- Non-toxic and safe for horses

SAND SPECIFICATIONS

This will work with any type of sand and is great to use with any of our other additives for enhanced moisture retention.

PRICING

\$419 (.06¢ per sq. ft.) Sold in 55 lb. bags.

Each bag covers 6,900 s.f.

FREE shipping in contiguous US. Prices subject to change.

Width		Length		Sq. Ft.
	Χ		=	





Premier Hydro-Keep is a safe, non-toxic chemical crystal that can reduce your arena watering by 50 percent! The crystal expands when wet, absorbing and retaining water. Over time as the soil dries, the crystal contracts, gradually releasing water and hydrating the surrounding area. As an added benefit, this continuous expansion and contraction reduces soil compaction.

Research shows that Hydro-Keep super absorbent polymers can release up to 95% of the water absorbed, making it available for your surface. One pound of Hydro-Keep can absorb 40 gallons of tap water and 31 gallons of rain water.

With an essentially neutral pH, Hydro-Keep will break down into nitrogen, carbon dioxide and water with no residual toxicity. Hydro-Keep can be added to any of our other additives for enhanced moisture retention.



"My dressage arena gets used constantly - and for everything, not just dressage. We jump, play and ride in there with several horses every day. I used to have to water it twice a day and even then it was dusty after a couple of hours with the dry Colorado air. Since mixing in Hydro-Keep, I water it every 3 - 4 days. That is just amazing to me. It is economical to use and it's saving me a lot in tractor/equipment use and valuable water supplies."

– Linda Parelli, Parelli Natural Horsemanship



WHOA Dust™ is proven to control dust and reduce watering in your arena, improving the texture and performance of your footing.

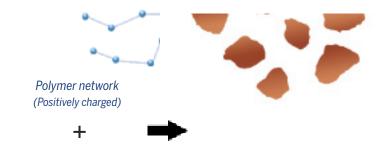
WHOA DUST™ uses flocculation. The neutrally-charged dust particles floating in your arena are charged to a negative state. Dust particles become connected through a network. Once charged, the dust will no longer be suspended in the air.

Moisture will be retained and the need to water your arena will be reduced by a minimum of 50% (Customer average 75%). Most arenas only need 12 - 24 lbs of WHOA Dust™ and application can be done in under 2 hours.

(Negatively charged)



Left: Water, footing, and WHOA Dust Right: 15 seconds later



Flocculation: Dust particles become connected through a polymer network, making particles heavier so they don't become airborne.

- · Simple and easy to apply
- Reduces operational and maintenance costs
- Use in arenas, round pens, corrals, paddocks, and race tracks
- Biodegradable
- Environmentally & animal safe
- · Can be used if Magnesium or Calcium Chloride has been used in the past
- Can last up to 16 months between treatments

WORKS WITH MOST FOOTINGS, SUCH AS:

Crumb rubber Screened/washed Cotton-added sand

Clay/sand mixture Geotextile*

Silica sand

*We noticed a 50% reduction in water when used with geotextile footing.

PRICING

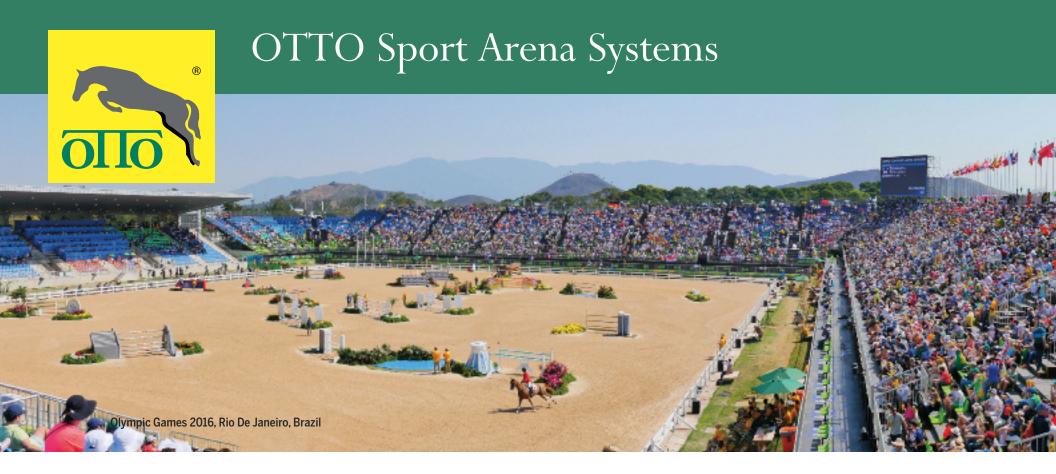
\$220 Sold in 4.4 lb. bags.

Each bag covers 2,800 s.f.

FREE shipping in contiguous US. Prices subject to change.

Width	χ	Length	=	Sq. Ft.
	χ		=	





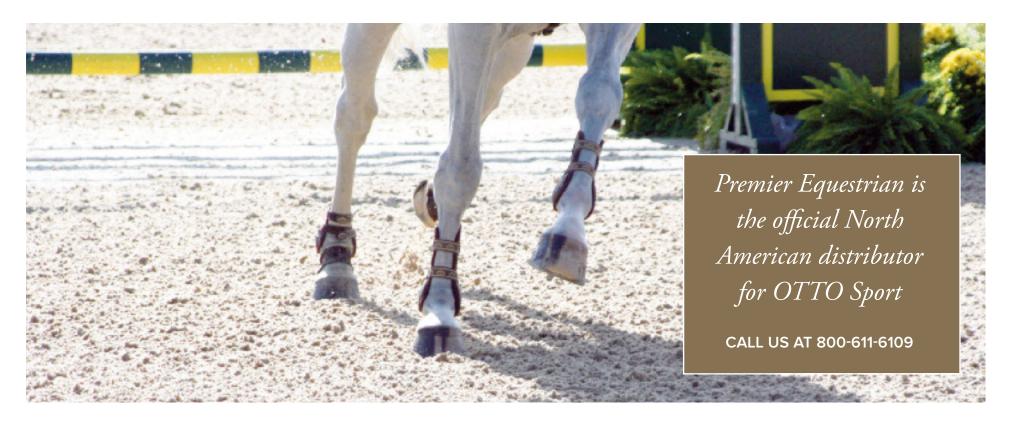
OTTO Sport International is known as one of the leading experts in its field, with almost 30 years of experience and over 6,000 installed arenas worldwide. Professional equestrians, as well as amateurs, trust in OTTO Sport's products. OTTO Sport provided the arena surfaces for the 2016 Rio Games



OTTO Sport Arena Systems can be seen at competition facilities and farms all over the world.

Olympic Games 2016, Rio De Janeiro, Brazil • Alltech FEI World Equestrian Games 2010, Lexington KY FEI World Equestrian Games Aachen 2006 • FEI World Equestrian Games Rome 1998

Bill Twomey • Steffen and Shannon Peters • Klaus Balkenhol • John Whitaker





OTTO-PerforatedMats (pg. 24–25)



OTTO-Ebb&Flow System (pg. 26-27)



OTTO-PerforatedMats

THE OTTO-PERFORATEDMAT

is a product made of resilient material, specially designed for equestrian sports. It is used in equestrian arenas and paddocks, set underneath the footing to provide maximum drainage, water conservation, concussion mitigation and stability for horse and rider.

This arena system provides all the benefits of firmness, cushioning, cupping, rebound, and grip, combined with a long lifespan and ideal moisture retention.



PRICING

7-026 OTTO-PerforatedMat **\$28/ea**. Each mat is 46" x 33.50" (1 sg. meter or 10.7 sg. ft.)

Installation, aggregates & freight additional Prices are subject to change

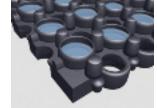
Why is the OTTO-PerforatedMat system best in class?

The OTTO-PerforatedMat is an arena base system that offers drainage, stability, shock absorption, and arena longevity. The system creates a true all-weather arena that many trainers need to keep up hectic training schedules. Clearly the world's best arena base system, OTTO Sport has chosen Premier Equestrian to represent the product exclusively in North America. Here are the reasons OTTO Sport is the best in class:



DRAINAGE — No other drainage method can match the amount of water an OTTO-PerforatedMat System can remove. Holes in the mats provide immediate drainage of excess water, making the arena useable immediately after heavy rain. Traditional arena bases are designed for water to flow over them, slowing down drainage. OTTO Arena Systems are designed to allow water to flow through the layer under the mats, creating a pathway for high-volume water flow.

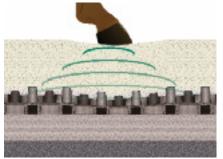
MOISTURE RETENTION — OTTO - Perforated Mats holds up to one gallon per mat. That equals 1,200 gallons for a standard 20 x 60 dressage court. The entire surface maintains even hydration for a more consistent footing.

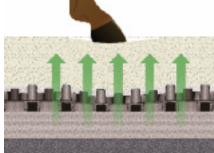


STABILITY OF FOOTING — Traction-knobs of varying height on the upper side of the OTTO-PerforatedMats maximize stability. This guarantees a secure surface, preventing horses from slipping – a clear advantage during sharp turns. The mat provides this grip while allowing some movement of the hoof, minimizing concussion and hyper-flexion of tendons and ligaments during each phase of movement.

CONCUSSION ABSORPTION & REBOUND — OTTO-PerforatedMats absorb up to 40% of the energy caused by the hoof fall. The German Association for Technical Inspection (TÜV) confirmed the mat minimizes shock and concussion on impact. The nature of the mat provides rebound. Cushion and rebound protect horses' musculoskeletal system and soft tissues. The top surface layer requires less additives for stabilization.







Knobs of varying heights create skid resistance. Mats absorb more than 40% of the force applied on the surface, and provide the horses' legs with the optimal amount of rebound.

Textile & Sand Footing

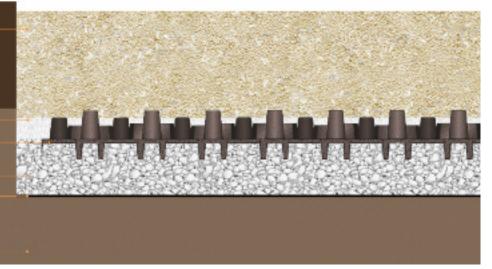
Fill Layer
Fine crushed stone, grain size: 1/8" - 1/4"

OTTO-PerforatedMat

Drain/Base Layer
Crushed stone, grain size 3/8" - 5/8"

Liner

Native Soil/Sub base Layer





LOCKING-RINGS — The tapered locking rings on the bottom side of the mat prevent lateral shifting. Rocks cannot migrate up to the substructure, nor will sand and footing travel down under the mats. This ensures a proper and durable separation of footing and drainage layer.

WELL-PERFORMING EXPANSION JOINT — Any material tends to expand when warming and contract when cooling. Systems without expansion joints will bulge out when warming. Sand can trickle down in the emerging cavities, forcing the mat up and dislodging it from its initial position.

A gap of approximately 1.5 inches is set between each mat. The structure of the bottom side and weight will lock the mats into place. Sand cannot get under the mats, eliminating bulging and shifting of the surface.

LONGEVITY OF SURFACE — The proper and durable separation between the footing and the substructure increases the lifespan of the arena. Stones will not migrate up from the drainage layer into the sand footing, and sand will not migrate down into the drainage layer. This ensures a long lasting arena surface that remains consistent from installation into the future.

DURABILITY AND WARRANTY— OTTO-PerforatedMats have been installed on more than 6,000 equestrian facilities throughout the world and have impressively proven maximum performance and durability. OTTO Sport gives a 20-year warranty on the Mats when installed according to specifications.

PROVEN ENVIRONMENTAL PROTECTION — OTTO-PerforatedMats are manufactured from recycled synthetic materials, which actively contribute to environmental protection and sustainable development. Quality management also includes regular screenings conducted by the German Association for Technical Inspection (TÜV) that approve compliance with statutory regulations for soil and groundwater protection. According to this, the OTTO PerforatedMats comply with all standards set by the German "Bundesbodenschutz-Verordnung" (Federal Soil and Groundwater Protection Order).



OTTO-PerforatedMats laid over a drainage layer



A fill layer goes over the OTTO-PerforatedMats



Footing layer over the OTTO-PerforatedMats



Consistent moisture for your footing

The OTTO-Ebb&Flow System eliminates the need for sprinklers and manual watering of your arena. It also provides high capacity drainage during rain events.

The system assures accurate and consistent hydration of the arena surface by automatically controlling the water level within the arena base-substrate. The surface is watered from below where the water wicks up through the sand to keep the surface at an optimum hydration.

It is the most efficient and easy method to keep your arena surface in shape for training and competition.

OTTO-Ebb&Flow



The water level is monitored constantly and regulated automatically through a pipe array that runs underneath the footing layer. The pipe array is connected to the automated water source and set within an impervious liner. The liner is filled with sand and the OTTO-PerforatedMats are set on top. The OTTO-PerforatedMats add shock absorption and cushioning, preventing the surface from becoming compacted and stiff. The top footing layer is then placed on top of the mats giving you an ideal performance surface.

The system includes an arena pan liner, pipe array, electronic controls, OTTO - Perforated Mats, and footing textile. The system calls for specific grading and construction. We will work with your contractor to assure a successful installation.



Automated water source

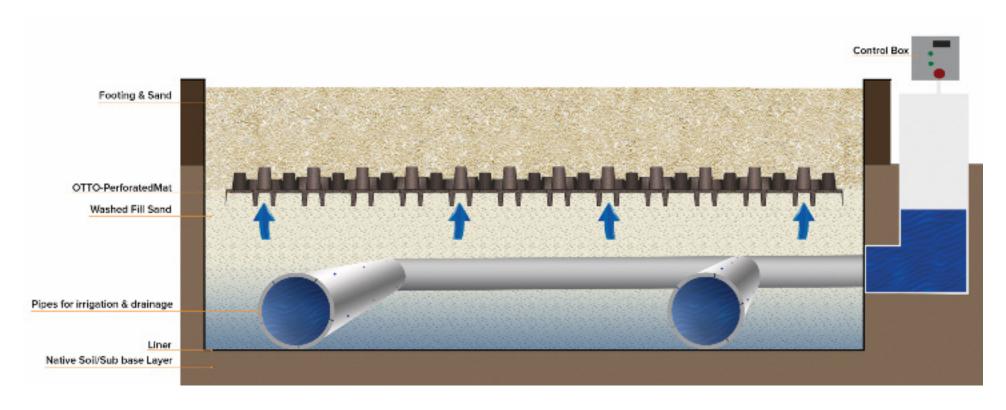


Electronic controls



Using the OTTO-Ebb&Flow System with OTTO-Perforated Mats and Premier Footing provides the highest quality surface, convenience, and considerably higher comfort for horses.

Call a Premier Specialist for a free consultation at 800-611-6109



OTTO Sport Arenas



"It's important that the soil is neither too hard nor too smooth. For horses, the soil has to be a little skidding, so it shouldn't be too blunt. Additionally, the soil has to be waterpermeable and ought to have a good degree of moisture. It should neither be muddy nor too dry.

OTTO Sport mats fulfill these requirements. We also use OTTO mats in our indoor arena as we need a soil which is level but not slippery. The knobs on the mats provide a good consistency so horses will find a strong foothold."

Klaus Balkenhol Rosendahl, Germany

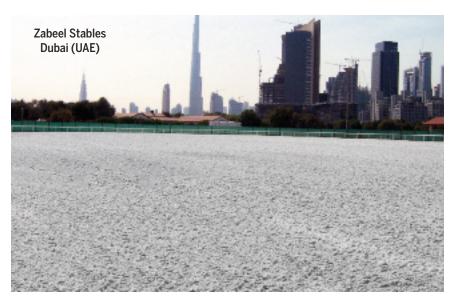






"We were introduced to OTTO Sport in 2006 before the World Equestrian Games and we have always thought they are just the best surface that you can have. And now we finally have them, which we're so so excited about."

Shannon & Steffen Peters Olympic Dressage Rider (Steffen), California, USA





ARENA GROOMING & MAINTENANCE

Grooming and maintenance are key factors in achieving quality arena footing. Grooming enables you to maintain a consistent riding surface for your equine athlete, avoid footing irregularities, and condition your sand and footing additives. Regularly mixing and leveling footing prevents problems. A professional-type groomer can overturn and redistribute the varying sand particle sizes and keep additives mixed thoroughly.

Premier Standard Groomer

Different arena surfaces require different maintenance. The Premier Standard Groomer is specifically designed to churn and blend textiles. It also mixes and levels crumb rubber and can break up even the most hard and compact surfaces. This groomer has been updated with some forward thinking grooming features that are not found on competing products.

New! Upgrade to Rotating S-Tines. This feature is great for synthetic and fiber arenas. Tines can be set all the way forward help to lift and mix. Themid position will maintain the mixture of your sand and fiber. Rotating tines back will smooth and finish the top surface. You still get all the great features of leveling, fluffing or compacting with this groomer.



S-Tines, Roller Break, Mix, Fluff, Finish. Outfitted with S-tines, the Adjustable Leveling Bar™, and a roller, the Premier Groomer will break, mix, fluff, level and finish in one pass.



Adaptable Hitch System - Use the 3-point hitch or add the Tongue & Ratchet Jack to tow with an ATV or other lightweight utility vehicle.

Item #	Description	Tine Bars	Unit Width	Unit Length	Unit Weight	Vehicle Width	Vehicle Power	Price	
5-500	5' Premier Standard Groomer	2 rows Coil or S-Tines	5 ft	52"	280 lbs	50"	18-24 HP or min. 500cc	\$2,295	
5-501	6' Premier Standard Groomer 2 rows Coil or S-Tines		6 ft	52"	330 lbs	62"	20-30 HP or min. 500cc	\$2,415	
5-502	7' Premier Standard Groomer	2 rows Coil or S-Tines	7 ft	52"	360 lbs	74"	25-35 HP or min. 650cc	\$2,650	
5-504	Tongue with Ratchet Jack Attac	hment 45 lbs.						\$335	
5-506	Arena Edger™ Upgrade								
5-519	Standard Groomer Rotating Tines & Kickstand Upgrade for Textile Arenas \$								
Freight Additional Prince are subject to change									

Freight Additional. Prices are subject to change



The Adjustable Levelling Bar™

An advancement in grooming technology! Set the Adjustable Leveling Bar^{TM} up, down, forward, backward, or diagonally to move your footing where you desire. For example, if footing is built up on the rail, set the Adjustable Leveling Bar^{TM} on a diagonal to pull the footing back into the track. When mixing textile move the Adjustable Leveling Bar^{TM} backward to avoid getting the textile stuck in the tines.



The Arena Edger™ cleans up rail ruts and breaks down side mounds.

PREMIER PRO GROOMER

Our new Pro Groomer contains all the features you'll ever need including: Swivel 3-Point Hitch, front and rear rollers, two rows of S-Tines and two rows of Coil Tines, and a smoothing bar/blade. Turnbuckles allow the tines to raise and lower independently, while securing their position. All four rows of tines can be used at the same time or independently. Tines can rotate 90 degrees to accommodate ripping and lifting, or set angle back for finishing and fluffing.

The Premier Pro Groomer will do heavy compaction or delicate grooming and perfectly finish your surface in one pass. Perfect for all types of footing and is safe for base, landscape liners and base mats.



S-Tines & Coil Tines can be rotated to rip, lift, finish, and fluff.



Smoothing bar and rollers smooth, compact, and finish the surface.

PREMIER MINI PRO GROOMER

The new Mini Pro Groomer has all the same great features as the Premier Pro, but in a compact lighter-weight version. The Premier Mini Pro is designed to be pulled with smaller equipment without a 3-Point hitch. Tow behind hitch allows the groomer to be pulled with a small tractor, UTV, or Side-by-Side possessing 27 HP or more. The Premier Mini Pro groomer will finish the arena surface perfectly for every stage of grooming. Works with all types of footing.





Item#	Description	S-Tine Bars	Coil Tine Bars	Unit Width	Unit Length	Unit Weight	Vehicle Width	Vehicle Power	Price
5-510	5' Premier Mini Pro	2 rows	2 rows	5 ft	68"	600 lbs	50"	18 HP	\$5,395
5-511	6' Premier Mini Pro	2 rows	2 rows	6 ft	68"	650 lbs	62"	24 HP	\$6,150
5-515	6' Premier Pro	2 rows	2 rows	6 ft	75"	1050 lbs	62"	40 HP	\$7,995
5-516	7' Premier Pro	2 rows	2 rows	7 ft	75"	1150 lbs	74"	40 HP	\$8,795
5-517	8' Premier Pro	2 rows	2 rows	8 ft	75"	1250 lbs	86"	50 HP	\$9,595
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Freight Additional. Prices are subject to change

WATERING

Watering your arena surface will make a huge difference in performance and dust control. The intermolecular attraction formed between water molecules holds wet sand together, stabilizing particles that would roll if dry. Water maintains its consistency from 32 degrees to 212 degrees fahrenheit.

We recommend water over polymers and wax coatings, as these types of coatings don't have the same molecular bond that water has. Polymer and wax molecules actually have a repelling action. They can become wedged in your horses feet creating a snowball effect, offsetting the balance of the hoof. These types of coatings are very inconsistent in temperature variation. They are stiff and clumpy in cold temperatures and have a lower melting point in high temperatures causing them to leave residue on clothes, shoes, and your horse.



ENGINEERING THE PERFECT RIDE

www.PremierEquestrian.com 800-611-6109

