

ARENA GUIDE

12 MIN READ

How to Choose the Right Footing for Your Horse Arena

Sand analysis · Discipline matching · Footing types
FIBR · FLEX · LOCK components explained

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Choosing arena footing is the single most consequential decision you'll make for your riding surface — and the one most people get wrong. Not because they pick a bad product, but because they pick a product without understanding their sand, their discipline, or their climate first. This guide walks through every factor that matters, in the order that matters.

SECTION 01

Start With Your Sand, Not Your Additive

The most common mistake in arena footing is choosing an additive before understanding the sand it's going on top of. Owners read a brochure, like the marketing, place an order — and then wonder why a \$20,000 upgrade rides like the cheap surface they replaced. The product wasn't the problem. The base it landed on was.

Sand is not generic. **Particle shape** determines whether grains interlock or roll under hoof — sub-angular is ideal; round river sand will not hold structure no matter what you mix into it. **Gradation**, the distribution of particle sizes across the load, controls compaction, drainage, and how an additive disperses. **Fines content** sets the balance between dust and binding: too many fines and the surface generates clouds and compacts hard; too few and the footing stays loose and won't hold together.

The same quarry can produce meaningfully different sand from load to load. Gradation shifts with the part of the deposit they're pulling from, with the weather during processing, and with how worn the screening equipment is. Two trucks from the same supplier on the same week are not guaranteed to be the same product. This is why a **sieve analysis** is the starting point, not an optional add-on.

KEY TAKEAWAY

A footing additive cannot fix fundamentally wrong sand. It can only enhance sand that's already in the right range. Spend the small upfront effort to find out what you have before you spend the large upfront cost to cover it.

Use our arena sand calculator

performancefooting.com/arena-sand-calculator

Get a free ArenaSpec™ sand analysis

performancefooting.com/contact-us

SECTION 02

Match Your Footing to Your Discipline

After sand, discipline is the most important variable in your spec. Different sports place different demands on a surface, and the performance windows are far enough apart that no single ratio serves them all well.

DRESSAGE

Needs a **firm, stable surface** — maximum FIBR, moderate LOCK, minimal FLEX. Collected lateral work and precise transitions demand footing that doesn't shift under load. Excess cushion destabilizes the horse's balance and softens the connection.

JUMPING

Hunter/jumper and arena eventing need **serious shock absorption**. Elevated FLEX for landing impact, balanced FIBR for push-off. The footing must absorb vertical force without being so deep that it fatigues the horse over a round.

WESTERN

Varies significantly within the category. Reining needs controlled slide — enough give to allow the stop without grabbing. Barrel racing demands maximum grip. Western pleasure just needs a smooth, predictable surface.

MULTI-USE

The **balanced compromise**. No component dominates. The hardest surface to specify because it must be acceptable for everything and optimized for nothing — diagnosis matters more here, not less.

“One footing for all disciplines” is the default recommendation from companies that only sell one product. It is not a recommendation rooted in performance.

SECTION 03

Indoor vs. Outdoor

The same additive at the same ratio will perform differently indoors than outdoors. That's another reason custom specification beats off-the-shelf.

Indoor Arenas

Indoor arenas live and die by **dust control**. With no wind to disperse airborne particles, riders and horses breathe whatever the surface throws up. Moisture management through LOCK is critical, drainage is rarely a primary concern, and temperatures are more stable — so seasonal maintenance adjustments are smaller. The spec leans toward fine-fines control and a binder that keeps the surface knit together between waterings.

Outdoor Arenas

Outdoor arenas have **weather as the wild card**. Rain saturation, UV degradation, freeze-thaw cycles, and wind that blows fines away all force a different specification. LOCK ratios are typically higher to maintain moisture. Drainage at the base layer matters enormously — if water pools, no footing additive on top will fix it. Base preparation with BaseCore™, geotextile, and proper grading is often the real issue.

TIP

Read the arena construction guide before specifying the surface for outdoor builds. If dust is your primary concern, explore our dust-free footing overview.

SECTION 04

The ArenaSpec™ System

ArenaSpec™ is a **diagnosed, prescribed blend system** — not a single product. Your sand, discipline, climate, and usage are all factored in to produce a custom ratio of three core components. Here's what each one does and why the balance between them matters.

FIBR**Structural Fiber**

COCONUT COIR FIBER · NATURAL · BIODEGRADABLE

FIBR is the structural backbone of the blend. It binds sand particles together, prevents lateral shift under hoof, and creates the interlocking matrix that gives footing its stability and grip. Higher FIBR ratios produce a firmer, more supportive surface ideal for dressage and collected work. Lower ratios allow more give for disciplines that need slide or deeper cushion.

FLEX**Bio-Based Cushion**

PLANT-BASED ELASTOMER · SHOCK ABSORPTION · ENERGY RETURN

FLEX is the cushion and energy-return layer. It absorbs impact on landing, reduces concussive force on joints, and returns energy on push-off. Jumping and eventing arenas need elevated FLEX; dressage arenas need minimal FLEX to maintain firmness. FLEX can also be used as a standalone product, but achieves its best results within the diagnosed ArenaSpec™ blend ratio.

LOCK**Liquid Dust Control**

LIQUID BINDER · MOISTURE MANAGEMENT · DUST ELIMINATION

LOCK is the liquid binder that controls dust and manages moisture retention across the surface. It keeps fines bound to the footing instead of airborne, reduces watering frequency, and maintains consistent ride quality between groomings. Indoor arenas rely heavily on LOCK for air quality; outdoor arenas use higher LOCK ratios to compensate for wind and evaporation.

WHY THE RATIO MATTERS

No single FIBR/FLEX/LOCK ratio works for every arena. The free ArenaSpec™ assessment diagnoses your sand, discipline, and conditions to prescribe the exact blend your arena needs — and the spec evolves as your footing ages.

SECTION 05

Other Footing Types

Levitare™

PLANT-BASED ELASTOMER · BLUESIGN® CERTIFIED · DIY INSTALL

An engineered elastomer additive that delivers cushion, grip, and dust reduction in one product. Install-it-yourself simplicity with broad discipline compatibility. Application rate varies by discipline — getting the rate wrong can over-cushion or under-perform.

FoamFooting™

BUDGET-FRIENDLY · LIGHTWEIGHT · EASY INSTALL

Repurposed closed-cell foam that adds cushion and dust control to existing sand. Extremely lightweight and easy to install with a standard groomer. Less durable than fiber or elastomer options in high-traffic competition arenas.

ArenaSpec™ Complete Replacement

WATERLESS · DUST-FREE · ZERO MAINTENANCE

A premixed, waterless, dust-free system that replaces sand entirely. Zero ongoing maintenance, no irrigation, no blending — installs directly on a prepared base. Higher upfront cost; requires removal of existing footing.

A NOTE ON SYNTHETICS

Synthetic fiber, crumb rubber, and textile shred carry persistent microplastic contamination, no biodegradable end-of-life, and increasing regulatory scrutiny. Performance Footing does not sell synthetic footing — our system uses only plant-based and naturally sourced materials.

SECTION 06

Budget Considerations

The real cost of arena footing is not the product price on the invoice. It's **total cost of ownership**: product plus installation plus maintenance plus water plus the replacement cycle. A surface that needs replacing in three years almost always costs more than a quality system that lasts ten or more — and the difference compounds when you factor in lost ride time during teardown and reinstall.

ArenaSpec™ systems are typically comparable to or less expensive than synthetic alternatives when measured over the full lifecycle. They also include ongoing monitoring and re-spec support at no additional cost, catching degradation early and extending footing life.

The free ArenaSpec™ assessment gives you exact quantities and exact costs before you commit. There's no reason to guess on a five-figure decision.

SECTION 07

Common Mistakes to Avoid

- Choosing an additive before testing your sand.
- Using the same product and ratio regardless of discipline.
- Applying too much additive — more is not better, and over-application creates instability.
- Ignoring the base layer. If drainage is poor, no footing additive will fix it.
- Skipping maintenance. Even the best footing degrades without regular grooming and watering.
- Choosing based on what your neighbor uses — their sand, discipline, and climate are different.
- Assuming “natural” or “eco” means lower performance. Plant-based systems match or exceed synthetics.

NOT SURE WHICH FOOTING IS RIGHT?

Start With a Free ArenaSpec™ Assessment

We'll diagnose your sand, your discipline, and your conditions —
and prescribe exactly what your arena needs.

Get Your ArenaSpec™

or browse all footing products at performancefooting.com



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