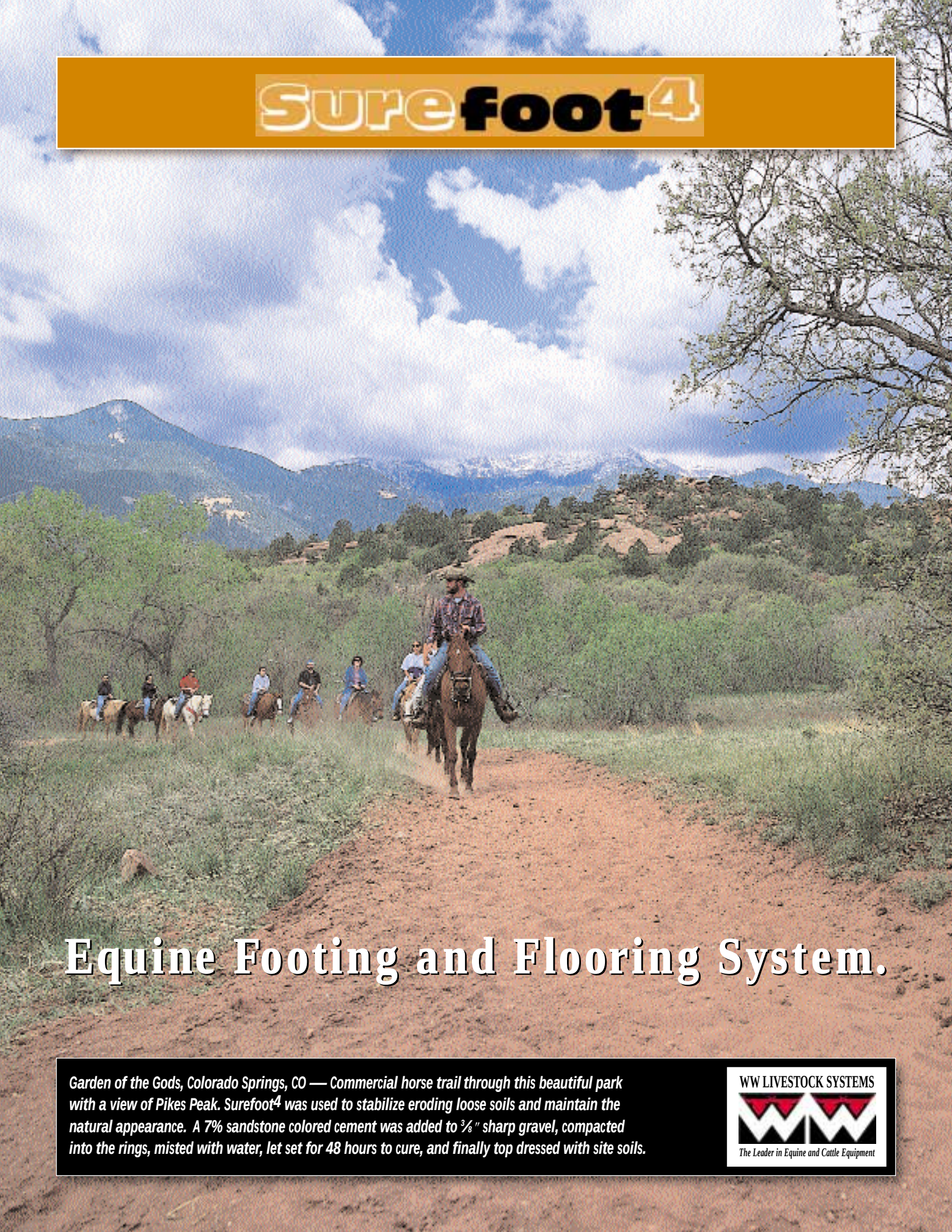
Surefoot4



Equine Footing and Flooring System.

Garden of the Gods, Colorado Springs, CO — Commercial horse trail through this beautiful park with a view of Pikes Peak. Surefoot4 was used to stabilize eroding loose soils and maintain the natural appearance. A 7% sandstone colored cement was added to ⅜" sharp gravel, compacted into the rings, misted with water, let set for 48 hours to cure, and finally top dressed with site soils.

WW LIVESTOCK SYSTEMS

The Leader in Equine and Cattle Equipment

Applications

- Trails
- Stall flooring
- Wash stalls
- Auto walkers
- Cattle working areas
- Feed lots
- Paddocks of sand, gravel, or grass
- Feeding or watering areas
- Turnouts and barn/arena access areas
- Race tracks
- Grooming stalls and breeding areas
- Parking for trailers
- Livestock trailer flooring
- Arenas

Common Problems

- Storms causing mud, erosion, puddles
- Livestock digging holes, loosening soils, wearing tracks
- Slippery, uneven surfaces
- Irregular, stressful footing
- Barn odor
- Large amounts of stall waste
- High expense of concrete
- Hauling heavy rubber mats for cleaning
- Medical bills for leg/tendon injuries
- High frequency long term maintenance

Custom Wheels tested the first stall with new Surefoot⁴ flooring.

Beneficial Changes and Improvements

- Stops erosion, rutting, and soil displacement
- Livestock not be able to dig holes or trenches
- Improved drainage even in heavy storms
- Eliminates mud, standing water, icy puddles
- Surface dries out quickly
- Rapid urine drainage with reduced ammonia odor
- Stable, non-slip surface
- Comfortable and resilient when standing or lying down
- Withstands punishment from heel cleats and toe grabs
- Veterinarian recommended for recuperation stalls
- Level surface for leg and tendon safety
- 50%–75% less bedding material (wood shavings or straw) during product testing
- Easy daily stall cleaning with standard tools
- Permanent flooring needs no rubber mats on top
- Irrigate with water to refresh stall
- Arena top sand layer stays cleaner, longer
- T-bar grading or dragging equipment allowed
- Greatly reduced maintenance and resulting costs

Practical and Proven

Surefoot⁴ provides long-awaited relief in the struggle between equestrian and livestock caregivers and the ground their four-hoofed friends walk upon.

Dirt is quickly disrupted by walking, pawing, digging, etc., and becomes a cesspool where liquid waste collects, causing significant sanitation and expensive, time-consuming maintenance challenges. Asphalt, concrete, and rubber mats present their own set of disadvantages. Surefoot⁴ is the solution to these problems. This new product line has proven to provide many added benefits over existing footing and flooring systems.

Product Information

Surefoot4 is a flexible, injection-molded plastic ring-and-grid mat system with a filter fabric backing. The design has been successfully used since 1982 as porous paving/reinforcement for grass and gravel fire lanes and overflow parking. It provides a stable, firm surface accommodates loads in excess of 50 tons per horse hoof. The polyester

1. Prepare porous gravel base

Excavate 6″–8″ down to allow for 4″–6″ of base course material, one inch of Surefoot⁴, and allowing space for bedding material depth or sand cover. Removing humps and gross unevenness is recommended. Most sub soils require a 4″–6″ base of sandy gravel, not to exceed ³/₄″ large gravel. Most quarries have road base material that is suitable. If it doesn't meet our recommended sieve analysis as shown on back page, then mixing one part sand with two parts ³/₄″ stone will work. Level and compact base with vibrating plate compactor for small jobs or highway roller for large projects. Verify porosity by running a hose and see that the water drains away.

2. Lay Surefoot⁴ units

With rings up and fabric down, lay mats in the same direction, directly over the base course. Connect the snap-fit fasteners together. A ¹/₂″ nut driver will speed this process. If fastening creates any unevenness, then leave the mats unconnected and secure the edges with anchors. Make sure to overlap fabric and tuck underneath the rings. Trim excess material around the perimeter. The plastic and fabric cuts easily with pruning shears, utility knife, and scissors.

filter backing allows liquid to rapidly filter through to natural drainage layers below, while at the same time acting as a weed barrier and preventing the mixing of base dirt with bedding or footing material.

This technology was designed by a registered landscape architect and tested by an AQHA-award-winning Quarter Horse exhibitor/breeder. Videotapes of test installations are available upon request.

Surefoot^4 in standard black color is molded from 100% recycled HDPE #2 plastic onto a polyester filter fabric. Rings: 2″ dia. × 1″ high. Self-fastening snap-fit connectors allow for easy placement. Anchor nails and fender washers are provided with each order.

Insert anchor nail and washer into ring in corner with two female connectors.

Reusable snap connector requires 5 lbs. to connect and resists 70 lbs. of pull-apart force.

Easy Steps to Install Surefoot^4

3. Secure Surefoot^4 to base with anchor nails

Drive 8″ galvanized anchor nails with fender washers through fabric layer, inside rings into base course. Place anchors at a spacing of 4 per m^2 over entire area. Additional nails may be required every third ring around perimeter, in corners, along door sills, or in heavy traffic areas. Stretch and smooth product as you nail to ensure ridge-free application.

4. Fill rings level to top

Fill to top of rings or a little higher with fine sharp-edged gravel $^3/_{16}$″ minus diameter (crusher fines, breeze, screenings, stone dust, or crusher run—see large photo). In areas where limestone is the only available aggregate, a combination of masonry or concrete sand may be used ($^2/_3$ limestone fines to $^1/_3$ sand). Do not use sand or other rounded particles, as they will not bind.

5. Compact fill material

Before compacting fill material into the rings, mist with water. Use a flat plate vibrating machine or asphalt roller, depending on the size of the project. Fill in any low spots and repeat the process as necessary until the rings are filled, flush to the top. Let the site set up overnight.

6. Top dress

Bedding material can now be added in stalls. Sand can be hauled into an arena or paddock. Take care when driving front end loaders that you do not twist the wheels dramatically. Use spikeless drag or soft flexible hand rake for grooming arenas, auto-walkers, and paddocks. Regular daily cleaning tools can be used in stalls.

Please install Surefoot^4 carefully to ensure safety and product longevity. This is a permanent installation with enormous benefits when done correctly. Professional assistance is not necessary. Landscape contractors or earth work firms can be hired to do large projects or handle any aspect of smaller installations.

Bridle Trail Solution

Garden of the Gods, Colorado Springs, CO

Rutting caused by horse traffic

Water erodes loose soils up to 3′ deep

Trenches filled with base course, leveled and compacted

Shaping Surefoot[4] to curves and hills, and anchoring in place

Tumbling in mixer—1/2″–3/4″ gravel, 7% cement as binder, and terra cotta colorant to match native soils

Compacting gravel mixture into Surefoot[4] mats and misting with water for adhesion

Covering with tarp to cure

Problem solved

Surefoot[4] Roll Sizes

Part#	Descr	Size	Area	Anchors Included
SF1 (one square unit)	1 pc	3.33′ × 3.33′	10 sf	4 nails/washers
SF10 (10′ × 10′ stall)	3 pcs	3.33′ × 10′	97 sf	36 nails/washers
SF12 (12′ × 12′ stall)	4 pcs	3.33′ × 13′	170 sf	70 nails/washers
SF40 (large roll)	1 roll	6.5′ × 65′	422 sf	180 nails/washers

See our nearest dealer

Parking Solutions

Surefoot[4] can also be used in combination with natural turf to reinforce grass or gravel parking lots and high use areas at event sites for cars, trucks, and livestock trailers. Cleanup is fast since manure from trailers can be raked and spread on the grass. Oil drippings from vehicles are broken down by soil bacteria. When this site is not used for parking it looks like a beautiful lawn or golf green.

Auto Walker Solution

Hot walker application eliminates ruts, improves safety, and reduces daily maintenance.

Base Course Sieve Analysis

Base Course: Sandy gravel material from local sources commonly used for road base construction, passing the following sieve analysis.

% Passing	Sieve Size
100	3/4″
85	3/8″
60	#4
30	#40
<3	#200

Web Site, Video and Professional Assistance

For technical assistance, a supplier or installer near you, call W-W Livestock Systems at 1-800-255-8999 or visit our web site www.wwsurefoot4.com

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