

Fences for Horses



*Dr. John W. Worley, Biological and Agricultural Engineering
Dr. Gary Heusner, Animal and Dairy Science*

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Purposes of a Fence

Pastoral scenes of life in the country often include beautiful horses running with tails raised high or peacefully grazing in lush green pastures surrounded by a freshly painted fence. While these fences are truly beautiful, they also serve practical purposes. Fences are necessary to safely confine horses yet provide them with the opportunity to exercise and graze. Because of the natural flight response of horses, they tend to injure themselves in fences more than most other livestock. In addition, many horses are extremely valuable and that justifies the extra cost of building a fence that is safe, strong and attractive. Painted rail fences are not only beautiful to humans, they are highly visible to horses. They appear to a horse as a solid barrier that they are less likely to challenge or run into. When a horse does contact a rail fence, it is less likely to get a hoof hung in it or cut itself on sharp wire ends as might be the case with many standard farm wire fences. When

selecting a fence, consider all three of these important functions -- utility (keeping the horses in), safety and aesthetics. How much importance is placed on each function depends on the owner's budget, the value of the animals, and your priorities. A number of alternatives are available for consideration.

Height of the Fence

The heights of fences used for other livestock do not necessarily apply to horse fences. Horses are more athletic and more likely to jump a fence than to go through or under it when spooked or herded. The minimum recommended height for perimeter pasture fences for horses is **5 feet (60 inches)**. This height will deter most horses from attempting to jump and will also reduce the temptation for people to reach over the fence to pet or feed horses. **A 5-foot minimum height fence is both horse-safe and people-safe.**

For paddocks (small pastures or turn-out areas fewer than 2 acres in size), corrals and stallion pens, a general rule is that the top of the fence should be at eye level with the horse's head in a natural upright position. This is usually 4 to 6 inches above the horse's withers. This height will discourage fighting over the fence and help prevent horses from leaning over the fence, although the sure way to eliminate leaning and rubbing on any fence is with an offset electric fence wire.

Fences that divide pastures can be 4¹/₂ feet (54 inches) high. The bottom of the fence should be 6 to 8 inches off the ground. This is especially important with wire mesh fences, since horses are less likely to paw at the fence and more likely to keep the fence line grazed. In addition, weed growth is easier to control along the fence line by either application of herbicides or use of a weed-eater if this clearance is left below the bottom of the fence. It also adds 6 inches of height to the fence at no extra cost.

Selecting the Fence

The kinds of fences commonly used for horses include rail (plank or PVC), various forms of galvanized and vinyl coated wire, electric and combinations of these. Whatever the fence is made of, it needs to be highly visible, resistant to damage by horses, durable, attractive and safe for contact by horses.

Rail or Plank Fences

Rail (also called "plank" or "board") fences are popular on horse farms because they are **attractive, highly visible and relatively safe**. This category includes fences made from treated and/or painted wooden planks nailed or screwed to posts, split rails with rounded ends that slide into holes in posts, PVC plastic boards, and wooden boards coated with vinyl. **If a horse runs into a rail or plank fence, the fence is not likely to cause physical harm unless the collision is hard enough to break the rail. A horse is also less likely to get a hoof hung in a rail fence. Probably the only disadvantage to a rail fence is the cost of**

construction and maintenance. Rail or plank fences are probably the most expensive fences to build, and maintenance expense can be significant.

Wooden planks are usually either oak or treated pine. Pine boards should be treated with CCA (chromated copper arsenate) at a minimum of 0.25 lb/ft³ (0.4 or higher if wood contacts the soil). Water-based paint or a black asphalt or coal tar based paint can be used to protect the wood and add to the beauty of the fence. Treatment of the wood also discourages chewing of the fence but may not be sufficient to prevent chewing when horses are stressed or confined in a small space.

PVC plastic fences (Figure 1) are generally more expensive than wood. They are, however, becoming very popular because of their attractiveness and the fact that they do not require painting, since they are the same color throughout the material. If a PVC board breaks, it does not present a jagged end as sometimes happens with natural wood planks. White PVC rail fences do, however, require periodic washing with mildew removing agents, especially in the humid south. Vinyl coated wood is simply wood dipped in a vinyl coating. This product, like PVC, does not require painting but it does require washing to maintain appearance. In addition, the wood inside the vinyl coating can warp with age just like any other board. Treated wood is strong and durable and resists rotting. It has a natural, attractive look but may lack the eye appeal of a painted fence. Usually either 1 x 6 or 2 x 6 boards are used for the rails. Rails made of 1 x 6 boards are less expensive but tend to warp more and are not as strong as 2 x 6 rails. Wood fencing is often painted with a mixture of asphalt or coal-tar mixed with oils. This material is relatively inexpensive and long-lasting. Exterior water-based paints also provide good protection against weather and are available in a wide variety of colors.]



Figure 1. A PVC rail fence makes an attractive picture.

High-Tensile Polymer Fences

One type of fence has the appearance of a rail fence but is actually a wire fence called a "high-tensile poly-mer fence." The "rails" consist of vinyl plastic 4 to 6 inches wide with two to three high-tensile steel wires encased (Figure 2). These fences are less expensive than rail fences, are very strong and have a nice appearance and good visibility much like a rail fence. They are, however, wire fences that must be tightened periodically to maintain the proper tension. (This is true of any high-tensile fence.) Some high-tensile polymer wires can be electrified for added security, but a special coating must be used to allow electricity to flow; you'll need to specify electrifying the fence when it's purchased.

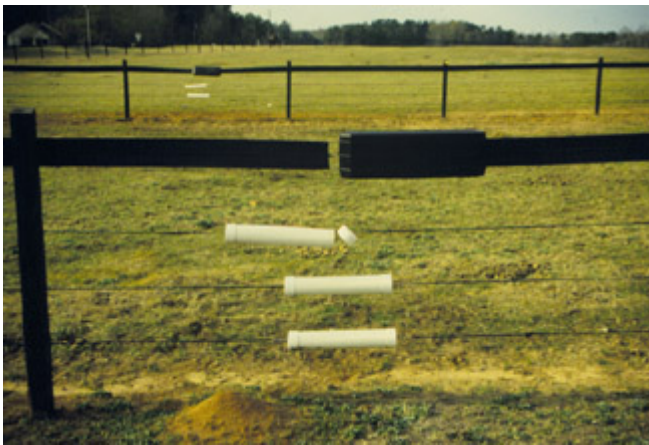


Figure 2. A high-tensile fence with top "rail." Tensioning devices are covered to protect horses from cuts and to allow the fence to be "dropped" quickly if a horse becomes entangled.

Rubber Fences

Rubber belting or rubber strips from old tires and conveyor belts have been used for horse fencing. These have the obvious appeal of being soft and yielding, preventing injury to horses, but they require a good deal of maintenance to keep them tight, since they continually sag with time, especially in the heat of summer. Horses do tend to nibble on the rubber and, with some products made with nylon threads, this has caused colic and/or impaction.

Mesh Wire Fences

Mesh wire fences are strong, durable and considered one of the safest fences for horses. They are less expensive than most rail fences but more expensive than conventional farm woven fences with 4- to 6-inch openings used for cattle and other livestock. The openings in these fences are small enough to prevent hooves being caught in them. They also have no exposed sharp wire ends to cut the animal's skin.

Two types of mesh wire are the diamond mesh (Figure 3a), which uses two wires twisted together in a diamond formation with 2-inch x 4-inch openings, and the square knot mesh (Figure 3b), which has single horizontal lines with the wire spaced 2 to 4 inches apart. This fencing should have a minimum of 12¹/₂ gauge wire unless it is high-tensile steel. A 14-gauge high-tensile steel wire will provide more strength than a 12¹/₂ gauge standard steel wire. A galvanized welded wire fabric with 2 x 4-inch openings is sometimes used because of its low price, but the joints will not hold up under field conditions and it is not recommended for horse fencing.

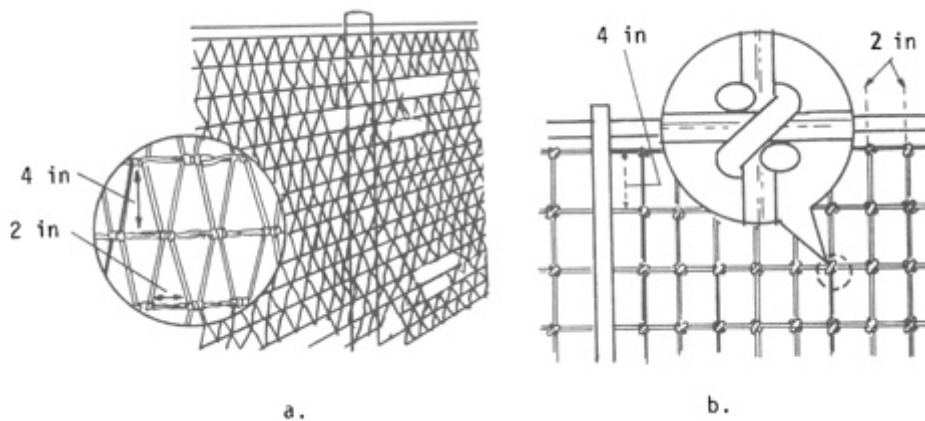


Figure 3. a. A detail of diamond mesh fence. b. Stiff-stay, square-knot fence.

Electric Fences

Several materials are used to construct electric fences. They include aluminum wire, high-tensile smooth steel wire, high-tensile steel wire coated with vinyl, and steel wires woven into vinyl tape. Some tapes are considered permanent fencing. **They are highly visible to horses since they are about 1½ inches wide.** One product contains 10 stainless steel wires 0.016 inch in diameter with polyethylene yarn woven between the wires. These products are stiff and difficult to bend, but these qualities are needed to provide strength and durability to the fence. Aluminum wire and some vinyl tapes and ropes with smaller, more flexible wires are also available, but they are designed primarily for

temporary fencing. They provide high visibility and their flexibility makes them easier to move from one location to another, but they do not provide the strength needed for long-term use. Electric fences are very effective in controlling horses once the horse has encountered the fence, but good visibility is extremely important and is not a characteristic of electric fences built with smooth steel wire. To increase visibility, one or more strands of vinyl coated wire or high-tensile vinyl tape should be included in the fence (Figure 4).



Figure 4. A vinyl-coated wire adds significantly to the visibility of a smooth-wire electric fence. Safety is enhanced when visibility is improved.

Combinations of Fence Types

A strand of electric fence wire can be added to a rail or wire mesh fence to increase the effectiveness and durability of the fence. If horses are damaging the fence by reaching over it to graze, a strand of electric fence across the top should prevent this. Place the wire on insulators on the opposite side of the post from the mesh wire or rails to prevent short circuiting the fence. A strategically placed strand can also help by discouraging predators. A mesh wire fence can be improved by adding one rail at the top (Figure 5). The rail increases the visibility of the fence and helps deter horses from stretching the wires by resting or pushing on the top, but horses will still push and sometimes chew on the wood unless the top rail is accompanied by an electric fence wire mounted on the other side of the posts. One "rail" of high-tensile polymer fencing (Figure 2), or even a polymer coated wire (Figure 4), at the top of a wire fence will also improve the visibility of the fence and is often more compatible with the post spacing used for the wire fence as compared to using a wooden top rail.



Figure 5. A top rail added to a square mesh fence prevents horses from stretching the fence wires. An electric fence wire installed on the opposite side of the post will prevent horses from rubbing on or chewing the board.

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