



Safe Fencing for Horses

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Introduction

Horses are becoming more numerous throughout Illinois, as they are in many parts of the United States. As new horse properties are built, and older properties are adapted for housing horses, safely fencing in these animals is a primary concern. Horses tend to be housed near their owner, which means that the highest population density of horses is near the highest population centers for humans. Horse fencing must be safe for the animals and also provide a secure barrier such that horses cannot escape onto roadways or neighborhoods where they may pose a grave danger to passing motorists or pedestrians. Fencing for horse properties should be designed to allow for easy management and movement of horses within the fenced perimeter, and also provide an aesthetically pleasing appearance for the property owner, boarders and neighbors. Planned animal use, type of horses to be enclosed, terrain, cost, durability and planned maintenance should also be considered before choosing the right fence for a particular horse operation. No single type of fencing may be suitable under all conditions for all horse properties, so some of the more common fence types will be discussed after reviewing some of the key features of safe horse fences.

Features of safe horse fencing

Fence height is an important aspect of horse fencing safety. Perimeter fencing for a horse property should be a minimum of 5 feet tall for most light breeds of horses and 6 feet tall for taller breeds or for horses that have shown a willingness to jump shorter fences. Interior fences separating pastures between compatible horses may be as low as 4 ½ feet high, but this may encourage horses to “ride down” the fence when reaching over to the other side. Of course, fences designed specifically to enclose small ponies or miniature horses may be shorter than the previous height recommendations. A good rule of thumb for the height of a fence for small equines is that the top of the fence should be at the horse's eye level when the head is held in a natural upright position.

Visibility is one of the most important safety features of horse fencing. Horses are more likely to accidentally run into fences that have low visibility. This is why it is recommended that all types of wire fences have a top sight rail on which the horse may focus. This sight rail may be a board, nylon webbing, PCV rail, etc.

Strength of the fence is another important consideration; however, if a horse runs into any fence at full speed, it is likely to either wind up on the other side of the fence or be badly hurt if the fence is not highly visible. Horse owners with multi-horse paddocks or pastures should pay particular attention to the strength and visibility of fences in high traffic areas such as near gates that horses move through frequently, near barns and locations where they are fed and watered.

Horse fences should also be smooth and forgiving along the inside edge nearest to the animals. Sharp edges from uneven joints, protruding nails or other fasteners, damaged boards or broken wires can badly injure horses as they move along the fence line.

Fencing material must not trap or entangle the horse. Horses are naturally claustrophobic and will panic when a foot, leg or head becomes trapped in a fence or gate, leading to potentially serious injury or escape from the enclosure.

Stallion paddocks should be double-fenced, with a lane between paddocks to discourage fighting between horses that would share a common fence line. Stallion paddocks should also be double fenced when adjacent to mare paddocks to discourage the stallion from trying to enter the mare's enclosure.

Types of fences for horses

Wooden board fences are the most traditional type of horse fencing. These fences are most typically made of 3 – 4 horizontal planks of hardwood such as oak, 12 to 16 feet long, rough cut into 1 X 6 inch boards and nailed or lag screwed onto 5 inch diameter round posts that are 8 feet long with 3 feet set underground. The boards should be secured to the inside (horse side) of the fence so that the horse does not run into the fence post. The bottom board should be 10 – 12 inches above ground so that horses do not get their legs trapped beneath it. Board fences are most often painted white or black with an asphalt based paint. Usually the “black paint” used for horse fences is diluted asphalt driveway or roofing sealant. Advantages of board fences include good aesthetics, high visibility and good strength. Wooden board fences are excellent for show and sale rings and make good stallion paddocks. Disadvantages include the fact that the initial cost is relatively high – usually \$1.50 - \$2.00 per running foot and the maintenance may be costly due to horses chewing on the wood, weathering, etc. Wooden fences must be inspected regularly for broken or damaged boards or protruding nails or screws that might injure horses.

Certain types of wire fencing may be safely used for horse enclosures if certain precautions are taken. The safest, but most expensive, type of wire horse fence is the v-mesh wire weave fence. The construction of wires in a closely spaced “V” pattern prevents hooves and legs from getting stuck in the fence, and may also provide some deterrence against predatory animals that may attempt to enter the enclosure if the wire is placed near the ground. However, it is recommended that the bottom wire should be raised 8-12 inches from the ground to avoid trapping a horse's foot and to avoid having horses “walk down” the fence by stepping on it. When a top sight board or vinyl tape is added to ensure good visibility, this type of fence is extremely safe and secure for most types of horses. Although the price of this type of fence with a top sight board usually exceeds \$2.00 per running foot, the maintenance cost is usually lower than that of a wooden board fence.

Rectangular woven wire fences with a wire weave that is 2 inches wide by 4 inches high may be used in relatively low traffic areas of horse pastures. This type of fence requires less maintenance than a wooden board fence and costs less than a v-mesh wire weave fence, but has openings large enough to entrap the hoof of a pony or small foal, and fewer wires per square foot, and thus is not as safe or strong as a v-mesh wire fence. Other styles of less expensive woven wire fencing with greater wire spacing is even less safe and strong and should only be used in areas with minimal horse population density where horses are unlikely to come into contact with the fence. Some of these fences may cost as little as \$1.00 per running foot, but safety is sacrificed to a certain degree. Once again, a top sight rail should be used to enable horses to focus on the fence line and avoid this type of fence.



High-Tensile wire may be used for horse fencing in some situations. At least 12.5 gauge smooth wire is recommended, and vinyl or plastic coated wire, although more expensive, is much safer than uncoated high tensile wire. Advantages of this type of fence include a high breaking strength, thus horses are deterred from escaping their enclosure, and fence posts can be as far apart as 60 feet instead of the typical 12 – 16 feet spacing. Maintenance costs tend to be fairly low, but ratchet-type tighteners must be periodically adjusted to keep the correct tension in the wires and proper bracing of corner posts is critical. Due to the long distance between posts, top sight boards become impractical, so electrification of the wires or use of electrified tape along the top of the fence may be necessary, especially in high traffic areas. Installation of a high tensile fence with electrification will probably cost about \$1.80 per running foot. Vinyl top rails with high tensile wires running through them may be used in conjunction with 4 or more regular high tensile wires to improve visibility, or 3-4 vinyl rails with high tensile wires inside may be used alone as a safe and strong horse fence.

Electric wire fence should not be used alone for horse fencing. Three stands of electric wire with metal posts and insulators may be used to divide permanent pastures into smaller grazing areas so that rotational grazing may be used to improve pasture production, but this type of fence should never be counted on for use as a perimeter fence. It lacks visibility, strength and the ability to safely enclose horses away from unwanted human contact. Electrified tape fencing made of woven threads of vinyl or plastic with fine wires may also be used as temporary horse fencing within a secure perimeter fence, and it has better visibility than regular electric wire, but it still must not be used as the sole perimeter fence. Electric wire fencing may cost as little as \$.35 per running foot.

Barbed wire should never be used for horse fencing. Barbed wire fencing is highly likely to result in serious injury to horses due to its lack of visibility and dangerously sharp edges.

Pipe fencing may be quite suitable for horse enclosures, and is strong and durable. Pipe fencing is often used for horse pastures in the Southwestern United States where oil field pipes are plentiful. Although the initial construction cost usually significantly exceeds \$2.00 per running foot, the maintenance costs are low.

Chain link fencing is similarly expensive, and is good for keeping out predatory animals, and but tends to lack horizontal strength and sags over time, thus maintenance costs are relatively high. Chain link fences with sharp top wires should be avoided for horse enclosures.

Poly vinyl chloride (PVC) fencing has become very popular as horse fencing. It doesn't require painting, and looks very much like a traditional board fence. However this type of fence should be considered to be a decorative fence unless it is fitted on the inside with electric wire. It may be effectively used as a riding arena fence without electrification, but the rails are usually not strong enough to be used as a pasture perimeter fence without added electrification. This fence also costs well in excess of \$2.00 per running foot, but requires minimal maintenance.

Conclusion

Several different types of fencing can be safely and effectively used for horse facilities. These different fencing systems have both advantages and disadvantages that should be considered before deciding on the type of fence most suitable to a specific horse facility.