



# HORSE FENCE COMPARISON

## Wood Board Fence

## Plastic (Vinyl & PVC)

## Welded Steel Pipe Fence

## Polymer-Coated Wire Flex Fence

## No-Climb Fence



### APPEARANCE



Looks good for 1 year then needs paint and repair regularly. Wood can warp. Will become cribbed from chewing.

Glossy and cheap looking with shrink lines.

Pipe look is not for all. Very industrial and farm-like. Rusts within a year.

Initially looks decent. Posts don't match fence, strands droop. Due to polymer coating, strands won't rust.

Initially looks decent. Posts often don't match fence. Depending on galvanization, climate, metal type, and polymer coating, could rust within a few years.

Looks like new for decades.

### MAINTENANCE



Regular board replacement, painting semi annually, post replacement, nail pounding.

Power washing twice per year. Collects mildew in humid climates. Fix fallen and broken boards, gate mending.

Thermal stress causes cracks and corrosion that need re-welding. Sections of rails and posts can rust through and require periodic replacement. Needs repainting once a year, as the paint peels off due to underlying rust.

Retighten each strand quarterly, Replace defective strands as needed. Not good in windy climates.

Retighten mesh against posts regularly. Routinely check growing plants don't warp mesh."

No regular maintenance required. Minor touch up only for cribbing. The protective powder coating will not chip, peel or crack and has superior long-term resistance to rusting, fading or chalking.

### SAFETY



Ingestion of toxic splinters, cuts from nails, splinters, shards and fallen boards. Highly visible.

Brittle breakage shards impale, escape is easy. Hot wire is required. Highly visible.

Rare but severe injuries from panic impacts and sharp broken pipe. Fairly visible. Due to thermal contraction issue, in long fences, can contract so much that the latch come out of the gate pins.

Easy fall through escape by smaller horses, wire cutting on extreme impact. Visibility high and depends upon color and thickness of wire.

Solid barrier; prevents other animals from accessing inside. Mesh gaps are small enough that horses hooves don't get caught. Cuts from torn mesh, or staples/nails in posts. Visibility moderate, and depends on color and thickness of wire.

No injuries known with this product. Holds normal, buckles on impact. Highly visible with rounded smooth edges and no nails, screws or fasteners. Each section is thermally independent and are not subject to cracking or corrosion.

### LIFE SPAN



7 to 15 years depending on climate.

10 to 20 years depending on climate.

Well over 20 years and better with regular maintenance.

7 to 20 years on posts and maybe more on straps depending on climate.

15 to 20 years depending upon level of galvanization, presence of polymer-coating, and climate.

Well over 30 years in most locations with no degradation.

### STRENGTH



Boards can be knocked out for escape but it is rare.

Easy escape; rails pop out of their fence posts when horses lean.

No escape even in collision.

Fall through issue with foals but generally secure with larger horses.

Without a strong top-rail or hot wire, horses can lean on mesh and loosen it.

Only running impact will release fence for safety.

### LIFETIME VALUE



Lowest value due to regular maintenance required.

Must be replaced once or twice over 30-year lifespan.

High upfront cost and medium maintenance cost. No replacement needed if maintained.

Moderate up front cost, one to two replacements over 30-year lifespan, moderate maintenance.

Must be replaced at least once over 30-year lifespan.

No maintenance or replacement required. Asset to property value.

### ECO FRIENDLY



Chemical preservatives prevent burning or reuse. Must be landfilled and is toxic.

Production process is most damaging to ozone. Cannot be recycled. Must be landfilled.

VOC's in the wet paint are harmful. Can be fully recycled but requires much cutting.

Posts must be landfilled and are toxic. Post paint has VOC's. Strapping may be downcycled with lower properties.

Purely steel fence easily recycled at obsolescence. More common vinyl-coated options difficult to recycle.

Made from recycled materials. No VOC's in powder coat. Product is easily recycled at obsolescence.

### OVERVIEW



Classic aesthetic but requires much ongoing maintenance. Low initial cost short term fencing solution where up front cost is the overriding criterion. Fairly easy to install. Not good for horse safety.

No paint required and relatively inexpensive initially but has durability and environmental problems. Easy to install. Not good for animal safety or containment.

The strongest fence and better for cattle but expensive and time consuming to install. Industrial looking and potentially dangerous to the horses. Cannot easily be adjusted if fence needs reconfiguring.

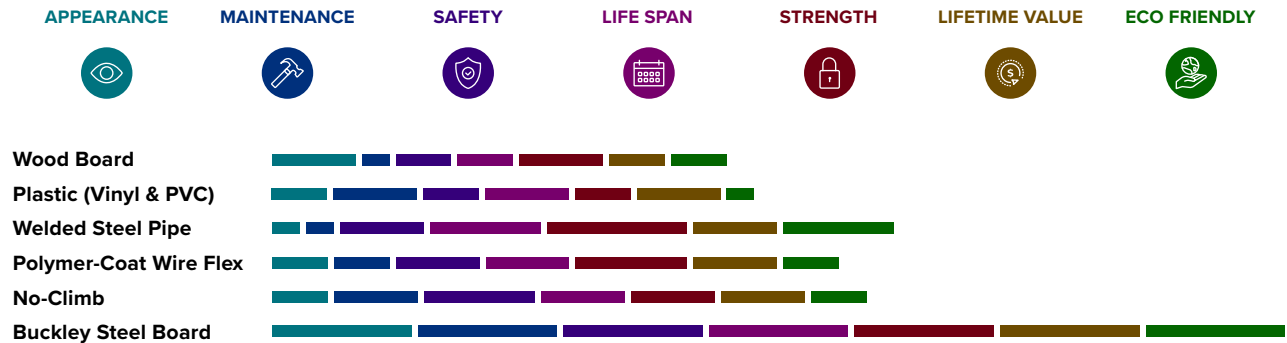
Relatively low initial cost and easy installation (if not electrified). Just ok for looks and safety. Not so good for maintenance, longevity and ecology. Not a good choice for windy climates.

Low initial cost short term fencing solution where up front cost and easy installation are the overriding criteria. Least aesthetically pleasing. Really only safe when combined with a hot wire or top rail.

Optimized for beauty, safety, longevity and ecology while preserving good long term economics.

# VALUE ANALYSIS

## "ESTATE STYLE" HORSEFENCE OFFERINGS



There are a range of factors to consider when choosing a horse fence. Most important is to strike a balance between horse safety and long-term durability. Often, a greater upfront investment equals far less maintenance and cost over the long-term.

### Appearance

If you're looking for traditional farm or ranch aesthetic, wood beams and welded steel pipe are of course the standards. The Buckley Steel Board fence takes the best of these two, offering the wooden post and rail style with the durability of steel, while forgoing the inevitable rust that accompanies welded pipe. Wood fencing, while classic, initially looks good but ultimately needs paint and repairs regularly. Wood can warp and horses cribbing on the boards will result in damage. Vinyl (PVC) fencing can come in a range of designs and colors but being plastic, will always have a glossy sheen, look cheap, chalks and warps over time. Furthermore, in humid climates, unsightly mildew will accumulate. Welded steel pipe has the industrial farm style look and will rust within a year of installation. Due to its plastic glaze, polymer-coated wire flex fence can come in a range of styles and colors. Strands don't usually match the posts used and they will inevitably droop. That being said, like the vinyl fencing, it won't rust. No-climb fencing is woven metal fence, available in various densities (i.e. wire spacing) and shapes. It rusts easily and therefore often comes polymer coated. Appearance is a subjective category but Buckley Steel Board fence is easily the most attractive option, particularly how it holds up through its lifetime. Rails remain straight and the posts perfectly aligned no matter what the temperature. Since it looks like new for decades, the fence adds great value to your property.



## Maintenance



This depends upon the kind of climate the fence is in, yet regardless Buckley Steel Board fence handily outshines all other options in this category. Unlike all of the other options, no regular maintenance is required. There may only be the very occasional minor touch up for cribbing. The protective powder coating will not chip, peel or crack and has superior long-term resistance to rusting, fading or chalking. Wood, meanwhile, rates poorly. It requires regular board replacement, semi-annual painting, sanding, nail pounding, and post replacement when rotted. Welded steel pipe is also a high-maintenance fence, it needs repainting annually and due to thermal stress, cracks and corrosion will need welding. Vinyl fencing is certainly less demanding, but due to mildew, it still needs power washing twice a year and checks to fix fallen and broken boards. Vinyl also becomes much weaker and more brittle over time. Polymer-coated wire flex fences are a regular time-eater; the strands need re-tightening every quarter and defective strands must be replaced. It is not recommended for particularly windy or harsh-weather climates, as it will cause strands to loosen more quickly. Similarly, no-climb fencing requires regularly re-tightening the mesh against posts and checks to ensure growing plants don't cause warping.



## Safety & Strength



At the forefront of most people's minds when choosing a fence is animal safety, both in terms of physical risk and risk of escape. While wood boards are highly visible to the horses' poor eyesight, horses still risk ingesting toxic splinters, and cutting themselves on nails, splinters, shards, and fallen boards. Boards can be knocked out for escape, although it is rare. Vinyl fence is also highly visible, but still allows for easy escape. The rails pop out of their fence posts when horses lean on them. Furthermore, it ranks below average for safety. Because PVC becomes much weaker and more brittle over time, the easy breakage results in shards that impale horses. For this reason, a hot wire is recommended to be used in conjunction. Welded steel pipe is hands down the strongest fence option; there is no escape, even with collision. Due to this though, in the rare event it happens, a panicked horse can be severely injured. Also rare, but due to this fence type's thermal contraction issue, in long fences it can contract so much that the latch comes out of the gate pins, allowing for escape. Polymer-coated wire flex fence is visible for horses and with its flex, foals can fall through. On extreme impact the horses are at risk for wire cutting. No-climb fencing is a decent option for this category. As a solid barrier it is the only option here that prevents other animals from accessing the enclosure and the mesh gaps are small enough that horses' hooves don't get caught. Of course, cuts from torn mesh, or staples/nails in posts are still likely. Without a strong-top rail or hot wire however, horses will lean on the mesh, loosening it, and risking escape. Buckley Steel Board fence is the safest option available, with no known injuries with this product. Unlike welded steel pipe, each section is thermally independent and therefore not subject to cracking or corrosion. Furthermore, due to its design of rounded smooth edges and no nails, screws or fasteners, there is no risk of cuts to horses' delicate skin. It is quite strong, but for safety reasons will buckle on direct running impact. (It is worth mentioning, that because bare wire and barbed wire fencing are so dangerous, they were not included in the comparison matrix at all).



## Upfront & Lifetime Costs

In terms of upfront costs, there's no question that the least expensive option is no-climb metal mesh fencing. Although over a forty-year time frame, it would need entire replacing at least once. Meanwhile, due to the material costs and skilled labour needed for installation, welded steel pipe is the most expensive. Once installed though, if regularly maintained it shouldn't need replacement. Wood has a low upfront cost but overall high lifetime cost, due to the high level of maintenance and board replacement. Both vinyl fence and polymer-coated wire flex fence rate as fairly average in this category. Vinyl is only about 50% more expensive than wood and would need replacing once or twice within a forty-year timeframe. The flex fence is only a little more expensive than wood and would need similar replacing. Buckley Steel Board fence has a higher upfront cost (although not as pricey as welded steel pipe), but the lowest lifetime cost. Due to the lack of maintenance needed and it being an asset to property value, its cost is easily amortized over time to make it the best option long-term.



## Environmental Friendliness

Factors such as materials sourcing, recyclability, and use & sourcing of electricity all play a role in determining how environmentally friendly an option is. Of the fence types assessed, Buckley Steel Board fence has the lowest environmental impact, whereas Vinyl and other plastic fences are the worst offenders. The Buckley Steel Board fence was designed to be as environmentally friendly as possible. It is made from recycled materials, has no harmful volatile organic compounds (VOC's) in its powder coat, and the product is easily recycled at obsolescence. Vinyl (i.e. PVC, polyvinyl chloride) and similar types are all forms of plastic, whose production is most damaging to the ozone. Furthermore, it cannot be recycled and must be landfilled. At first glance it may seem wood would be the most natural, and therefore least harmful option, but the wood is treated with chemical preservatives to prevent burning or reuse at obsolescence. This unfortunately makes it toxic and also requires it to be landfilled. Welded steel pipe rates just behind Buckley Steel Board fence, as the piping can be fully recycled but the VOC's used in the paint can be harmful. Polymer-coated wire flex fence and coated no-climb fencing rank as below average for environmental friendliness. The posts used are toxic, must be landfilled, and their paint have VOC's. Strapping may be downcycled with lower properties, but vinyl coated no-climb is difficult to recycle. In general, many of the options incorporating wire are difficult to generalize. Their environmental friendliness and electric conduction efficiency (if able to be used hot) greatly depend on the metal used, level of galvanization, presence of a polymer coating, and manner of construction (i.e. braiding, coiling, weaving). If a hot-wire is used, its environmental impact could be lessened when solar powered.



## Summary

The bottom line is that Buckley Steel Fence is the best rated option in nearly every category. It's aesthetically pleasing, will look like new for decades, and requires virtually no maintenance ever. Furthermore, it rates best for environmental friendliness and animal safety. While Buckley Steel Fence does have a higher upfront cost than other options, this is amortized over its essentially unlimited lifespan.

# VISUAL ANALYSIS

No-Climb  
Fence

Wood Board  
Fence

Plastic (PVC/Vinyl)  
Fence

Welded Steel  
Pipe Fence

Polymer-coated  
Wire Flex Fence

Buckley Steel  
Board Fence

