HFD Braid Fence Planning Guide

Plan with confidence. Build with purpose. Protect what matters.

The Healing Barn | 877-300-2638 | TheHealingBarn.com

A well-designed fence begins long before the first post is installed. Whether you are fencing horses, cattle, alpacas, goats, sheep, dogs, or creating paddocks for rotational grazing, proper planning is essential to building a safe, effective, and long-lasting fencing system.

1. Planning Your HFD Braid Fence

Take Time to Plan

The installation of any fencing system begins before the first post is driven. The best value comes from taking the time to plan the layout, choose the right configuration for your animals, and calculate materials before construction begins.

Check Local Laws and Ordinances

Fence placement and electric-fence regulations vary by location. Before installation, confirm applicable requirements with your County Extension Office, local zoning department, or City Clerk.

- How far must a fence be from a roadway or property line?
- Can electric fencing be used in your area?
- Are warning signs required?
- Are there restrictions on fence height or placement?

Sketch Your Property

Draw a map of your property and include major features such as buildings, roads, fields, woods, low areas, gullies, streams, and other obstacles. Identify overhead and underground utilities before digging.

- Mark each end post and corner post.
- Mark line-post locations based on your desired spacing and terrain.
- Mark gate openings.
- Mark the energizer location near a suitable electrical outlet, or plan for a solar-powered energizer.
- Mark the grounding-system location.
- Calculate the total length of fence.
- Choose the number of strands needed for the animals you are containing.
- Choose your line-post material: wood, T-post, fiberglass, or steel.

Planning Tip: For horse fencing, a minimum of three strands is recommended, with four strands being a common choice. Other animals may require different configurations, outlined below.

2. Recommended Fencing Configurations by Animal

Animal	Recommended Configuration	Spacing / Notes
Horses / Equine	3-4 strands	Top strand at withers height, or at least shoulder height, of the tallest horse. Bottom strand between hock and fetlock. Space remaining strands evenly.
Alpacas	5 strands	Three positive (hot) strands and two grounded strands.
Beef & Dairy Cattle	3 or 4 strands	Permanent cattle fencing may use three or four strands depending on herd, terrain, and management needs.
Dogs / Canines	5 strands	Three positive strands and two grounded strands. Adjust heights for the size and behavior of the dogs.
Goats & Sheep	5 strands	Three positive strands and two grounded strands. Lower-strand

		placement is especially important for smaller animals.

Grounding Recommendations

For configurations using alternating positive and grounded strands, add supplemental grounding approximately every 1,300 to 2,600 feet, particularly where soil is dry, on hilltops, or where ground conductivity is poor. Actual grounding requirements depend on soil conditions, total fence length, and energizer specifications.

Rotational Grazing and Paddock Divisions

Single-line paddock division: A single HFD Braid line approximately 3 feet above the ground can be effective for segregating cattle paddocks within a secure fenced perimeter.

Two-line paddock division with grounded line: For dry or frozen conditions, use one positive line and one grounded line. Add a ground rod approximately every 1,300 to 2,600 feet and connect it to the grounded strand as appropriate.

Temporary cattle fencing: A single line at approximately 28 inches may be used, or two lines with the upper line at approximately 28 inches and the lower line about 12 inches below it.

Important: Temporary single- or two-line arrangements are best suited to livestock already trained to electric fencing and used within a secure perimeter. They are not appropriate for every animal or property.

3. Planning Your Materials

HFD Braid is a tension-based fencing system. End and corner posts must be properly installed and braced so they can withstand the forces created by the tensioned fence.

HFD Braid Reels

Multiply the total fence length by the number of strands, then divide by the length of the reel you are purchasing:

(Fence Length x Number of Strands) / Reel Length = Reels Needed

Round up to the next whole reel and allow additional material for terminations, gates, splices, and installation adjustments.

Roller Insulators - End, Corner, and Vertical Changes

1. Add the number of corner posts and end posts, then multiply by the number of strands.
2. Count line posts where the fence changes vertically because of hills, gullies, or terrain and multiply by the number of strands.
3. Add the two totals together to estimate the number of roller insulators required.

Brace-Post Insulators

4. End posts x number of strands.
5. Corner posts x number of strands x 2.
6. Add the totals together to estimate brace-post insulators.

Line-Post Insulators

Your line-post material determines the type of insulator required. Count the regular line posts and multiply by the number of strands to estimate line-post insulators.

Copper Lead-Out Wire

Lead-out wire is used for electrical connections between the energizer, fence, grounding system, and insulated crossings. Calculate the approximate length needed for:

- Gate crossings.
- The energizer to the nearest fence connection.
- The energizer to the grounding system.
- Connections between ground rods.
- Connections between positive strands and other electrical components.

Use appropriately insulated, electric-fence-rated lead-out cable for underground runs. Add extra length for routing and installation adjustments.

Copper Split-Bolt Connectors

Split-bolt connectors may be used to terminate HFD Braid, splice sections together, and make electrical connections. Estimate connectors for:

- Strand terminations at end posts.
- Splices between reels.
- Electrical connections between strands.
- Connections to lead-out wire and other electrical components.

Energizer and Ground Rods

Select an energizer appropriate for total fence length, number of strands, vegetation load, and the animals being contained. Three ground rods are a common starting point, but larger systems and poor soil conditions may require additional grounding. Follow the energizer manufacturer's instructions for rod length, spacing, and installation.

Installation and Tensioning Tools

Before installation, have the appropriate tensioning equipment, installation instructions, and a digital electric-fence voltmeter available. A second tensioning kit can be useful on larger properties and longer fence runs.

4. Fence Planning Worksheet

Planning Item	Your Measurement / Quantity
Total fence length	
Number of strands	
HFD Braid reel length	
Number of end posts	
Number of corner posts	
Number of line posts	
Line posts with vertical changes	
Total braid needed	
Estimated reels needed	
Estimated roller insulators	
Estimated brace-post insulators	
Estimated line-post insulators	
Estimated lead-out wire	
Estimated split-bolt connectors	
Ground rods	
Energizer model / size	

5. Horse Fence Installation and Safety

Recommended Line Spacing

With HFD Braid fence, you are building the equivalent of a boxing ring. Corner and end posts must be strong enough to withstand the forces that would be transmitted if a horse were to strike the fence at speed.

- Set the top strand at the withers height of the tallest horse, or at least shoulder height.
- Set the bottom strand somewhere between hock and fetlock height based on your specific needs.
- Space the remaining strands evenly between the top and bottom strands.
- Adjust spacing for ponies, foals, miniature horses, or mixed-size groups.

Positive and Grounded Strands

A hot-ground system incorporates both electrified and grounded strands. For a four-strand equine fence, one option is to ground the second strand from the top and keep the remaining strands electrified. This creates an electrical return path when an animal contacts both a positive and grounded strand and can improve performance where soil conductivity is poor.

Areas of Heavy Snowfall

Heavy, wet snow can short electric fencing. In areas prone to significant snow accumulation:

- Install cut-off switches above the expected snow height.

- Use switches to progressively turn lower strands on or off as snow depth changes.
- Fasten wires securely to posts to protect them from damage.
- Regularly inspect and test the fence during winter weather.

6. Horse Fence Safety Considerations

Know your horses. Consider size, temperament, herd dynamics, and previous experience with electric fencing.

Keep the energizer operating. Do not routinely turn the fence off simply to reduce electricity use. A fence only works as intended when it is properly energized.

Inspect regularly. Check HFD Braid tension, insulators, posts, vegetation, and electrical connections.

Prioritize grounding. Poor grounding is a common cause of weak electric-fence performance. Follow the energizer manufacturer's grounding instructions and test your system.

Use added protection where appropriate. Small paddocks or pens for active horses may benefit from an HFD Braid top line used with properly installed heavy-grade diamond mesh, V-mesh, or no-climb fencing.

Manage herd dynamics. Separate stallions when necessary and use laneways or additional divisions when introducing horses to established groups.

Provide a safe rolling area. If horses tend to roll near fences, consider a sandy area away from the fence line.

Introduce horses to new fencing. With the energizer turned off, safely lead the horse around the perimeter so it can understand the boundaries. Once the horse is released and clear of the fence, turn the energizer back on.

Keep feed and water away from electric strands. Avoid hanging grain pails on fence posts or placing hay and water troughs where animals can be accidentally shocked.

Do not take shortcuts. Follow recommended installation procedures, use appropriate components, and maintain your fence throughout the year.

7. Ready to Plan Your HFD Braid Fence?

Every property is different. The Healing Barn can help you plan a fencing system suited to your animals, property, and management needs - from new pastures and paddocks to rotational grazing and fence expansions.

Questions? Call The Healing Barn at 877-300-2638

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