# Finishline Fencing Installation Guide

## **About Finishline**

Thank you for choosing Finishline Fencing for the containment of your horses and/or other livestock! We are sure that you will be satisfied like the thousands of others who have used Finishline on their farms worldwide. Finishline has 30 years of tested durability and strength, all while delivering a beautiful fence line that will add value to your property.

Finishline is as strong as a wire fence with 1250 lbs. of tensile strength per strand. It is the only product of its kind to be manufactured with vital UV inhibitors throughout. This UV protection maintains the products strength, flexibility, and stunning appearance. Finishline is lightweight and easy to install. A quarter mile of Finishline weighs only 23 lbs. and has a silk like feel that can be hand tensioned by applying 150lbs of pull. This simple installation is a do-it-yourselfers dream!

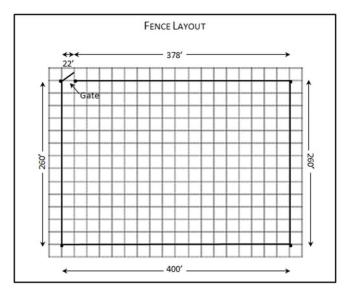
Finishline can withstand temperatures from -40 to 128 degrees Fahrenheit without losing its tension. No more wasted time maintaining the proper tension and viability of your fences.

Finishline contains no wire, which delivers several great advantages; it is lightweight thus easy to install, requires no special equipment for installation and in most cases can be tensioned by hand. Finishline flexes upon harsh impact from horses and livestock which can reduce the risk of injury. Lower instances of cut skin, torn tendons and broken limbs.

As all horse/livestock owners know, no containment system is fool proof, and we recommend the use of an electric line with Finishline. Please continue to look through our installation guide so you can properly install your Finishline and know that your livestock will be safely contained behind the best!

## **Pre-Installation**

The prerequisite to a successful Finishline Fence Installation is advanced planning, combined with proper tools and quality materials. Before you begin, walk the proposed layout to check for any obstructions that might cause you to have to modify your layout. Modifying your layout is easier in the planning stage than in the middle of installation.



When you feel confident that your proposed layout will work, draw a measured, or to scale, layout of your fence installation. This fence layout will be a valuable planning aid and will also help establish a materials list. Please see *Illustration 1.1* to the left.

Note that the space between posts and the number of strands installed is determined by the intended use of the enclosure; pasture, feed lot, corral, etc. and what type of animals and how many animals will be enclosed.

When you have completed your fence layout, contact your local utility company and schedule an inspection to determine if and where utility lines are located. Typically, in most localities, a free "One Call" program is available and

response is in less than three days. THIS IS VITAL BEFORE DIGGING THE FIRST POST HOLE OR DRIVING THE FIRST POST.

Following all safety requirements and guidelines is as important as any component of your plan. This includes, but is not limited to; eye protection, gloves, and steel toed work boots. Also, use ear protection when operating power augers or post drivers.

#### **Recommended Number of Strands and Spacing**

When installing Finishline Fencing, acceptable post spacing is 8 to 12 feet apart. Finishline recommends using at least one strand of electric when installing your fence line. If you choose not to use electric, please do so with caution. Size of the herd, types of animals being contained, animal personalities, and beauty will influence the numbers of strands needed to contain your animals. Please see Electrifying the Fence on page 5 for more details.

Equine/Donkey- Horse owners for years have used Finishline for safe containment of their horses. When containing horses, it is recommended to use 4 to 5 strands of Finishline Fencing and to space them 7 to 12 inches apart. The top strand should be a minimum of 52 to 54 inches from the ground and 2 to 4 inches from the top of the post. The bottom strand is typically 14 to 18 inches off the ground. Horses which have a tendency to rub fencing continually

or "play" with fencing can lead to problems for the fence and the horse. In cases of frequent horse contact with Finishline Fencing, an electrified wire is recommended. Please see Illustration 2.1 on right for examples.

Stallions and Jumpers- For extra fence height, use 6 to 7 strands of Finishline Fencing.

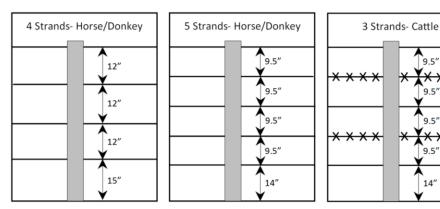


Illustration 2.1

9.5"

Cattle- Use 3 lines of Finishline with two lines of barbed or electric between strands. Finishline is an excellent sight line for large cattle farms. Please see *Illustration 2.1* above for an example.

Other Livestock- For use with other animals such as goats, sheep and minis, place Finishline closer together for optimum containment and use 2 to 3 strands of electric.

Deer- Finishline is an excellent option when your property has problematic deer. Higher installation and closer spacing helps to protect your land from being intruded on by deer. In most cases deer are reported to bounce off the fence without breaking it or clears the Finishline fence line with minimal damage.

Please note: Although many of our customers do not use electric with their fencing, please use caution when choosing this option. As a livestock owner, you understand best the behavior of your animals. Please use extra caution when using this option.

#### **Attaching Finishline to your Posts**

Finishline can be used with any type of post system. The two most common types are wood posts and t-posts. See below for the different ways to attach Finishline to your wood and t-posts. All choices work equally as well.

**Wood Posts** - There are three main options to attach Finishline Fence to wood posts: insulators, drilling, and stapling.

#### 1- Wood post insulators

To use wood post insulators, simply attach to wood post with galvanized roofing nails. Once attached to the posts, run the Finishline through the holes to keep it aligned.

#### 2- Drilling through the posts

Finishline Fencing can also be installed by drilling through line posts and running the Finishline Fencing through holes to the end post where it will be anchored. If through-the-post installation is selected, a wooden template (2" x 2" x 6') with holes pre-drilled at the selected spacing will allow fast hole alignment and allow the horse fence to follow the contours of the land.

To drill holes, use a battery-operated or portable generator-operated electric drill with a 5/16-inch or 3/8-inch wood drill bit. For large diameter posts, a 5/16-inch bell hanger installer drill bit permits drilling through the thickest posts.

NOTE: The use of through-the-post installation carries with it a slight risk of abrasion. If this is a concern, you may line the holes with protective tubing. This is rarely necessary. Abrasion can be reduced by using an

electrified wire with Finishline Fencing, as this will prevent animals from pushing on the fence.

#### 3- Staples (Insulated or standard U)

When installing with the Staples, care should be taken to prevent crushing Finishline when hammering each staple. This permits the Finishline to slide freely without wear. (Various insulators are available. If necessary, contact your Finishline dealer.) Please see *Illustration 3.1* for an example.

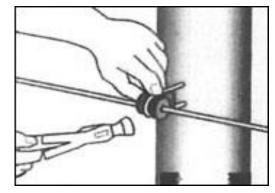


Illustration 3.1

*T-Posts* – When installing Finishline Fence to a T-Post, standard insulators are the preferred choice.

#### 1- T-Post Insulators

All standard T-Post Insulators work to attach Finishline to the posts.

#### 2- T-Post Vinyl Safety Cap

Toppers add safety and visibility for livestock.

## **Installing Your Finishline**

#### **Start Post**

The three most common ways to begin your Finishline runs are as follows:

#### 1- Bayco Knot

Give yourself approximately 3 feet of Finishline to start the knot. Wrap around your start post 3 times, wrap the short end up the run line 3 times then wrap back 3 times. Once you do this, insert and wrap the Finishline around the original loop 2-3 times to secure the line. Please see *Illustration 4.1*.

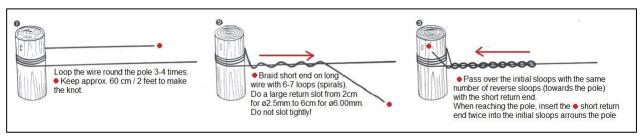


Illustration 4.1

### 2- One-Way Anchor Vice – 5/8-inch hole

To start your fencing with a One-Way Anchor Vice, drill a 5/8-inch hole in your start post. Then begin threading the line back through the hole while holding the pointed end of the vice at the first post. Insert the line through the vice then insert the vice into the post. Always cut Finishline at an angle when using a vice for easier insertion. Please see *Illustration* 4.2 for diagrams on how to tension.

**NOTE:** It is not necessary to secure the vice to the post.

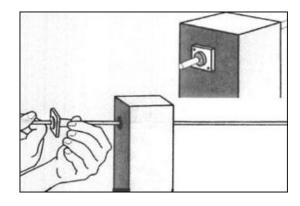


Illustration 4.2

#### 3- GP No. 2 - 3/8-inch hole

When using a GP No. 2, installation is very similar to the One-Way Anchor Vice. Drill through your end post with a 3/8-inch drill bit and the GP No. 2 will hold tension on the outside of your post. You then have the option to tack Finishline to your post with a staple, or loop back into GP No. 2 if re-tension is needed in the future. Always cut Finishline at an angle when using a GP No. 2 for easier insertion. See *Illustration 4.3* to see how a GP No. 2 is installed



Illustration 4.3

## Stretching for Proper Tension at Your End Post

A One-Way Anchor Vice is inserted into the end post for each strand of Finishline that is being installed. Thread the Finishline through the vice and pull all slack from the fence run. Once this is done, it is time to tension your fence.

Pull Finishline Fencing from both ends, for proper tension, unless starting with a knot where this would be impossible. Always start at the bottom strand and work your way up to the top strand. Always be sure to leave enough extra fence (6-10 inches) on both ends to attach a strand stretcher or vice grips. Finishline can also be tensioned by hand, eliminating the need for special tools. Please see *Illustration 4.3* for tips on tensioning your Finishline Fence.

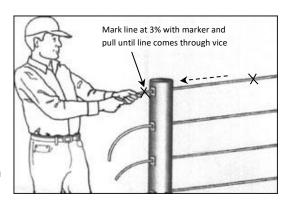


Illustration 4.3

<u>Finishline Fencing requires a tension of 3% of total strand length.</u> For example, a 400-foot length with a 3% tension is 12 feet (.03 X 400). As a result, you would need to tension your fence twelve feet.

After determining the length needed to tension the fence, measure in from the end post to the predetermined length and mark the fence line with a marker or ribbon. Begin stretching with hand strength, fence stretcher, or vice grips until the determined length is pulled through the end post vice. Using a mark on the fence or ribbon will help insure proper tension is being applied. After tension is reached, cut all but approximately one foot of your fence line. Tack extra Finishline with a staple to the post for future tensioning purposes. Please be advised: do NOT pull down hard on Finishline with a tensioning tool or vice grips. Pull directly towards you.

Splicing/Repairing- If your job requires more than one spool of Finishline, it will be necessary to splice the spools

together. This is also the way you would repair breaks in the Finishline.

To use a Wire Link, put both ends of the line that you are splicing into opposing holes at the end of each Wire Link. Always cut Finishline at an angle for easier insertion. Please see Illustration 5.1 of the Wire Link in use.



Illustration 5.1

# **Electrifying the Fence**

Only a livestock owner can determine what is best for his/her animals with regards to how much electric current is needed for safe containment. Finishline Fencing cannot carry an electrical charge itself, but a Finishline Fence can be electrified in several ways. We have listed below some common installation techniques.

- 1- Attach a strand of electric on the inside portion of your posts using an insulator.
- 2- Reduce your Finishline Fence Line by one and install an electric line in its place.

3- Wrap an electric line around one of your Finishline strands. Using this technique will reduce the amount of labor necessary to upkeep electric. Because Finishline rarely loses tension, you can support your electric line by wrapping it around one of your Finishline strands. This will eliminate the need for you to retension your electric strands. A 17-gauge aluminum wire can be easily wrapped several times around a Finishline strand between posts. The electric wire will need to go through an insulator on each post. Finishline acts as an insulator and will not short your line. Please see *Illustration 5.2* for example.

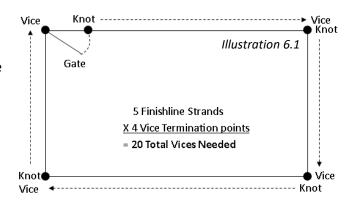


Illustration 5.2

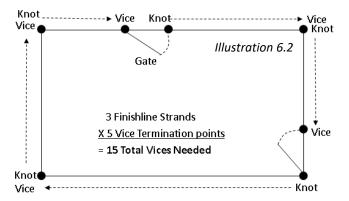
The inclusion of electric is recommended as the best way to reduce animal contact with the fence. Several products are available that will complement your Finishline Fence at your local agricultural store.

## Calculating the Number of One-Way Anchor Vices/GP No. 2s

In *Illustration 6.1*, there are only 4 end posts where the Finishline is being terminated and tensioned. These are marked by the word "Vice". In the example provided, this person was using 5 strands of Finishline. To determine the amount of One-Way Anchor Vices/GP No. 2s required, multiply the number of posts where you are terminating by the number of Finishline strands you are installing, and this will tell you how many tensioners to purchase. In this case, this person needs to purchase 20 One-Way Anchor Vices or GP No. 2s.



In *Illustration 6.2*, there are 5 end posts where the Finishline is being terminated and tensioned. In this example, this person was using 3 strands of Finishline. To determine the number of tensioners required, multiply the number of posts where you are terminating by the number of strands you are installing. This will tell you the number of Vices or GP No 2s to purchase. In this case, this person needs to purchase 15 One-Way Anchor Vices or GP No. 2s.



# **Additional Information**

With time, Finishline Fencing may loosen due to movement of fence posts. Fencing should be checked occasionally. If fence can be pulled towards you easily, it is recommended to tighten the fence by pulling at the One-Way Anchor Vice or GP No. 2. If loss of tension is due to loose posts, it is important to locate the loose post and correct.

Helpful hint: If your gate or a start post is less than 100 ft away from the next corner, feel free to wrap around the outside of the post and tension at the next gate or end post. This will save on the tensioners needed. It is

recommended to put some sort of protective covering around the Finishline Fence to eliminate abrasion. Common household items work well for this such as an old garden hose. Please see *Illustration 6.3* for example.

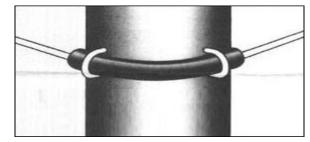


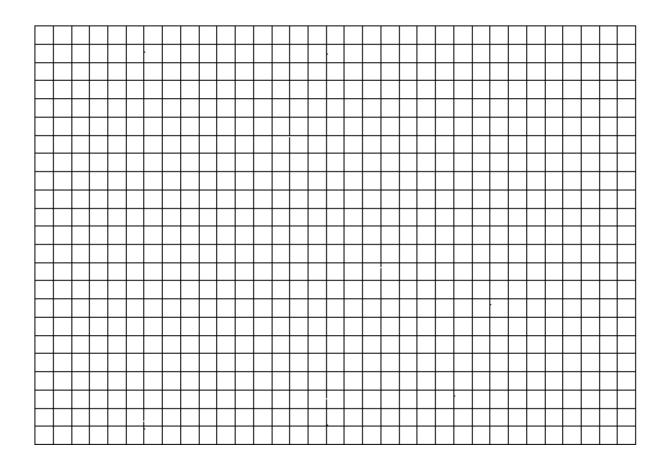
Illustration 6.3

# **Measuring Guide**

Wondering how much Finishline to buy? Use the chart provided to determine the number of spools required for your fencing project.

Finishline is available in 2,000ft and 1,320ft spools

#### Please use the grid below to sketch your fence layout.



Although the information and recommendations in this Finishline Fencing Installation Guide is presented in good faith and believed to be correct, Ag-Liner, Inc. makes no representations or warranties as to the completeness or accuracy of the information.

Information and product is supplied upon the condition that the persons receiving same will make their own determinating as to its suitability for their purposes prior to use. In no evet will Ag-Liner, Inc. be responsible for damages of any nature whatsoever resulting from the use of our products or reliance upon this information.

If you have any questions, or would like to order:
please call us Toll Free at 877-625-6100 or 724-625-6100
Or order online at FinishlineFence.com