

Installation Guide For Finishline XL 5mm

About Finishline XL

Thank you for choosing Finishline XL to fence in your property. Finishline XL will add beauty and value to your land all while giving you decades of low maintenance performance. Finishline XL has 35 years of tested durability and strength. Join the thousands of others who have used our High-Quality Polymer Fencing on their farms worldwide. We are sure you will be satisfied with your purchase.

Finishline XL is as strong as high tensile wire fencing, offering 1,850 lbs. of tensile strength per strand. It is manufactured with vital UV inhibitors which delivers and maintains the fence lines strength, flexibility, and stunning appearance. Finishline XL is lightweight and easy to install. A 2,000 coil of Finishline XL weighs only 30 lbs., is available in white or black. XL's 5mm diameter offers a visible and stunning perimeter to your land all while offering you a no maintenance fence line that will look and perform as beautifully in decades to come as it does today. This simple installation is a do-it-yourselfers dream!

Finishline XL 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. XL flexes upon harsh impact from trees, debris or neighbors and will immediately return to its original tension when the tree or debris is removed from the fence.

Pre-Installation

The prerequisite to a successful Finishline XL 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.

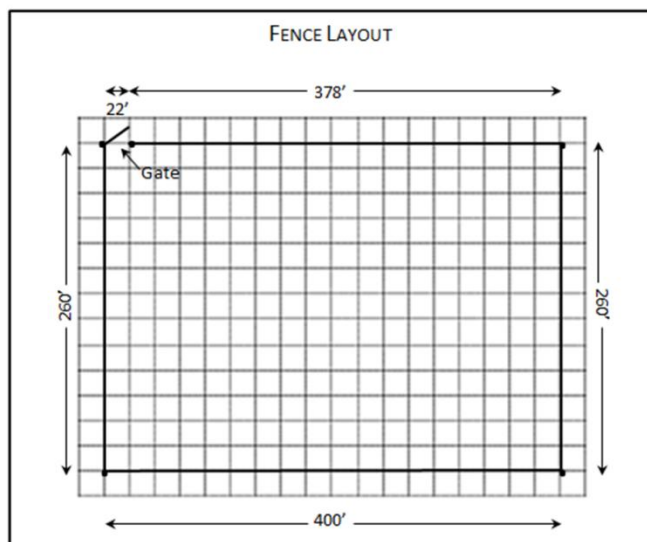


Illustration 1.1

Note that the space between posts and the number of strands installed is determined by the intended use of the enclosure, pasture, plantings, or decorative fencing.

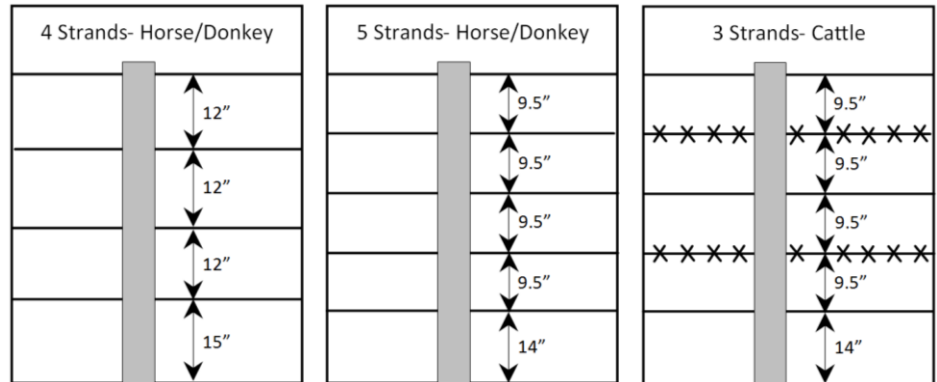
When you have completed your fence layout, contact your local utility company and schedule an inspection to determine if and where utility lines are located. Typically, in most localities, a free "One Call" program is available, and response is in less than three days. **THIS IS VITAL BEFORE DIGGING 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 XL, acceptable post spacing is 8 to 12 feet apart. **Finishline XL recommends using at least one strand of electric when installing your fence line if you will be containing livestock. If you choose not to use electric, please do so with caution.**

Equine/Donkey- When containing horses, it is recommended to use 4 to 5 strands of Finishline XL 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 tend 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.

NOTE- For foals you'll need to install another lower strand of electric for safety and training purposes.

Cattle- Use 3-5 lines of Finishline XL with two lines of barbed or electric between strands. Finishline is an excellent sight line for large cattle farms.

Deer- Finishline XL 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 XL with minimal damage.

Please Note:

The above examples are suggestions only.

Fencing of all livestock comes with risk. Please use your own judgement and research for your final installation. It is our recommendation to use electric with all Finishline installations to provide the safest containment system. If you choose not to use electric, please do so with caution.

Attaching Finishline XL to your Posts

Finishline XL 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 XL to your wood and t-posts. All choices work equally as well.

Wood Posts - There are four main options to attach Finishline Fence to wood posts: insulators, drilling, and stapling. Use a template to mark locations for your post attachment placement.

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- **Ring insulators**

To install ring insulators use a **Ring Insulator Drill Tool** and attach to your drill. A pilot hole may be needed depending on your post.

3- **Drilling through the posts**

Finishline XL can be installed by drilling through line posts and running the XL through holes up to the end post where it will be anchored. If drilling is selected, determine the line spacing. Helpful Hint- Determine top and bottom height and divide that space by number of strands you are installing. After marking your posts by measuring or using a wooden template such as a 2x4 with holes pre-drilled at the selected spacing you're ready to start drilling. Using a template will allow fast hole alignment and allows the 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. Abrasion can be reduced by using an electrified wire with Finishline Fencing, as this will help prevent animals from pushing on the fence.

4- **Staples (standard U)**

When installing with the Staples, care should be taken to prevent crushing Finishline XL when hammering each staple. This permits the Finishline XL to slide freely without wear.

T-Posts – We carry multiple accessories that be used with T-Posts. Two that will attach XL to the post and two toppers to help protect the top of the metal post.

1- Standard & Heavy-Duty T-Post Insulators

Available in white or black. 25 to a bag.

2- T-Post Vinyl Safety Cap

Lightweight and helps to provide more visibility and a layer of protection from the metal post. Available in white. 25 to a bag.

3- T-Post Safety Topper

Larger molded topper which provides added visibility and the ability to hold electric line and has a higher layer of protection from the metal post. Available in white or black. 10 to a bag.

Installing Your Finishline XL

Due to its larger diameter and higher tensile strength, Finishline XL is only available on coils. Before removing the coil from the box, make sure you have a spinning jenny available for easy installation and to prevent any tangling.

Start Post

The most common ways to begin and/or end your Finishline XL runs are as follows:

1- Finishline Bayco Knot

Give yourself approximately 4 feet of XL 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*.

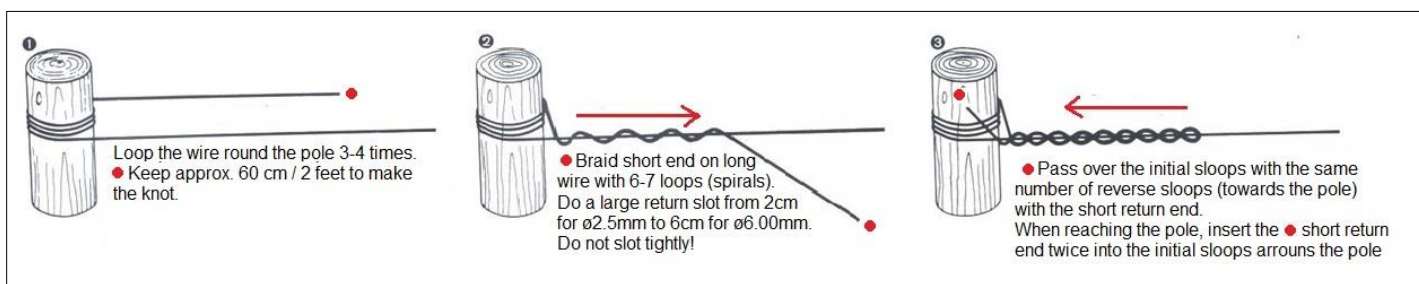


Illustration 4.1

2- **Sure Stop** – 1 1/8-inch hole

To start your fencing with a Sure Stop you'll need to drill a 3/8-inch hole through your entire start post. Then use a 1 1/8-inch drill bit on the outside of the post where you will insert the Sure Stop and drill a hole that is 1/2-inch deep.

Begin by threading the Finishline XL back through the hole while holding the narrower end of the Sure Stop at the first post. Insert the line through the Sure Stop then insert the Sure Stop into the post. Always cut Finishline at an angle when using a Sure Stop for easier insertion. See *Illustration 5.1* to see how the Sure Stop looks installed.



Illustration 5.1

3- **XL One-Way Vice** – 1-inch hole

To start your fencing with a One-Way Anchor Vice, drill a 3/8-inch hole through the post, then partially drill a 1-inch hole in your start post on the end where you will be using the vice.

Then begin threading the line back through the hole while holding the pointed end of the vice at the first post. Cut the Finishline at an angle and insert the Finishline as straight as possible through the vice to prevent getting caught in the spring. Once the line is through the vice, insert the vice into the post. Please see *Illustration 5.2*.

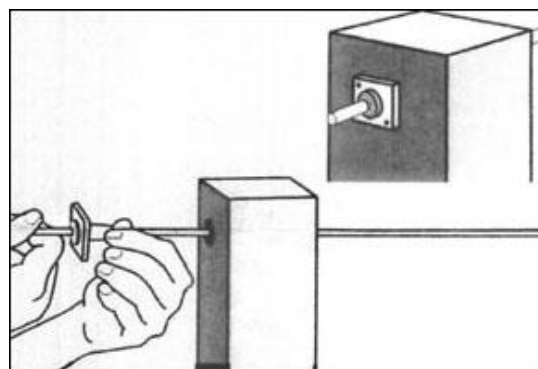


Illustration 5.2

NOTE: Unlike the Original Finishline One-Way Vice, the XL One-Way Vice is not square at the end.

4- **D6 or FastLink**

Instead of drilling through your end post to begin your runs, you can also wrap around your end post and hold the line with the the D6 or FastLink. Always cut Finishline XL at an angle to prevent the line from getting snagged inside of tensioner. See *Illustration 5.3* for an example.



Illustration 5.3

Stretching and Securing Tension at Your End Post

There are two ways to secure the tension that you will pull on the Finishline XL.

1- **Sure Stop** (1 1/8-inch hole) or **XL One-Way Vice** (1-inch hole)

To tension your fencing with a Sure Stop or XL One-Way Vice, drill a 3/8-inch hole through the post, then partially drill a 1 1/8-inch hole (Sure Stop) or 1-inch hole (XL Vice) in your end post. Then begin threading the line back through the hole while holding the pointed end of the Sure Stop/Vice at the first post. Cut the Finishline at an angle and insert the Finishline as straight as possible through the vice to prevent getting caught in the gear/spring. Once the line is through the End Stop, insert the End Stop into the post and pull all the slack out. Once you do this you are ready to tension.

Pull Finishline XL from both ends, for proper tension, unless starting with a Finishline Bayco 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. On shorter runs, XL can be tensioned by hand. Please see *Illustration 6.1* for tips on tensioning your Finishline XL Fence. Keep in mind colder weather does make tensioning more difficult. A **Torq Tensioning Tool** available in our online store will make tensioning easier or by attaching a vice grip to the Finishline XL and pulling the tension with a truck or tractor or by using a fence stretcher that you may already own.

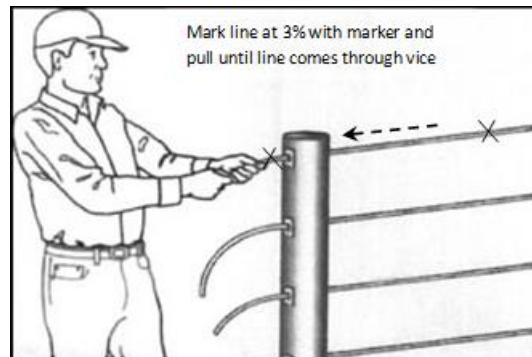


Illustration 6.1

Finishline XL requires a tension of 3% of total strand length. For example, a 400-foot length with 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 Torq Tensioner Tool, hand strength, or other fence stretchers. Using a mark on the fence or ribbon will help ensure proper tension is being applied. After tension is reached, cut all but approximately one foot of your fence line. Tack extra XL with a staple to the post for future tensioning needs.

5- D6 or FastLink

When reaching the last post of the run, thread the Finishline XL through the directed slot of the D6 or FastLink. Wrap the Finishline XL around the end post and then thread the end of the Finishline XL through the remaining hole in the tensioner. Use a Torq tensioner to tension the line the 3-4% and the tensioner will hold the line in place.

How to tension with a D6 or Fastlink

Like the Sure Stop and XL Vice tension directions above, once all the slack is pulled out, you will want the loop around your end post to equal the 3% needed to pull tension (give yourself an extra 10-12 inches to make up for the post).

For example, a 400-foot length with a 3% tension is 12 feet (.3 x 400), then add an extra 12 inches totalling 13 feet.

Now you are ready to use the **Torq Tensioner Tool**. As shown in Illustration 7.1, you will use the torq tool to tighten the Finishline and bring the tensioner closer to your end post. Once the 3% tension is pulled, you are at perfect tension. Feel free to trim the excess line and use a white electrical tape if desired to keep the tail flush against the rest of your fence.

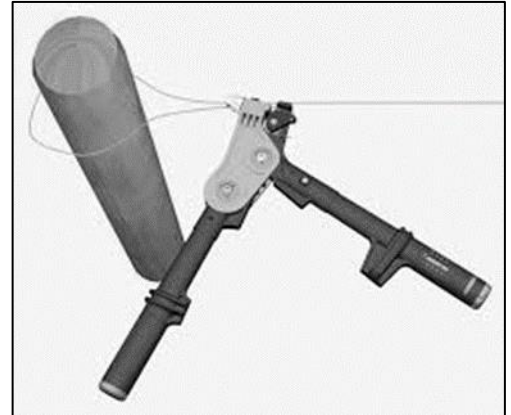


Illustration 7.1

NOTE: If you are using a D6 tensioner, once tension is achieved, use the Hex key to move the D6 into the LOCK position.

Splicing/Repairing- If your job requires more than one coil of Finishline XL, it will be necessary to splice the coils together. This is also the way you would repair breaks in the Finishline XL. This can be done with a **D6** or **FastLink**. Simply put one end of each line being spliced into an opposing hole in the splicer. Look for the arrows on the splicer if you have a question on how to use. Please see *Illustration 7.2*



Illustration 7.2

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 XL cannot carry an electrical charge itself, but a Finishline XL 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 XL strands. Using this technique will reduce the amount of labor necessary to upkeep electric. Because Finishline XL rarely loses tension, you can support your electric line by wrapping it around one of your Finishline XL strands. This will eliminate the need for you to re-tension your electric strands. A 16-gauge aluminum wire can be easily wrapped several times around a Finishline XL strand between posts. The electric wire will need to go through an insulator on each post. Finishline XL acts as an insulator and will not short your line. Please see *Illustration 8.1* for example.



Illustration 8.1

The inclusion of electric is recommended as the best way to reduce animal contact with the fence.

Calculating the Number of XL End Stops

In *Illustration 7.2*, there are only 4 end posts where the Finishline XL is being terminated and tensioned. These are marked by the word "Vice". In the example provided, this person was using 5 strands of XL. To determine the number of End Stops, multiply the number of posts where you are terminating by the number of XL strands you are installing, and this will tell you how many End Stops to purchase. In this case, this person needs to purchase 20 End Stops (Sure Stops, XL Vices, D6s or FastLinks).

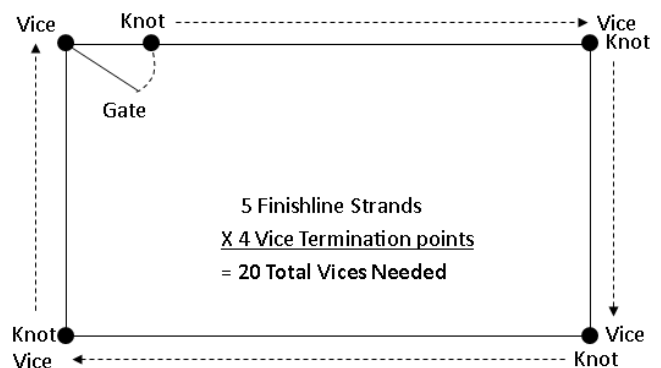


Illustration 8.2

When runs are over 150ft. it is advisable to use End Stops at both the start and end of each run. In *Illustration 8.2* the knots would be replaced by End Stops. In the example above, 40 Sure Stops/Vices/D6's/FastLinks would be needed.

In *Illustration 9.1*, there are 5 end posts where the Finishline XL is being terminated and tensioned. In this example, this person was using 3 strands of XL. To determine the number of End Stops 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 End Stops to purchase. In this case, this person needs to purchase 15 Sure Stops/Vices/D6's/FastLinks.

As previously mentioned, when runs are over 150ft. it is advisable to use an End Stop at both the start and end of each run. In *Illustration 9.1* the knots would be replaced by End Stops. In this example, 30 Sure Stops/Vices/D6's/FastLinks would be needed.

Please Note:

If you need help or advice determining the amount and type of accessories to use, please contact a Finishline advisor. By providing a simple sketch with the length of your runs and approximate location of gates we can quickly provide you with the most optimal and cost-effective plan. 724-625-6100 / info@agliner.com

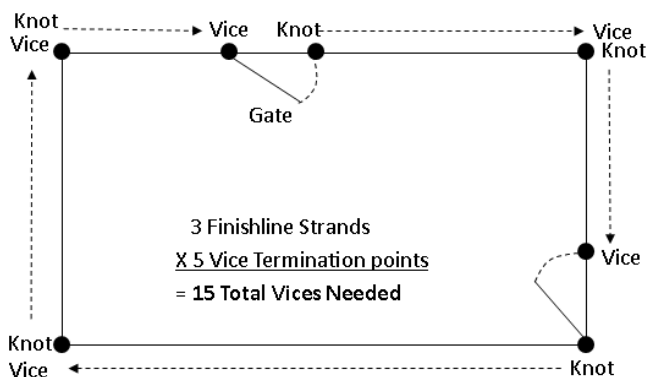


Illustration 9.1

Additional Information

With time, Finishline XL 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 used End Stop. 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 number of End Stops needed. It is recommended to put some sort of protective covering around the Finishline XL to eliminate abrasion such as a Corner Collar Insulator. Common household items also work well for this such as an old garden hose.

Please see *Illustration 9.2* for example



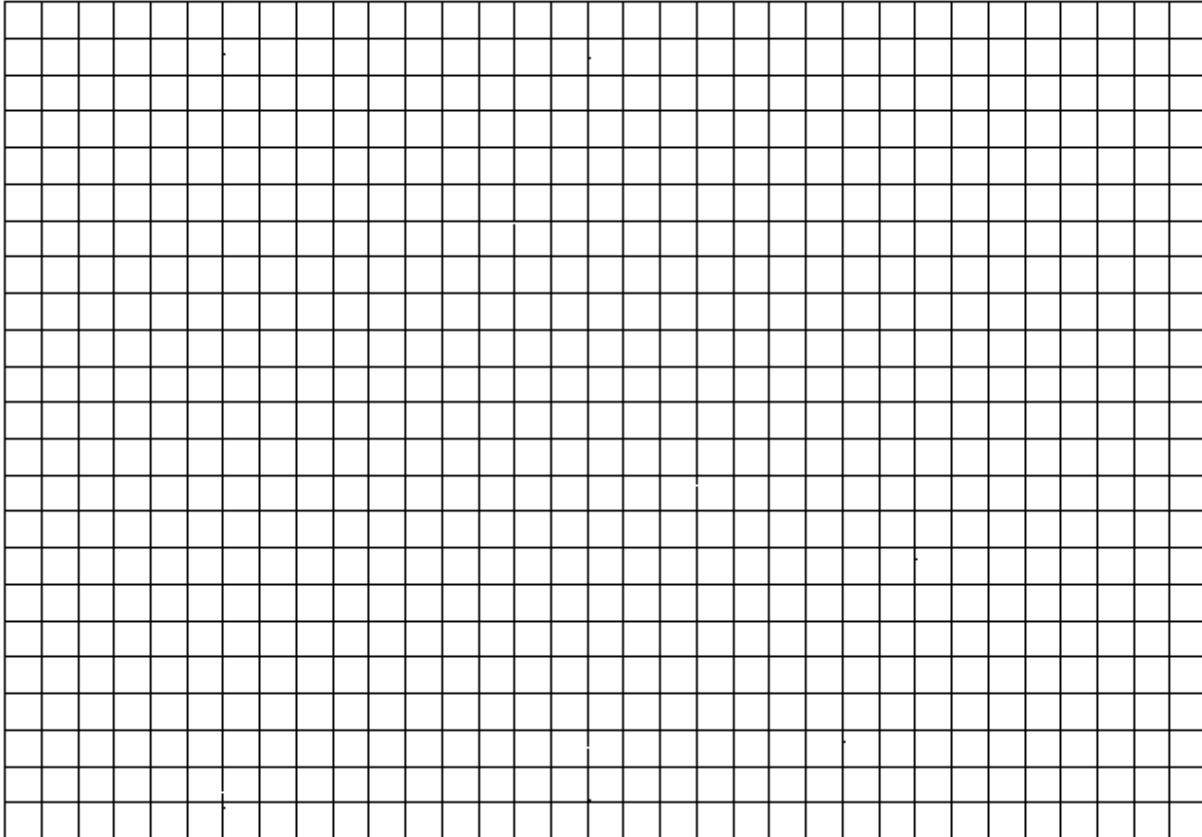
Illustration 9.2

Measuring Guide

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

Each Coil of Finishline XL has 2,000 feet of line

Please use the grid below to sketch your fence layout.



Although the information and recommendations in this Finishline XL 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 determination as to its suitability for their purposes prior to use. In no event 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**