Electrified Netting

What is it?

- It's an electrifiable, prefabricated, portable mesh that arrives at your door as a complete fence. This fence will require a fence energizer and a ground rod.
- The mesh is composed of vertical strings welded to electrifiable horizontal strings. It's supported by white (or green) plastic posts.
- The posts are pre-fitted into each roll. Each post has 1 steel spike (or 2) at the base that's inserted into the ground for support.
- A standard roll (164 ft) inclusive of posts weighs only 23 lbs. Shorter rolls are available.

How does netting work?

The horizontals (except for the bottom one that rests on the grass) are electrified by a fence energizer (purchased separately). When livestock (and predators on the outside) touch it, they receive a shock from the brief electric pulse—and learn to avoid it.

How reliable is it?

Very reliable—if it's adequately electrified by the energizer.

History?

Electrified netting was invented in the 1960s in England. We imported it to the US in the 1970s and have been improving it ever since.

Why is it so popular?

- Much easier and faster than other fences to install, adjust, relocate and remove. Takes less than 10 minutes per roll. Can be done alone but handling tall and/or long rolls of net is easier with 2 people.
- Unlike permanent fences, electrified netting easily adapts to fence lines with corners and curves—and dips and hills.
- No tools are needed. Only hand-tension is needed—which is why it adapts easily to curves, dips, hills and corners. We use FiberTuff posts for additional support at corners and ends.
- Close spacing of the verticals and lower horizontals creates both a physical and a visual barrier for livestock—and their 4-footed predators (foxes, coyotes).

Why we're netting experts?

- We've used it for over 45 years. (Premier's founder first used nets in England during the 1960s.)
- We use miles of it on our 3 farms yearround, in all weather. (Call us if you plan to use during netting winter.)
- We hear our customer likes and dislikes about netting daily.
- We've been the leading US netting source for 35 years.

Premier's innovations:

- White/black and yellow nets instead of orange to increase visibility to both humans and animals.
- Better net conductivity (Premier's 38 ohms vs others' 380 ohms).
- A PermaNet option in 2007 with much stronger, stiffer posts.
- Stronger line posts in 2010.
- Adding more posts per roll in 2011 (we call these Plus Nets).
- FiberTuff support posts in 2013.
- ElectroNet, ElectroFence and Poultry NetGates in 2017.

What users like about it...

- It works so well. No other <u>portable</u> fence even comes close to netting's effectiveness in the field.
- It's so quick and simple to move. So users fence a few days' worth of grass as needed instead of an entire field.
- Each roll is a complete fence.
- Requires little tension, and adapts easily to curves and hills. The adage "the best fence is a straight fence" does not apply to netting.
- Does not need a gate. Instead, we disconnect the power and remove an end post to make an opening.
- The rolls, with posts included, are not heavy (average 23 lb). Most folks are able to carry them with ease. The shorter nets are even easier to handle.

Netting protects or contains...

What users dislike about it...

- It must be moved when tall grass covers the lower "live" strands. The alternative? Apply a strip of a herbicide to kill vegetation.
- Ice and heavy snow can flatten and thereby damage it.
- High winds can bend it.
- Animals can become entangled in it and die. On a % basis, entanglement is very rare, but it can and does occur.
- That you can't (or shouldn't) ever climb or step over netting when it is energized. First turn it off—always!

Some rules for reducing risk of animals challenging netting...

- Use a high output energizer to combat weed contact and intimidate animals. If your soil is dry, use a wideimpedance unit.
- Never leave netting unenergized.
- Do not allow animals of the same species (i.e. sheep/sheep) to be on both sides of a net simultaneously.
- Never use netting to separate mothers from weaned progeny.
- Never force animals against netting. It's not a physical barrier.

Why a taller net is not always the best choice...

Because shorter nets are:

- Easier to install and/or remove.
- · Less affected by high winds.
- Less expensive (usually).





Livestock

ElectroNet 9/35/12 contains sheep/lambs and goats/kids and protects them from coyotes, stray dogs and foxes.



sensitive to electric fences (PermaNet 10/48/6 above). Keeps dogs in, coyotes and foxes out.



Poultry

PoultryNet protects poultry from ground based predators-coyotes, foxes, dogs, raccoons and (yes) even bears.



Pigs/Feral Hogs OuikFence 6/30/12 is an instant fence for pastured pigs. Also see our HogNet to protect against feral hogs.



Sweet Corn

RaccoonNet 4/18/12 is the most reliable fence to keep raccoons from sweet corn. 18" netting is easy to install around your patch.



Beehives

Bear QuikFence 12/35/12 protects beehives from wildlife (bears) and curious livestock (cattle, goats or pigs).



Soft Fruit Protect soft fruits from deer, raccoons and other

wildlife. PermaNet 12/48/3

(above) and 10/48/6 both do

Gardens VersaNet Plus 12/60/3 keeps dogs and wildlife out of fruit, flower and vegetable gardens.



Windbreaks PermaNet 12/68/6 keeps out the majority of deer. You can also use Deer OuikFence.

Netting stops pests and predators like these and many more...



this well.









Applies to all nets...

Net Type

- **Premium:** White/black and green nets. Superior posts and conductivity.
- **Basic.** Similar to all non-Premier mail-order and farmstore nets (minimum posts, smaller diameter posts, lower conductivity, no struts). But they're yellow and less expensive than Premier's Premium nets.
- **Positive/Negative (PN).** Every other horizontal can be an earth wire. These nets are for dry conditions. Nets that are P/N will have this symbol. *See more info on p. 93.*

Durability

If used with care, Premier's nets can last 10 grazing seasons. Do not allow rodents to build nests in the netting when stored, or snow and ice to weigh them down.

To install

Netting requires minimal strength, skill and tools to install. You can install most rolls within 5–15 minutes.

How often will the fence be moved?

If moved daily or weekly or for fastpaced rotational grazing set-ups, a temporary fence is best.

If moved monthly or less frequently, you need a semi-permanent fence. Associated with set-stocking pastures or providing a stationary run for the flock.

For poultry netting, if moved frequently or not, you may prefer non-electrified fence.

What's the difference?

The posts! PermaNet Plus has thicker line posts with longer ground spikes. PermaNet Plus posts resist side strain, wind, rain, ice and snow better than non-PermaNet fences; therefore, PermaNet Plus can be left in place for a long period of time. *See size comparisons below.*

To review: Use PermaNet Plus as a semi-permanent fence and non-PermaNet netting as a temporary fence.

What's the terrain?

Choose Plus Nets if your pasture or yard has ups/downs and curves/corners.

Plus Nets have additional built-in posts, which means a shorter distance between line posts (every 6.8 ft). The result is reduced sagging along the fence line.

If you have flat terrain, standard netting (posts spaced 10 or 12 ft) works well.

Those who have used both almost always prefer the Plus Nets. *See graphic below.*

When Plus Nets excel...

- For fences that involve curves, corners and directional change. Added posts enable the fence to better adapt to corners and curves with minimal sagging. FiberTuff support posts are still recommended at 90° corners.
- 2. When aesthetics are a concern. Less sagging = more eye appeal.
- 3. In soft soils: double spikes + more frequent posts = more support.

3 EASY STEPS TO ORDERING NETTING

1. Choose your netting-

To begin designing your fence, first measure the fence line, then choose the length and the amount of netting needed. To narrow down the type of fence, refer to the steps below.

Example: Net numbering system for PoultryNet 12/42/3

- 12 = 12 horizontal strands
- 42 = 42" high installed
- 3 = vertical strands every 3"
- **2. Don't forget the support posts**—as needed for ends, curves and corners, especially useful in rough terrain.
- 3. Pick an energizer system that works for you.

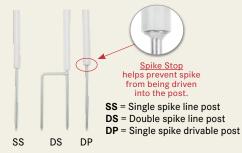
Type of Line Posts

Line posts are built into the net (see diagram below). 3 options available— Single Spike (SS), Double Spike (DS) and Driveable (DP).

Single spike is the best choice, unless your soils are always soft.

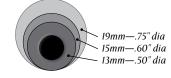
For always-soft soils, use double spike, pushing in the spikes with your foot. If soil is hard or rocky, double spikes are more difficult to install and remove.

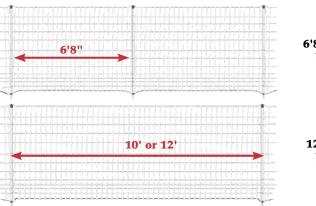
Use Drivable Posts for installing net in dry, hard or rocky soils.



Line post sizing and spacing

An illustration comparing the 3 NetPost diameters.





Plus Nets= 6'8" spacings between built-in line posts

Standard Nets= 12' spacings between built-in line posts

About Premier's Netting

- Quick to install (10 min. average)
- Complete—all you need is an energizer and extra support posts at corners
- Durable—will last 10 years if used with care
- Very adaptable to hills, dips and curves

Why Premier knows netting...

- We've used it since 1970—longer than anyone in the US.
- It's used 24/7 at Premier to fence sheep, goats, poultry and dogs in—and fence deer, coyotes and stray dogs out.
- We talk daily to netting users (thousands per year) nationwide—who let us know what they like and/or dislike; when it works and where and why it doesn't.

Why it's unique...

- It's easy to move.
- It requires minimal sweat energy.
- It's quick. 600 ft can be moved or installed in an evening by almost anyone over 12 years old.
- It doesn't require tools.
- It's not physically strong. It relies upon pain and the animal's memory to contain or repel it.

How netting works...

The visual combination of a close mesh of vertical and horizontal wires encourages animals to touch it with their sensitive head, nose or ears.

All horizontal strands (except for the bottom strand) in most nets connect to a powerful fence energizer that sends a shock down the wires once per second.

Result? Animals touch it, conclude the fence is painful—and then avoid it.

Delivered FREE to your door.

Ours vs others'

What Premier's netting has that other competitor nets don't:

- 1. Drivable posts in select nets.
- **2.** *Plus* **Nets**—extra line posts to reduce sagging and adapt better to curves and hills.
- **3. FiberTuff[™] support posts**.
- 4. Much better conductivity.
- **5. Struts as verticals**—easier to roll/unroll. Less likely to sag than nets with strings/stays.
- 6. Stronger horizontal strands.

Our netting comes to you in a tidy easyto-carry roll. Just attach an energizer and you're ready to go. Netting and a portable energizer can fence any pasture.

PoultryNet 12/42/3 vs Others

Premier's netting is not just better. It's also much less expensive—because we buy direct from the world's best manufacturer.

Source	<u>Height</u>	Length	Price
Premier	42"	164'	\$159.00
Other catalogs Farmstore	42" 42"	164' 164'	\$189.95 \$178.99

Electric Netting: 7 key details

2. Color Options...

Premier's white net Premier's green net

White vs Green Net

Premier's (white/black)—White enhances visibility to both humans and animals. More visible at night.
Premier's (green/black)—Some prefer green because it blends into a green-grass background.

White vs Orange Net

Other's orange net

Premier's

white net

Premier's Net (white)—When visibility is a concern, for both humans and animals, white is the obvious choice. **Other's net (orange)**—Orange is actually harder to see (and it appears dark gray at night).

1. Plus vs Standard

Why do we offer both?

- 1. Standard is less expensive.
- 2. Many prefer standard netting.
- 3. Users who own Plus nets seem very pleased with it (as are we).

So we continue to supply both.

The key difference?

Plus nets have additional line posts, which means a shorter distance between posts.

More posts mean less sagging between posts. Those who have used both almost always prefer the Plus nets.

Plus Nets

When Plus nets excel

- 1. For fences that involve curves, corners, and elevation changes. Added posts enable the fence to better adapt to corners and curves with minimal sagging. FiberTuff support posts are still recommended at 90° corners.
- 2. Better aesthetics. Less sagging = more eye appeal.
- 3. For net fences that will not be frequently moved.

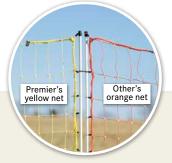
Drawbacks of Plus nets

- 1. Heavier and bulkier per foot than standard nets.
- 2. More expensive due to additional posts.
- 3. Extra posts per roll make them more work to move.

Standard Nets

When to use them?

- 1. For a straight fence line with no curves. Purchase additional posts for corner support.
- 2. When your energizer is large/strong enough to cope with the extra sagging and grass contact.



Yellow vs Orange Net

- **Premier's (yellow)**—More visible than orange nets. Above, a comparison to competitors' orange nets.
- **Other's net (orange)**—At night yellow is a light grey, whereas orange is a dark grey (harder to see).

3. Line Post Spacings

STANDARD NETS (12 ft between line posts)

Bear QuikFence Cattle QuikFence Chicken Net Deer QuikFence ElectroFence ElectroNet ElectroStop Goat & Sheep Net Horse QuikFence PermaNet **Pig QuikFence** PoultryNet Sheep & Goat Net Sheep QuikFence

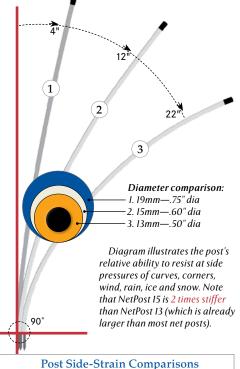
PLUS NETS

(6.8 ft between line posts) **ElectroFence Plus ElectroNet Plus** ElectroStop Plus PermaNet Plus PoultryNet Plus VersaNet Plus



4. Line Post Strength, Sizes and Diameter

All Premier nets have built-in line posts (see above). To order replacement line posts, see our website.



Post Side-Strain Comparisons				
	Outer dia	Height of test site on	Deflection with 2 lbs of	
<u>Name</u>	of the post	each post	<u>side-strain</u>	
1. NetPost 19	.75" (19mm)	35"	4"	
2. NetPost 15	.60" (15mm)	35"	12"	
3. NetPost 13	.50" (13mm)	35"	22"	



- All OuikFences
- ElectroFence
- ElectroNet (DP)
- ElectroStop (DP)
- NetGates (DP)
- PermaNet
- PermaNet Plus
- PoultryNet (DP)
- VersaNet 60"



2. NetPost 15

- Chicken Net
- ElectroStop
- ElectroStop Plus
- PoultryNet
- PoultryNet Plus



• ElectroNet Plus

• Sheep Net

.50" dia (13mm)

Hollow PVC post

3. NetPost 13

ElectroNet

Goat Net

Actual size cross-section

VersaNet Plus

Premier's Posts

- Either .50", .60" or .75" PVC.
- The .60" and .75" posts have 6 fiberglass cable filaments for reinforcement.

Other's Posts • .50" fiberglass rod.

- Very stiff (good) but weighs
- more than PVC posts.

A 42" NetPost 15 (double spike) weighs .8 lb—and by comparison, a 40" fiberglass rod (with foot) weighs 1 lb. That .2 lb weight difference adds up quickly (for 5 posts = 1 lb; for 10 posts = 2 lb).

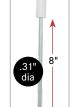
5. Post Ground Spikes

Single Spike (SS)

We recommend these unless your soil is always soft. Single spikes insert and remove easier than double spikes.

NetPost 13 or 15 (SS)

- Chicken Net
- ElectroNet
- ElectroStop
- Goat & Sheep Net
- HogNet
- PoultryNet
- RaccoonNet
- Sheep & Goat Net
- VersaNet Plus 9/20/3
- VersaNet Plus 11/30/3



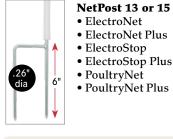
NetPost 19 (SS)

- ElectroFence 11/48/12
- PermaNet 10/48/6
- PermaNet 12/48/3
- Pig QuikFence

Note: 19mm spikes are longer and posts are larger. So, they provide more support—but are a bit harder to install/remove.

Double Spike (DS)

When the soil is soft, these are easily pushed in with your foot. When the soil is hard, they are much harder to get into the soil and to remove. Do not drive them with a hammer!

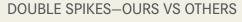


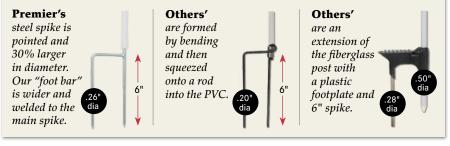
NetPost 13 or 15 (DS)

- ElectroNet Plus



- NetPost 19 (DS) • ElectroFence 11/48/12 • PermaNet 10/48/6 • PermaNet 12/68/6 • PermaNet Plus 12/48/3 • PermaNet 19/68/3
- QuikFence Cattle,
- Deer, Horse and Sheep
- VersaNet Plus 12/60/3





Drivable Post (DP)

For dry, frozen or rocky soils, we recommend these posts. Also for hard soils when it's difficult to push in single spikes or step in double spikes. When using a hammer to drive the post into hard or rocky soils, the spike stop (*at right*) prevents the spike from being forced up into the post.



- NetPost 19 (DP)
- Bear QuikFence 12/35/12
- ElectroNet 9/35/12 • ElectroStop 10/42/12
- NetGates
- PoultryNet 12/42/3
- PoultryNet 12/48/3





Dead Blow Hammer The drivable post (DP) drive cap (brown in color) can be hit with a dead blow hammer or mallet (not steel).

6. Vertical Types

Large plastic struts

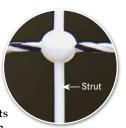
- Bear QuikFence
- Cattle QuikFence
- Deer OuikFence ElectroFence
 - ElectroNet

Struts are able to hold strands above the soil when net passes over rises in terrain or grass. Allows net to

be set up with less tension (because struts offer support between

ElectroStop • HogNet

- Horse QuikFence • Pig QuikFence
- RaccoonNet



posts). Easier to fence curves and corners.

Enables net to maintain height between horizontals. Makes handling easier during installation or removal.

String verticals

- All PermaNets
- Chicken Net
- Goat & Sheep Net PoultryNet

String nets (excluding PermaNets) are best when used for shorter fence lines. The strings

verticals do not



• Sheep & Goat Net

• Sheep QuikFence

• VersaNet Plus

provide support when net passes over rises in terrain or grass. Net will sag a little between posts.

STRUTS-OURS VS OTHERS





Premier's Strut Side and crosssectional views (magnified 2x).

Other's Stays Side and crosssectional views (magnified 2x).

Premier introduced netting with struts in 1979.

A competitor offers nets with stays and implies they are equal to our struts. In truth they are much smaller and flexible and less able to provide the same support as struts.

7. Conductivity

Premium Nets

Design includes a green and white superconductor strand that has both stainless steel and tinned copper filaments for optimal conductivity.

These nets are 10 times more conductive (only 38 ohms) than our basic nets (below). This enables the pulse to go much farther and be less affected by weed contact.

 All of our nets (including pos/neg capable nets) are premium nets, except the 3 basic nets below.

Basic Nets

• Goat & Sheep Net • Chicken Net • Sheep & Goat Net

These nets are not advised for fences exceeding 600 ft in length.

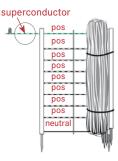
Very similar in design and conductivity (380 ohms) to nets from our competitors.

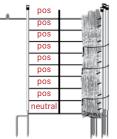
Pos/Neg Nets

- Bear QuikFence HogNet
- PermaNet ElectroFence
- ElectroNet
- PoultryNet • ElectroStop Sheep OuikFence

For sites where soil resistance is high (brown grass, dry soil, snow). Learn more at right.

Also for species that make poor soilto-foot contact due to fur, dry hooves or minimal weight (e.g. goats).





pos/neg

pos

pos pos/ne

pos

pos/n

neutra

pos/n

MORE INFORMATION ABOUT POS/NEG NETS

Is your area dry?

Conventional electrified fence systems rely on soil moisture to be effective. However, not all areas have the required moisture.

Pos/Neg nets are wired to allow the use of every other horizontal strand as an extension of the ground terminal, rather than all an extension of the fence terminal. Half the strands are connected to the ground terminal or ground rod, so reliance on soil moisture is reduced. A PowerLink is sold separately to make the secondary ground connection.

How it works...

In order to receive a shock, the animal must touch both a positive (hot) and negative (grounded) strand at the same time. This will deliver more pain to animals than normal nets but the fence needs added maintenance. (Grass contact across both a positive and a negative wire will reduce the voltage.)

Pos/Neg fences can be used as Pos/Pos in moist conditions.



All strands electrified for moist conditions

Connect both net clips together and

attach energizer fence lead to net clips.

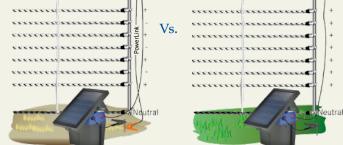
Then attach energizer ground lead to

Connect energizer fence lead to positive "+" net clip and energizer ground lead to ground rod. Then connect a PowerLink (p. 121) from negative "-" net clip to ground rod.

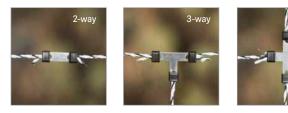
- BARNING

ELECTRIC FENC





New! Repair Clips



New! LitzClips

Clever conductive clip for repairing breaks in netting. Simply insert conductor or string support through holes and slide black clip to lock. For 3mm verticals and conductors.

LitzClip, 2-way, package of 10, 0.10 lb	#200002
LitzClip 3-way, package of 5, 0.10 lb	#200003
LitzClip 4-way, package of 5, 0.10 lb	#200004
LitzClip Repair Set	
(4) 0	#00000

(4) 2-way, (2) 3-way, (2) 4-way, pkg of 8, 0.20 lb...... #200008



Spacing of Bear QuikFence's conductors are optimized for Pos/Neg use. The 2" gap makes it easy for a bear to simultaneously touch positive and negative wires.

How to Install Netting

It usually takes less than 10 minutes to go from a roll of out-of-the-box netting to an installed erect fence.

Why it's easy to install...

We understand why those without experience might doubt those who say "it's very easy."

But net actually is a product that's easier to use than it appears—*if you follow the instructions included with each net.*

A key to its ease and speed is that netting needs minimal tension—which means small, light posts that are both easy to carry (they're built into the net) and easy to push or step into the soil.

Site preparation...

- Carry roll(s) of netting to proposed fence line.
- Prepare fence line by mowing or trampling down all vegetation over 4" tall. If mowing isn't practical, use a vehicle to make a track. Then install the fence in the track.
- For longer fences, we put the rolls into a vehicle and unload them as we drive along the intended fence line.

The 2 most common errors...

- 1. Not energizing the net or using an energizer too small in joules of output (ignore miles of fence as a guide). Failure is almost guaranteed if net is not energized properly.
- 2. Rolling up the net like a carpet instead of first folding it up by the posts.

Most of the nets we receive back from unhappy users are rolled like a carpet instead of folded—even though our instructions (*which include how-to photos*) are specific on this point.

Need complete instructions?

- Instructions will be enclosed in the box when you receive your order.
- Visit our website (video and/or written instructions are available).

(right) These steps are with ElectroNet but the process is the same for all electric netting.

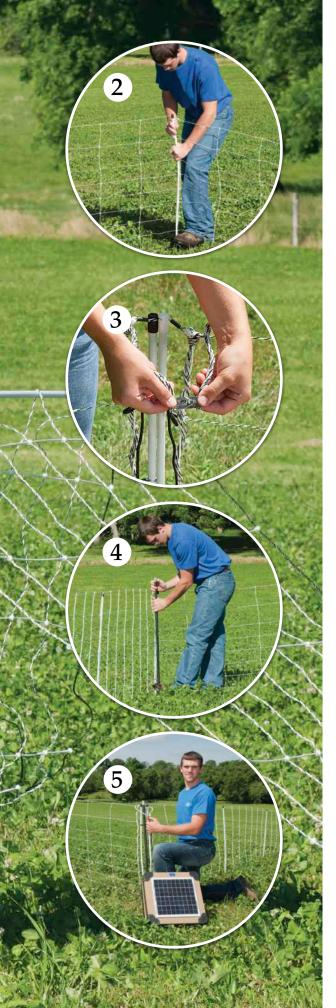


Installation steps...

- 1. Unroll and unfold the net.
- 2. Push in the posts.
- 3. Join the 2 rolls (as needed).
- 4. Install additional support posts as needed. We like FiberTuff posts (*p. 109*).
- 5. Connect energizer. Check the voltage.



Watch Online **NETTING INSTALLATION** premier1supplies.com/videos



Electric Netting FAQs



After turning on the energizer, test the fence with a voltmeter (see p. 88). Voltage should be at least 3000v.

Q. Does the net have to be electrified?

- A. Yes. Always. It's a serious mistake to not electrify it. Why?
 - Nonelectrified netting increases the risk of entanglement and death.
 Nonelectrified netting will not stop predators.
 - 3. Animals and poultry will peck and chew nonelectrified netting.

Conclusion: A simple quick shock is far better than death by entanglement or by a predator.



- Q. How do I hook 2 rolls of net together electrically?
- **A.** There is a stainless steel clip (*shown above*) on each end of all nets. Just join the clips together by hand to electrically connect the 2 rolls of net.

Q. Does net have to make a full circle for a pulse to occur?

A. No. The pulse path is from the net to the soil then back to the energizer. It's a mistake to attach (electrically) the far end of the net to the beginning.



Q. How do I support netting at corners or curves?

- A. Two options:
 1. Install a support post. (See FiberTuff post above and other posts sold on pp. 108-113.)
 - 2. Or drive in a tent peg or T post outside the fence at the corner. Tie to netting post (at least 2" away) with nonconductive string.

Electric Netting FAQs

Q. Is it ever safe to step over netting?

A. Doing so risks injury! Footwear and clothing (buttons, buckles) can become entangled and cause falls. Short nets are easier to step over, obviously.

Never step over energized netting! To our knowledge no human has ever been seriously injured by entanglement in nonenergized netting, but there is always a first time.

Q. If the net is too long, can I cut it?

A. We strongly advise against cutting netting—because all the energized horizontal strands are interconnected at each end of the net. The best way to deal with net that is too long is to make a complete U-turn with the excess netting and erect it back alongside the original fence line. The 2 nets can touch one another (unless the netting is a pos/neg configuration).

Q. How do I put in replacement posts? Replacement clips?

A. Starting at the bottom of the net, interweave the new post upwards. Once done, place the lowest all-black strand in the replacement bottom clip and slide it up the steel ground spike. Then attach the top strand to the cap on top of the post. For clips, place the lowest all-black strand in the replacement bottom clip and slide it up the steel ground spike. Then attach the top strand to the cap on top of the post.

Q. How much area do I need to fence in my animals?

A. It depends on the species, type of production (confined or rotational) and management style.

Q. Some of my netting wires are being chewed or cut. Why?

A. The lower wires are not "hot" enough to prevent small animals (rats, mice, rabbits) from cutting them with their sharp teeth.

Q. Does the bottom wire have a charge?

A. The bottom strand of most (but not all) nets is not conductive. The exceptions are QuikFence Quick Ground nets (see our website for details).

Q. How do I fix a break in my net?

A. Each net is supplied with a repair kit (*see on our website*) containing brass ferrules, conductive twine, post tops and bottom clips.

Use a fisherman's knot. (You can look online for a how-to on tying the knot.) Clamp brass ferrules over the knot to hold it in place.

Also available are LitzClips. These are stainless steel tabs with sliding black clips that hold the broken conductors in place. Very useful for quick, knot-free connections.

Q. Can I use different types or styles of netting together?

A. Yes, they all conduct electricity. But some are much better than others.

Q. Advantages of Pos/Neg?

A. Main use is in dry, sandy or rocky soil conditions due to poor soil moisture.

It's good for species that make poor soil-to-foot contact due to fur, dry hooves or minimal weight.

Must be installed with extra care and checked often to remove objects that fall on or against it. Best to convert it to all "hot" in green grass situations.



Q. How do I make a gate?

A. We often use the netting itself as a gate. Turn off the energizer or disconnect the PowerLink. Open one end of net and walk through. We also use Net Gates—they feature insulated handles and a docking station for quick and easy access.



Coyotes are one of many predators that wellenergized netting can stop. Photo by K. Gustafson, MO.

Q. Can predators jump the net?

A. It is possible for some predators to jump these fences. However, this is unlikely if the net is properly electrified when it is first installed and always maintained that way.

Why? Because of the "fear factor" created by the initial exposure. Evidence? Our sheep guard dogs will jump or climb 4 ft tall wire fences and gates in pursuit of coyotes or other dogs. But they rarely jump 35" tall electrified netting.



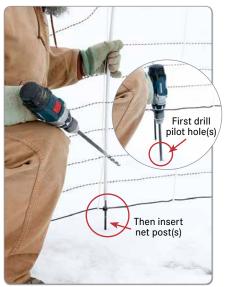
Q. I want to contain several species. Which net design is the best?

A. Choose the fence for the most difficult species to contain. For example, if fencing both poultry and sheep or goats, use either PoultryNet 12/48/3 or PermaNet 12/48/3 (*see above*).

Q. Will netting harm animals, birds or humans?

A. Not unless they are unable to move away from it. An electric fence pulse lasts less than 3 milliseconds—which is too brief to cause harm if the contact does not continue.

Electric Netting FAQs





Snow and a thick winter hair coat increase resistance. Make sure your energizer is up to the challenge of such situations.



During winter, drill pilot holes for single and double spikes. They will insert much easier. Add more support posts to take the weight.

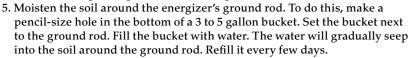
Q. Can I leave it up through the winter? (see above)

- **A.** Posts become frozen in the soil. To release we clamp pliers on the steel spike and twist. To insert a post into frozen soil, use a power drill.
 - Excess ice and snow can flatten netting (as they will any fence).
 - Snow can act as an insulator and reduce the strength of the pulse.

Q. How can I make netting work well in dry soils?

A. Here are 5 ways to maximize effectiveness:

- 1. Use a wide-impedance energizer. They are more capable of pushing strong pulses through dry soil than low-impedance units.
- 2. Use Pos/Neg capable netting.
- 3. Install more or longer ground rods. The extra length needs to reach damp subsoil.
- 4. Place the energizer's ground rod in damp soil.





To reduce green grass contact we spray a strip of herbicide along netting fence lines.

Q. What about grass contact?

- **A.** It lowers the fence's voltage. So:
 - When grass gets 6" high, first turn off the energizer(!), then mow carefully *along* the fence. Do not mow into the fence. Move the net into mowed strip by removing and reinstalling.
 - 2. Or spray herbicide in a narrow strip under the fence. We prefer burn-down chemicals that don't kill perennial grasses or clovers so vegetation will return.
 - 3. Or buy an energizer large enough to cope with the extra weed contact.



Q. Fence energizers? Why and which one to choose?

A. For netting to work, it absolutely must be properly electrified. *Many farmstore energizers are too low in energy output to successfully energize a roll of netting.*

That is why we offer our own units. They are specifically selected for properly energizing netting.

Q. Which energizer is right for you?

- **A.** If you're close enough to plug the energizer into an outlet, always use a **plug-in (AC/110) unit** (*see pp. 72–77*). For fences far away from an outlet:
 - **a. Solar units**—an all-in-one kit. Units are ready to work within 5 minutes.
 - **b. DC battery**—for which you will need a 12 volt battery.

Netting Kits PoultryNet RaccoonNet VersaNet Plus

Energizer Kits HotShock Patriot IntelliShock Kube Solar IntelliShock PRS



Q. Why do you sell netting and energizers as kits?

- A. To simplify purchasing decisions.
 Because there are so many netting options, support-post choices, etc.
 - Because it's complicated for those without fencing/electrical experience to buy the correct components.

We also know that:

- 1. Many already own an energizer. If you're not sure whether it will work for our fences, call us.
- 2. Many need longer fences and larger energizers than suggested in our kits. If so, call us and we will help.

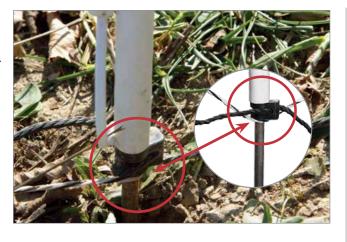
Common Mistakes with Netting

A common error

Allowing the lowest live strand to be caught by post's metal ground spike.

Result—a direct short through the energized strand to the metal spike and into the soil. Voltage will be very low. Animals will escape and you will be frustrated!

(right) Energized wire caught by steel spike. This creates an immediate "dead short" in the fence.



How to move and store netting

Folding, then rolling up the net the correct way...

Step 1. First fold the net by picking it up sequentially by the posts. The netting naturally folds into sections as you do this. Keep the posts together in a bundle in your hands.

Step 2. Lay the folds neatly on the ground. Starting at the end opposite the posts, roll the folded net toward the posts. When this is done, use the exposed end-post tie strings to secure it as a roll.



First step is to fold the net by picking it up sequentially by the posts.

Two ways to make handling netting difficult instead of easy.

- (*right*) Rolling the net from one end to the other as you would roll a carpet. It's hard work and takes a long time both to roll and eventually unroll.
- 2. Even if you've first folded the net correctly (*as in step 1 above*), you can still make net "handling" difficult if you roll up the net beginning with the posts! This buries inside the black tie strings and risks entangling net with post spikes.



Second step—starting at the end opposite the posts, roll the folded net toward the posts.



Too much green vegetation

When touching live strands, grass will drain the energy out of an electric fence. **3 Solutions:**

- 1. Move the fence, then mow.
- 2. Kill the grass with herbicide.
- 3. Graze or trim the grass under offset wires.



Spraying PermaNet to reduce grass contact—

Without herbicides weeds can render netting useless by midsummer in areas with rapid grass growth. The bottom photo shows how this fence line looked 2 weeks after spraying.





To reduce green grass contact we spray a narrow strip of herbicide along netting fence lines.

Connection Solutions for all Fences

Problem

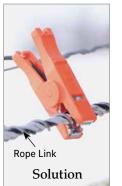


Alligator clips can burn through rope and twine if the energizer is large and the drain via weeds is high.

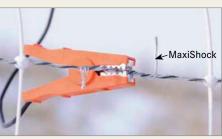
Rope fence connections



A potential problem. Strong pulses may "burn" the small metal filaments.



Attach the PowerLink where a Rope Link covers rope.



Two simple, "no cost" solutions

Twist MaxiShock around the rope/twine and attach the alligator clip to the combination.

Insulated Wire to Rope



The best way? Place 4"-6" of bare wire next to the rope and secure it with a Rope Link as shown.

An electric fence pulse is less than 3/10,000 of a second. But for that instant the energy flow can exceed 50 amperes.

That's why good connections (tight, firm, no rust, metal-to-metal contact) are very important.



On netting—attach the PowerLink to the stainless steel connector at the end post of all nets.

Ins. "Maxi" to HT Wire?

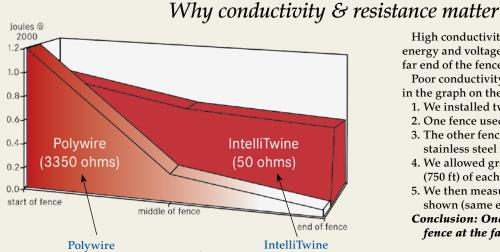


We prefer Insulated MaxiShock over Insulated HT wire.

To connect it: Carefully remove the insulation with a sharp knife. (It's not easy.)



Conductors



Resistance is 65 times higher—3300 Ω per 1500 ft. So its conductivity is much lower than IntelliTwine. The difference? It has only stainless steel filaments in it. **Intelli I wine** Resistance is 50 ohms (Ω) per 1500 ft. Why? Because it has both stainless steel and tinned copper filaments. High conductivity (low ohms/ft) enables the pulse energy and voltage to remain high all the way to the far end of the fence.

Poor conductivity does the opposite as you can see in the graph on the left.

- 1. We installed two 1500 ft fences side by side.
- 2. One fence used a good conductor (IntelliTwine).
- 3. The other fence used ordinary polywire with only stainless steel filaments.
- 4. We allowed grass to grow and contact the far 50% (750 ft) of each fence.
- 5. We then measured available joules at the points shown (same energizer for each).

Conclusion: One will allow animals through the fence at the far end. The other won't.