Conductors

- Visible and reliable
- Proven by extensive field tests
- Backed by our expertise, world-class reputation and legendary service

Why our conductors excel...

- **Knowledge.** Premier specializes in electric fences. We use miles of them daily. Most others just sell them.
- Wide range of options—IntelliBraid, EnduraSoft, IntelliRope PE, etc.
- **Ropes and tapes** combine conductivity, durability and visibility.
- Lowest cost (items of similar quality). It's almost a given that if someone is selling rope or twine for less than Premier, it is inferior in diameter, conductivity and/or filament quality. (Check the specifications.)
- **More experience.** Example: We were the first to see the merits of electrified rope.

Background

- Premier conductors are made to our specifications. They're the result of more than 35 years of testing, observing, analyzing, modifying and retesting. We continue to "tweak" the specifications because we know that all products can be further improved.
- We are interested in what works and what might fail for specific purposes and for specific species. We are not interested in what sells best, fancy packaging or exaggerated claims.
- Our goal is simply to supply you with choices—for unique and proven products with features and capabilities not found with other suppliers.

We have used products from Premier1supplies for years. Everything we have purchased is good and lasts for years. We are still using their electric rope—in some places it is about 14 years old and is still good. I always suggest this company for anyone interested in electric fencing.

– Elizabeth R., Missouri

We've stood behind all of our products for 40 years. If a Premier item disappoints within its normal life, we either replace it or refund its prorated value based on years of use. It's as simple as that!







Shortcuts for ordering

- Most UV resistant: EnduraSoft, IntelliBraid 6.0
- Most resistant to mildew: IntelliRope PE 6.0
- **Best for long fences:** EnduraSoft, IntelliBraid 6.0 and IntelliRope PE 4.5 and 6.0
- **Best for portable fences:** IntelliRope PE 4.5 and IntelliTwine
- **Best for semi-permanent fences:** IntelliRope PE 4.5 and 6.0
- Lowest cost per ft: IntelliTwine
- Least cost per year of use: EnduraSoft, IntelliBraid 6.0 and IntelliRope PE 4.5

Plastic filaments

Many store labels don't tell you exactly what the plastic filaments are.

They should—because there can be large differences in performance and cost per year of life.

Why don't they? Some don't know. Others don't care—and assume that users buy on price alone.

That's why we advise not buying rope, twine or tape from manufacturers and sellers who do not clearly state which filament their product is made of.

In descending order of cost per ft and inherent resistance to sunlight: 1. Polyester.

- 2. Virgin polyethylene monofilament.
- 3. Polyethylene monofilament.
- 4. Polypropylene film.

The differences between these in response to sunlight, movement, stretching, mildew and years of life can be large. Some work for less than 2 years—and some for more than 20 years.

What to look for when purchasing electrifiable rope

- Visibility against all backgrounds. Animals see colors poorly, so maximum contrast is important.
- **Conductivity.** Important if the fence is more than 1000 ft or in contact with heavy weeds. If not, it's a minimal factor.
- **Durability.** Match intended use—don't buy a 20-year rope for a 2-year situation.
- **Exposure of metal filaments.** The better rope and twine have these spread evenly and frequently around the exterior.
- **Support.** We support what we sell—and have confidence in our products.

Which conductor is the most visible?

Direct Sunlight
What humans see What animals see

Twine/Wire

Rope

Tape



At Night





Relative visibility to animals and humans differs. And it's critical. Why?

- 1. If it's easy to see, it's more likely to stop livestock and wildlife.
- 2. Visibility = avoidance = safety for both animals and humans.

But animals and humans differ in the ability to see fences. Many animals see color poorly. Their world is largely black, white and shades of gray. But most have better night vision than we do. (And birds see much better than humans.)

Photos (*above*) simulate both direct sunlight and "nightlight." To achieve this we eliminated the color from the photo and enhanced the amount of night light.

Key conclusions:

- Size in diameter or width matters larger is always better for visibility.
- **Contrast matters**—black/white is much more visible than solid white, green, orange or black.

Electrifiable Rope & Twine





660 ft roll 48 ohms/1000 ft

IntelliBraid[™]6.0

For permanent electrified fences. Black/white alternating colors offer contrast to animals against both light and dark backgrounds.

Has 4 tinned copper filaments twisted around top-quality braided polyester filaments. Very conductive.

Polyester, the same plastic filament as in EnduraSoft, is noted for its strength, soft feel and inherent high resistance to UV light degradation.

Expected life-up to 25 years.

IntelliBraid 6.0

660', 12 lb	#256710
1320', 24 lb	#256730



660 ft roll 50 ohms/1000 ft

EnduraSoft® 6.0

For permanent electrified fences, but is twisted instead of braided (IntelliBraid).

Made of polyester so it's soft to the touch. Expected life is up to 25 years. Polyester is more resistant to ultraviolet light than even the best polyethylene.

Has 3 "cables" of twisted polyester strands into which 3 tinned copper and 3 stainless steel filaments are intertwined.

Very good conductivity ($50\Omega/1000$ ft) so it's suited for any length of fence line and nearly all energizers.

EnduraSoft 6.0

660', 12 lb	#256500
1320', 22 lb	#256600



660 ft roll 50 ohms/1000 ft

IntelliRope® PE 6.0

Excellent for *both* permanent and portable fence situations because PE (polyethylene) resists wear and abrasion.

Excellent built-in elasticity means extra springs are useful but not essential. Made of virgin polyethylene

monofilaments interwoven with 3 tinned copper and 3 stainless steel filaments.

Particularly good for humid climates because mildew doesn't thrive on PE.

6.0 mm diameter—heavier, stronger and more expensive than 4.5mm (*right*).

IntelliRope PE 6.0

660', 9 lb	. #256900
1320', 18 lb	. #256910

Comparison Chart

Name	Premier's approx. cost per ft	Others' approx. cost per ft	Probable <u>yrs of life</u> *		Diameter <u>or width</u>	Visibility to animals	Portability	Ohms per <u>1000 ft</u>	Breaking strength <u>per lb</u>	IntelliBraid, EnduraSoft,
IntelliBraid 6.0	16¢	21.5¢	25	w/b/w	1/4"	good	fair	48 Ω	1800 lb	IntelliRope & IntelliTwine
EnduraSoft 6.0	14¢	14.4¢	25	w/b/w	1/4"	very good	fair	50 Ω	1800 lb	In 40-60 Ω
IntelliRope PE 6.0	8¢	11.8¢	10	w/b/w	1/4"	very good	good	50 Ω	1200 lb	JOut
IntelliRope PE 4.5	6¢	7.3¢	10	w/b/w	3/16"	good	very good	50 Ω	750 lb	Rope that has
IntelliBraid Twine 3.0	5¢	4.8¢	5	w/b/w	12 g/.09"	fair	excellent	50 Ω	240 lb	only stainless steel filaments (no
IntelliTwine 2.25	3¢	4.8¢	5	w/b/w	12 g/.09"	fair	excellent	50 Ω	240 lb	copper) 1350 Ω or more
Farmstore Rope	n/a	8¢	3-5	varies	1/4"	fair	fair	1350 Ω	1200 lb	In

"Important: "Probable Life" is not a warranty by Premier. Why not? Because we know that longevity is highly dependent upon, but not limited to, quality of installation, insulator(s) used, rope tension, animal/wind/snow/ice/vegetation pressure and UV exposure (altitude and climate).

Comparing ohms (Ω), for most people, is counter intuitive because higher ohm numbers equal lower conductivity. The pictograph (above right) shows the relative conductivity of conductors. A smaller number of Ω = a bigger "pipe" for each pulse. Higher ohm number is more constrictive to flow while lower ohm number is more open to flow. The differences actually are as large as they appear in these diagrams.



actual size



660 ft roll 50 ohms/1000 ft

IntelliRope® PE 4.5

Identical to PE 6.0 (*left*) except it has fewer polyethylene (PE) monofilaments. This 4.5mm version is less weight, lower cost and better for short-term fences. Also has 3 tinned copper and 3 stainless steel filaments.

Good for all sites, and especially good for humid climates because virgin polyethylene resists mildew. Excellent for portable and semi-permanent situations. PE filaments are slick—resistant to wear and abrasion. Built-in elasticity.

IntelliRope PE 4.5

660', 5 lb	#245100
1320', 10 lb	#245200

660 ft roll 50 ohms/1000 ft

IntelliBraid[™] Twine PE 3.0

The braid preferred by those who unwind and rewind twine or polywire frequently—best for temporary fences.

A little thicker than normal twine (3mm)—more visible to animals and humans.

Plastic strands are made of virgin polyethylene monofilaments. Has 3 stainless steel and 3 tinned copper filaments, conductivity is excellent. Space line posts up to 35 ft apart.

IntelliBraid Twine PE 3.0

660', 3 lb	#253530
1320', 5.6 lb	#253531
2000', 8.55 lb	#253532



50 ohms/1000 ft

IntelliTwine[™] 2.25

Conductivity Compared

Excellent for portable fences for cattle and sheep. Has 3 stainless steel and 3 tinned copper filaments so it's as conductive as 420 stainless steel filaments. 24 virgin polyethylene monofilaments.

Easy to unwind/rewind onto reels small diameter enables reels to hold 2000 ft. Space posts up to 35 ft apart if the fence line is level and straight.

Excellent elasticity. Contrasting colors enhance visibility.

IntelliTwine 2.25

660', 2 lb	#253500
1320', 4 lb	#253510
2000', 5 lb	#253520
,	

MaxiShock



Twine and MaxiShock combined on a temporary fence. Twine provides visibility and MaxiShock offers low resistance for a consistent pulse.

Electrifiable Tape



For most cattle one strand of tape (or rope) is enough for a subdivision fence. Set conductor height at mid-chest level of the cattle.

MaxiShock™

Famous for 3 qualities:

- 1. Very thick zinc coating (Class IV) of each of the 7 strands in this cable. It should last 10 years without rusting in humid climates.
- Low-tensile strength. Therefore it's easy to wind, unwind, cut, tie and join. Enables simple, conductive, durable "no-tool" connections.
 Excellent conductivity.



MaxiShock

1320' 12 lb	. #251000
Prewound MaxiShock (includes a SupaReel), 1320', 13 lb	#251010
Prewound MaxiShock (includes a SupaReel), 2640', 26 lb	#251020

IntelliTape[™]

The most visible narrow tape available. 3 stainless steel and 3 tinned copper filaments. Made of virgin polyethylene monofilaments for years of use.

How does tape compare to IntelliTwine and IntelliRope?

- Tape is more visible.
- Tape costs more per ft than twine and 6.0 ropes; requires more posts to support it.
- IntelliRope lasts much longer and is more elastic (which means it's less likely to sag).

IntelliTape

330', 2 lb	#257010
660', 3 lb	#257020
1320', 6 lb	#257040

MaxiShock & IntelliTape Compared

Name	Premier's approx. cost per ft	Other's approx. cost per ft	Probable <u>yrs of life</u> *	<u>Color</u>	Diameter <u>or width</u>		Portable	Ω (Ohms) per 1,000 ft	Breaking strength/lb	MaxiShock 20 Ω or less
MaxiShock	9¢	n/a	10	silver	1.7 mm	poor	good	19 Ω	160 lb	20 32 01 1655
Farmstore Polywire (with stainless steel—no copper)	n/a	4¢	2	varies	14 g	fair	good	2150 Ω	200 lb	In
IntelliTape	5¢	n/a	3	w/b/w	1/2"	very good	good	50 Ω	200 lb	Farmstore Polywire 1350 Ω or more Out
Typical tape (with stainless steel—no copper)	n/a	4¢	2	white	3/4"	good	poor	1400 Ω	300 lb	In

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Pictographs (at right) depict the relative conductivity of conductors. A smaller number of Ω means a bigger "opening" for each pulse. The differences actually are as significant as they appear above! Higher ohm numbers result in lower conductivity because higher ohms impede the flow of electrons.



Conductivity Compared