Conductors

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

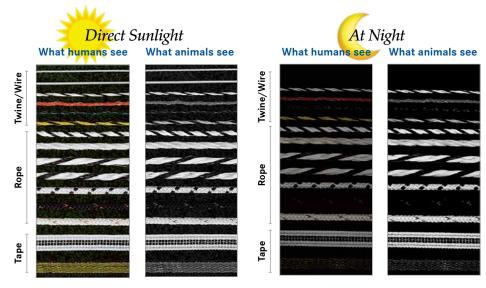
Why our conductors excel...

- **Knowledge.** We specialize in electric fences. We use miles of them daily.
- Wide range of options—IntelliBraid, EnduraSoft, IntelliRope PE, etc.
- **Ropes and tapes** combine conductivity, durability and visibility.
- Best cost of similar quality items.
 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.** 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.

Which conductor is the most visible?



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

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

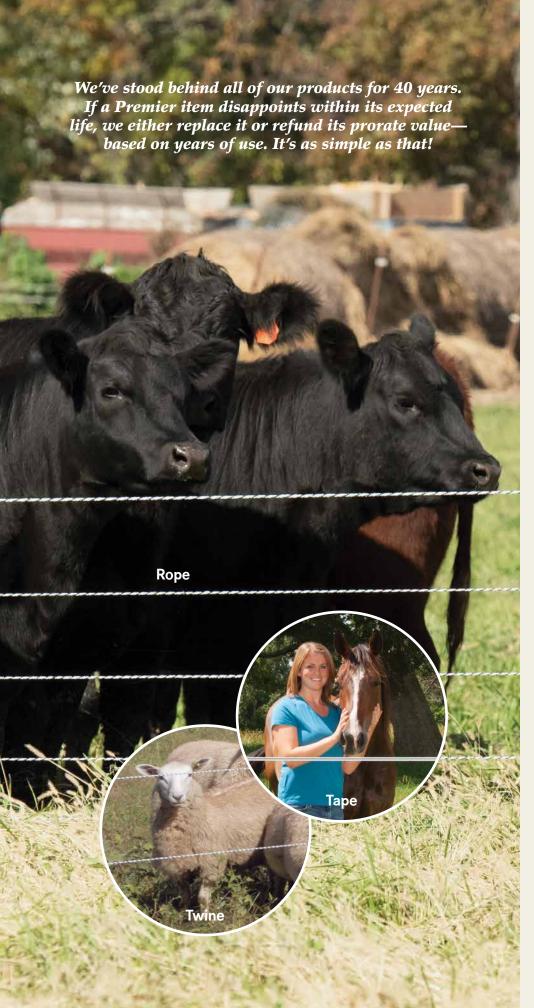
But animals and humans differ in the ability to see fences. Many animals see color poorly. Their world is largely black, white and shades of gray. But most have better night vision than we do. (And birds see much better than humans.)

Photos (*above*) simulate 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.





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 2-year twine for a 20-year situation. It will disappoint!
- Exposure of metal filaments. The better ropes and twine have these spread evenly around the exterior.
- **Support.** We support what we sell—and have confidence in our products.

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.

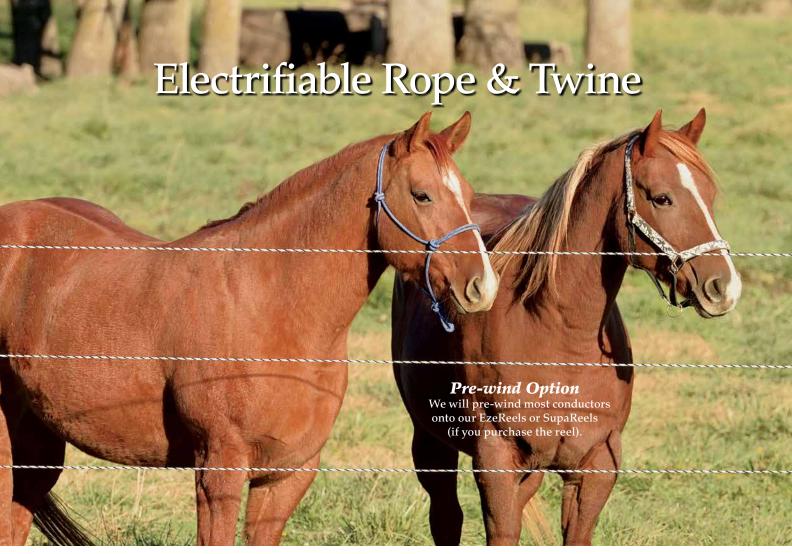
They should—because there can be large differences in performance and cost per year of life.

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 significant. Some work for less than 2 years—and some work well for more than 20 years.





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', 17.85 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

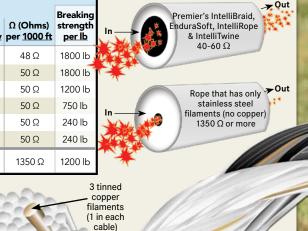
660', 9 lb	.#256900
1320'. 18 lb	. #256910

Comparison Chart

Name	Premier's approx. cost per ft	Others' approx. cost per ft	Probable yrs of life*	Color	Diameter or width		<u>Portability</u>	Ω (Ohms) per <u>1000 ft</u>	Breaking strength per lb
IntelliBraid 6.0	16¢	21.5¢	25	w/b/w	1/4"	good	fair	48 Ω	1800 lb
EnduraSoft 6.0	14¢	14.4¢	25	w/b/w	1/4"	very good	fair	50 Ω	1800 lb
IntelliRope PE 6.0	9¢	11.8¢	10	w/b/w	1/4"	very good	good	50 Ω	1200 lb
IntelliRope PE 4.5	6¢	7.3¢	10	w/b/w	3/16"	good	very good	50 Ω	750 lb
IntelliBraid Twine 3.0	6¢	4.8¢	5	w/b/w	12 g/.12"	fair	excellent	50 Ω	240 lb
IntelliTwine 2.25	3¢	4.8¢	5	w/b/w	12 g/.09"	fair	excellent	50 Ω	240 lb
Farmstore Rope	n/a	8¢	3-5	varies	1/4"	fair	fair	1350 Ω	1200 lb

"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 counterintuitive 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.



Conductivity Compared



660 ft roll 50 ohms/1000 ft

actual size .12"

3 stainless

steel

filaments

(1 in each

cable)

660 ft roll 50 ohms/1000 ft



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

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', 6 lb	#253531
2000' 9 lb	#253532

IntelliTwine[™] 2.25

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
,	#253510
2000' 5 lb	#253520



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.
- 2. Low-tensile strength.

 Therefore it's easy to wind, unwind, cut, tie and join. Enables simple, conductive, durable "no-tool" connections.
- 3. Excellent conductivity.

MaxiShock



1320 ft roll 19 ohms/1000 ft

*prewound includes a SupaReel

muxiciion.	
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.

actual

size

1/2"

 IntelliRopelasts 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

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

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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.