

TAPE YARN AND MONOFILAMENT YARN

Product Differences and Uses



ACADIAN
INDUSTRIAL TEXTILES

TAPE vs MONOFILAMENT

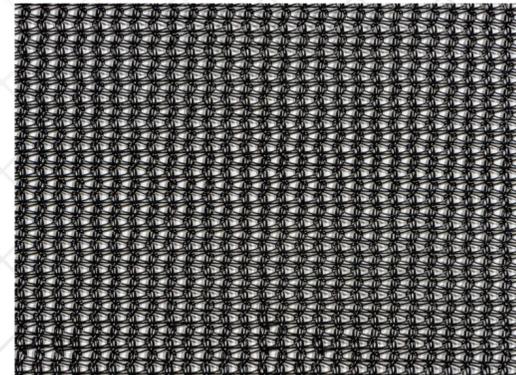
IS THERE A DIFFERENCE?

To make thread, raw, High Density Polyethylene or Polypropylene pellets are heated to their melting point and pushed through an extrusion machine. This machine shapes the melted resin into monofilament or tape thread. The thread is pulled, heated and cooled to achieve its target strength. Once the thread is made, it is moved to the looms for weaving and/or knitting.

THE RESULTING PRODUCT:



Tape Yarn



Monofilament

YARN COMPARISON

	Tape Yarn	Monofilament Yarn
Shape	Flat, like clear tape	Round, like fishing line
Shade	Above 90% shade is possible	Above 70% shade is difficult
Strength	Lower Strength	Higher Strength
Yarns per Inch	Fewer yarns per inch	More yarns per inch
UV Damage	More susceptible	Less susceptible
Cost Value	Value Priced	Can be more than double
Uses	Privacy/Sight Barriers, Temporary Fencing, Throw away Tarps, Shade Structures	Truck covers, Containments, Sandblasting, Shade, Filtration

SHADE COMPARISON

For roughly the same amount of shade, Mono-knit can be twice the cost of Tape knit. Why?

Characteristics	80% Mono	87% Tape - Tape
Weight	278 grams/m ²	142 grams/m ²
Shade Factor	80%	87%
Tensile Strength	Warp: 110 lbf Weft: 251 lbf	Warp: 66.3 lbf Weft: 134.6 lbf
Elongation	Warp: 83.4% Weft: 48.8%	Warp: 45.9% Weft: 38.5%

Stonger (points to Tensile Strength of Mono)

Heavier (points to Weight of Mono)

More flexible (points to Elongation of Mono)

Lighter (points to Weight of Tape)

Less fabric for similar shade (points to Weight of Tape)

Tape Yarn is FLAT therefore it:

- creates more shade per square inch;
- has a greater surface area per square inch allowing for more UV exposure (adding extra UV additive can prevent this).

Mono Yarn is ROUND therefore it:

- requires more yarn per square inch;
- has less surface area so less UV exposure (it still requires some UV additive to ensure a long life).
- Some mills can't produce over 70% shade.



Tape knit

Tape's lighter weight makes it more suitable for installation parallel or perpendicular to the ground. Also, because it's less flexible, it will withstand the weight of gravity.

- Improves aesthetic
- Advertising space
- Privacy screening for schools, patios and more



Mono-Knit

Mono's higher flexibility means it's perfect for perpendicular installation.

- Shade factors from 30% to 70% to meet needs of specific plants
- Strong - can withstand flying debris
- Paintball net, truck cover
- Higher air flow supports perpendicular installation in higher wind areas. Its use in filtration, use construction sites, and installation at high wind areas.

Our team of experts are here to help you navigate the world of textile options and possibilities. We handle all your freight and shipping needs. From shade fabric to truck tarp to privacy/site barrier, we have a large supply of fabrics on hand, so you get the exact type and length you need in days, not weeks.

Need a custom material?
We work with mills to develop your perfect solution.

Contact us today to discuss how we can help you.



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