

## ATTRIBUTES

Properties	Abrasion	Acid Resistant	Durability	Floats	Handling	Heat Weakens at	Mildew & Rot Resistant	Oil & Gas Resistant	Stretch	Sunlight Resistant
Nylon	✓✓✓✓	✓✓✓	✓✓✓✓	No	✓✓✓✓	350° F	✓✓✓✓	✓✓✓✓	✓✓✓✓	✓✓
Polypropylene	✓✓	✓✓✓✓	✓✓✓	Yes	✓✓✓	150° F	✓✓✓✓	✓✓✓✓	✓✓	✓
Polyester	✓✓✓✓	✓✓✓✓	✓✓✓✓	No	✓✓✓✓	350° F	✓✓✓✓	✓✓✓✓	✓✓	✓✓✓✓
Manila	✓✓✓	✓	✓✓✓	No	✓✓	*Unaffected	✓	✓✓	✓✓	✓✓✓✓
Sisal	✓✓	✓	✓	No	✓	*Unaffected	✓	✓✓	✓	✓✓✓✓
Cotton	✓✓	✓	✓✓	No	✓✓✓✓	*Unaffected	✓	✓✓	✓	✓✓✓✓

✓✓✓✓=Best \*Chars at 350° F

**Working Load Limit (WLL):** The Working Load Limit is a guideline for the maximum allowable weight capacity of a new rope .

## TYPES OF BRAIDS

**Hollow Braid:** Rope is manufactured by weaving ends of yarn over and under. Hollow braid is hollow without a center core and can be spliced.

**Solid Braid:** Rope as well as the core is braided. Also referred to as “double braid”. Solid braid has a special lock-stitch construction which prevents unraveling when torn or cut.

**Diamond Braid:** Rope is manufactured by weaving ends of yarn over and under. Diamond braid contains a center core.

**Twisted:** Rope is formed by coiling three strands together in the same direction. Rope must be fused and taped on each end to prevent unraveling.

## ROPE MATERIALS



**Manila:** Hard natural fiber, is not affected by heat and has an excellent resistance to the sun's UV rays. Manila holds knots firmly and stretches very little. It must be stored dry to avoid mildew. Chemicals will cause the rope to deteriorate.

**Sisal:** Hard natural fiber, has many characteristics of manila but offers 80% of its strength. Sisal is more economical than manila. It must be stored dry to avoid mildew. Chemicals will cause the rope to deteriorate. Sisal has good knot-holding ability.

**Jute:** Soft natural fiber. Is mainly used as a tying twine. Jute knots very well, has less strength than Manila or Sisal.

**Cotton:** Soft fiber is easy to handle. Cotton rope knots well, has less strength than Manila or Sisal.

**Polypropylene:** Flexible and lightweight, polypropylene is rot proof, resists oil, water, gasoline and most chemicals. Polypropylene is the only fiber that floats.

**Polyester:** Very strong and provides excellent abrasion resistance. Polyester stretches less than Nylon and does not have the shock absorbing qualities that Nylon has. It has good resistance to UV rays and resists rot, oil, gasoline and most chemicals.

**Nylon:** Strongest rope material known for its tremendous shock absorbing qualities. It has good abrasion resistance, is rot proof, resists oil, gasoline and most chemicals. It has good resistance to UV rays. Nylon will last 3-4 times longer than natural fibers.