

CLIMBING ROPE CHART

MANUFACTURER LABELED DIAMETER

MANUFACTURER

WEIGHT PER 100 FT.

MILKS

AVERAGE TENSILE STRENGTH

MATERIAL

CONSTRUCTION

KNOTABILITY (10 = excellent)

SPLICEABLE

ELASTIC ELONGATION @ 540 lbs.



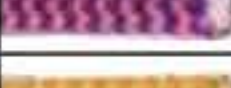



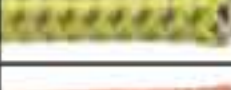

















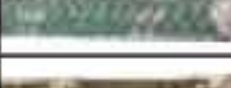
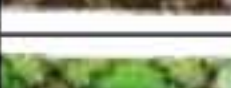


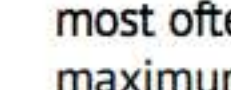
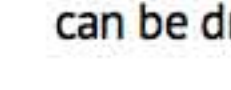

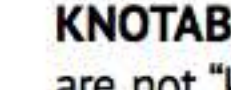
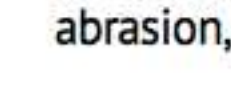
ROUNDNESS UNDER LOAD (10 = round)

SURFACE TEXTURE (10 = smooth)

WAX CONTENT (10 = high)

DOUBLED ROPE CLIMBING

SINGLE ROPE ASCENT

PG #	CLIMBING ROPE																	ROPE USE
7	 Poison Ivy®	11.7 mm	Yale	6.5	Yes	6,500 (29 kN)	Polyester	Double Braid	10	Hand	1.80%	10	10	0	•	•		
7	 Poison Hi-vy®	11.7 mm	Yale	6.5	Yes	6,500 (29 kN)	Polyester	Double Braid	10	Hand	1.80%	10	10	0	•	•		
7	 Poison Ivy® Calamine	11.7 mm	Yale	6.5	Yes	6,500 (29 kN)	Polyester	Double Braid	10	Hand	1.80%	10	10	0	•	•		
7	 Tropical Ivy™	11.7 mm	Yale	6.5	Yes	6,500 (29 kN)	Polyester	Double Braid	10	Hand	1.80%	10	10	0	•	•		
8	 Lava® Orange	11.5 mm	New England	6.3	Yes	7,100 (31.6 kN)	Poly/Nylon	Double Braid	10	Hand	3%	10	10	4	•	•		
8	 Lava® Green	11.5 mm	New England	6.3	Yes	7,100 (31.6 kN)	Poly/Nylon	Double Braid	10	Hand	3%	10	10	4	•	•		
8	 Lava® RopeBoss®	11.5 mm	New England	6.3	Yes	7,100 (31.6 kN)	Poly/Nylon	Double Braid	10	Hand	3%	10	10	4	•	•		
8	 Lava® Surge	11.5 mm	New England	6.3	Yes	7,100 (31.6 kN)	Poly/Nylon	Double Braid	10	Hand	3%	10	10	4	•	•		
9	 Velocity Hot	11 mm	Samson	5.6	Yes	6,000 (26.7 kN)	Polyester	Double Braid	10	Hand	2.52%	10	10	5	•	•		
9	 Velocity Cool	11 mm	Samson	5.6	Yes	6,000 (26.7 kN)	Polyester	Double Braid	10	Hand	2.52%	10	10	5	•	•		
9	 Blaze	11 mm	Yale	6	Yes	5,600 (25 kN)	Polyester	Double Braid	10	Hand	2.20%	10	10	0	•	•		
9	 Fly	11.5 mm	New England	6.3	Yes	7,400 (33 kN)	Poly/Nylon	Kernmantle	10	Hand	3%	10	10	0	•	•		
10	 Yellow Jacket™	1/2 in	Samson	7.7	No	8,100 (36 kN)	Poly/Nylon	16-Strand	10	Hand	2.52%	8	9	6	•			
10	 Blue Streak	1/2 in	Samson	7.7	No	8,100 (36 kN)	Poly/Nylon	16-Strand	10	Hand	2.20%	8	9	6	•			
10	 Gold Streak	1/2 in	Samson	7.7	No	8,100 (36 kN)	Poly/Nylon	16-Strand	10	Hand	2.20%	8	9	6	•			
10	 BRW	1/2 in	Samson	7.7	No	8,100 (36 kN)	Poly/Nylon	16-Strand	10	Hand	2.20%	8	9	6	•			
11	 Vortex Hot	12.7 mm	Samson	7.6	Yes	7,900 (35 kN)	Polyester	Double Braid	10	Hand	1.40%	8	10	0	•	•		
11	 Vortex Cool	12.7 mm	Samson	7.6	Yes	7,900 (35 kN)	Polyester	Double Braid	10	Hand	1.40%	8	10	0	•	•		
12	 Phoenix™ (XTC)	1/2 in	Yale	7.5	No	6,200 (27.5 kN)	Polyester	16-Strand	10	Hand	3.15%	8	9	6	•			
12	 Spark™ (XTC)	1/2 in	Yale	7.5	No	6,200 (27.5 kN)	Polyester	16-Strand	10	Hand	2.83%	8	9	6	•			
12	 Fire (XTC)	1/2 in	Yale	7.5	No	6,200 (27.5 kN)	Polyester	16-Strand	10	Hand	3.46%	8	9	6	•			
12	 Spearmint (XTC)	1/2 in	Yale	7.5	No	6,200 (27.5 kN)	Polyester	16-Strand	10	Hand	3.15%	8	9	6	•			
12	 Pro Stripe™	1/2 in	Yale	7.5	No	6,200 (27.5 kN)	Polyester	16-Strand	10	Hand	2.20%	8	9	6	•			
12	 Safety Blue	1/2 in	New England	7.1	No	7,000 (31 kN)	Poly/Blend	16-Strand	10	Hand	4%	8	9	6	•			
12	 Hi-Vee	1/2 in	New England	7.1	No	7,000 (31 kN)	Poly/Blend	16-Strand	10	Hand	4%	8	9	6	•			
12	 Ultra-Vee	1/2 in	New England	7.1	No	7,000 (31 kN)	Poly/Blend	16-Strand	10	Hand	4%	8	9	6	•			
13	 True Blue	1/2 in	Samson	8.8	No	7,300 (32.5 kN)	Polyester	12-Strand	10	Grizzly	3.46%	7	8	6	•			
13	 Tree Pro Red	1/2 in	Samson	8.8	No	7,300 (32.5 kN)	Polyester	12-Strand	10	Grizzly	3.15%	8	8	6	•			
13	 Arbor Plex	1/2 in	Samson	6.8	No	6,000 (26.7 kN)	Poly/Blend	12 Strand	8	Grizzly	3.15%	7	8	4	•			
18	 Platinum	10.5 mm	Teufelberger	5.2	No	6,950 (30.9 kN)	Poly/Nylon	Kernmantle	10	Grizzly	3.8%	10	9	0		•		
19	 Snakebite™	10 mm	Sterling	5.3	Yes	6,650 (29.6 kN)	Polyester	Kernmantle	4	Grizzly	2%	10	10	0		•		
19	 Snakebite™ Green	10 mm	Sterling	5.3	Yes	6,650 (29.6 kN)	Polyester	Kernmantle	4	Grizzly	2%	10	10	0		•		
19	 HTP Red	10 mm	Sterling	5.3	Yes	6,650 (29.6 kN)	Polyester	Kernmantle	4	Grizzly	2%	10	10	0		•		

MILKS - milking is when a rope's mantle (outer cover) elongates over its core, most often when new and due to friction hitch use that forces strands into maximum alignment. Milking usually shows up as a bubble of material that can be drawn to one end and trimmed with scissors.

MATERIAL - see page 25 for descriptions of rope materials.

KNOTABILITY (10 being excellent) - Ropes for rigging and SRT generally are not "knot-friendly." Their stiff construction makes them more resistant to abrasion, but tougher to dress into a tight knot.

SPLICEABLE - If you like to climb with a split tail (see page 30) then we recommend hand splicing the climbing rope's end, except for those ropes that are not hand-spliceable. A Grizzly splice can get lodged in a tight crotch when retrieved from the ground.

ELASTIC ELONGATION - Measurement of a rope's elasticity is done differently depending on if the rope is a climbing or rigging line.

Climbing lines: Measurement is based on a 540 lbs weight being applied.

Rigging lines: Measurement is based on a weight equal to 10% working load of the rope's tensile strength. For example, 1/2" Dynasorb's has a tensile strength of 10,500 lbs, so 10% of that would be 1,050 lbs, which is what would be used to measure its elasticity.

ROUNDNESS UNDER LOAD (10 being round) - It's a fact that 12-strand ropes square off under load while doublebraid stays round under high tension even when trailing through blocks and tackle.

SURFACE TEXTURE (10 being smooth) - This spec can be critical to prusik or friction hitch performance.

WAX CONTENT (10 being high) - Sand, grit and dirt particles are the enemy of ropes because such particles become trapped inside the fabric and, like rocks in your shoe, slowly work their irritating destruction. Wax liquid, among other proprietary formulas, are added during the manufacturing process to help protect inner fibers while offering lubrication that enhances tensile strength.

CE - Mandatory conformance mark for European products. Does not apply to splices.