

Materials 1991

Ripstop Nylon

We only stock one weight and width of ripstop nylon as standard. This is Carrington Novare N1048 1st quality, 104cm wide, polyurethane coated nylon (weight per square yard approx. 1.8 oz.). Standard colours are red, white, blue, black, white, emerald green, lime green, yellow, flo. satin yellow, orange, flo. orange, bermuda, flo. pink, lilac and purple (occasionally we have other strange colours depending on circumstances beyond our control). The price is 4.00 per metre off the roll (min .5m each colour).

Ripstop nylon tape, Kevlar tape, etc

Ripstop nylon tape is self adhesive 50mm wide tape useful for repairs, re-inforcement and decoration on kite sails. Available in red, white, blue, black, white, yellow, orange, flo. orange, flo. pink, green, lime green and purple. Price 20p per foot or 1.95 per 4.5m roll.

Kevlar tape is a self adhesive, 50mm wide, woven Kevlar re-inforced tape ideal for re-inforcing high stress areas on stunt kites prior to sewing together (ie noses, leading edge cut-outs etc). Price per roll is 4.95 (1.5m long).

We also have a heavy grade nylon tape, 100mm wide, which can be used for re-inforcing etc. Price per 1.5m roll is 4.25.

Sticks, spars, tubes etc

Diameter in mm	Dowel	GRP rod	Hollow GRP tube	Alloy Tube
2	*	.50	*	*
3	*	.55	*	*
4	*	.65	*	*
5	.65	1.10	*	.40
6	.70	1.35	2.00	.90
8	.95	1.65	2.20	.95
10	.80	1.90	2.50	1.10
12	*	*	2.75	*
14	*	*	2.95	*
19	*	*	3.95	*
22	*	*	4.50	*

Prices shown are for;-

- 6ft lengths of dowel (ramin, sometimes 8ft supplied)
- 2.5m lengths of GRP rod
- 1.5m lengths of hollow GRP tube
- Per foot for alloy tube

The alloy tube is 22swg wall thickness and thus makes ferrules for the next smaller diameter shown.

We also have 7/16" diameter brass tube at 2.00 per foot which ferrules 10mm dowel neatly.

Please note that we do not cut to length (except alloy & brass) and we do not operate a mail order service for materials in this box.

Shanti Speed Line

Speed line from Shanti Kite Spools is made from 100% Allied Fibres Inc Spectra fibre. Spectra is composed of very long chain polyethylene molecules and has all the properties of polyethylene- it is smooth, slippery, light and resistant to chemical & ultraviolet attack.

However, Spectra's greatest advantage is its very high tensile strength- compare the following common kite line materials;-

Material	Strength GPa
Spectra	2.7
Kevlar	2.7
Polyester	1.1
Nylon	.9
Polypropylene	.6

As a result flying line made from Spectra has a diameter 1/3 to 1/4 of that of the same strength nylon or polyester line with all the resulting benefits of reduced line weight and line drag which at the breaking strains associated with standard stunt kites makes all the difference.

Another advantage is Spectra's low non-elastic stretch- typically only 4% max. - compare with nylon or polyester line which stretches elastically up to 14%- non elastically about 6%. Low stretch equates to fast, sharp action when you pull a turn without any hesitation or swing past from the kite- the kite goes where you want it to, not where it shouldn't.

Pre-sleeved, on card spool

The easiest way to buy Speed line if you already have handles or want to fly on straps etc.

100ft/150lb Breaking strain		7.30
150ft/80lb	" "	9.90
150ft/150lb	" "	9.90
150ft/200lb	" "	13.20
150ft/300lb	" "	14.50

All lengths are nominal and represent minimum length on spool- typical variation 2-3 ft between spools- please trim before use.

Un-sleeved, on card spool

Requires cutting in half and sleeving before use, but slightly cheaper than buying pre-sleeved.

300ft/150lb	" "	17.20
300ft/300lb	" "	26.50
300ft/700lb	" "	72.80

Pre-wound, on handles

All the following lines are pre-wound and sleeved on Peter Powell heavy duty handles.

BS Length	80	150	200	300	500
75	13.80	13.80	17.10	*	*
100	17.10	17.10	21.50	*	*
150	23.70	23.70	30.30	32.90	50.25
200	30.30	30.30	39.10	42.30	69.50

Again, all lines should be checked for equality of length before using- instructions included.

Bulk Mill

If you are a member of a club or team that uses a lot of Speed line then it may be more economical to buy all your season's Speed on one spool and cut it up as you need it (this works out about 15% cheaper).

80lb BS	3000ft	171.50
150lb BS	3000ft	171.50
200lb BS	3000ft	223.00
300lb BS	3000ft	231.90

Sleeving, Traces and Fluffballs, etc

You must sleeve Speed Line at every line to handle/kite connection to prevent the line cutting through itself. Unless you are working very close to the line's breaking strain it is not absolutely necessary to sleeve the line to repair a cut/popped line providing you use the correct type of knot- the correct knot is composed of two slip knots running on each segment of the broken line- no other knot will do (without sleeving). Never try and fly in team with a repaired line- the knot will catch on other lines and be cut again.

When flying trains of kites (Flexifoils especially) it is a good practice to fit trace lines of thick nylon at the kite end of the Speed lines as nylon has far better wear characteristics and is cheap to replace. The drag induced by these short (usually 6-40ft) lines is not excessive and makes little difference to the kite's flight.

If you pick an unmelted end of your Speed line apart you will find that is composed of hundreds of very fine fibres. During the weaving process very short pieces of these fibres (which have sneaked through from an early stage in manufacture) accumulate on the weaving head and when the accumulation is large enough literally jump off the head into the woven line to form a fluffball. You will sometimes encounter one of these little inclusions in your line- they make no difference to the strength of the line and can be removed with a little patience and time (it normally takes about a minute to remove an average fluffball). They are not a fault in the line, just a slight nuisance.

Carbon fibre rods

We have carbon fibre rod/tube in the following sizes and lengths;-

2mm rod, 2.5m long	1.85
3mm rod, 2.5m long	2.90
4mm rod, 2.5m long	3.70
6.35mm tube, 2.5m long	5.40
8mm tube, 1.5m long	4.90
8mm tube, 2m long	6.50

For stunt kites we have 5.5mm tube in the following assorted lengths (mostly lengths we use in our own stunt kites & thus of variable availability):-

50cm	.75
54cm	.80
63cm	.95
74cm	1.10
76cm	1.15
80cm	1.20
97cm	1.45
100cm	1.55
120cm	1.80
150cm	2.30

See overleaf for fittings to suit this size of carbon tube (arrow nocks, vinyl caps, ferrules & joiners).

Please note this is a "flexible" carbon rod/tube and has little tendency to splinter. Mail order is possible for most lengths, but special rate applies- please ask.

Fittings and other bits

O ring large	.05 each
D ring small	.05 "
D ring large	.05 "
Bowstring adjusters	.10 "
2mm vinyl end caps	.03 "
3mm " " "	.04 "
4mm " " "	.04 "
5mm " " "	.06 "
6mm " " "	.06 "
8mm " " "	.08 "
Small line clip	.10 "
Sm. line clip & swivel	.25 "
No2 Twyster swivel	.45 "
4mm Lug cap (white)	.20 "
6mm Lug cap (black)	.20 "
4mm Standoff clip	.20 "
5.5mm Arrow nock	.20 "
5.5mm Ferrule alloy	.25 "
5.5mm Ferrule brass	.35 "
5.5mm Joiner turned alloy	.85 "
4mm Dihedral plastic	.15 "
5mm Dihedral plastic	.20 "
6mm Dihedral plastic	.20 "

Dacron edge tape (as used on the leading edges of most stunt kites) is currently unavailable (we committed too much to manufacture and forgot to re-order). We expect to have it back in stock by the end of July.