

Principles of kite making

Here are some rules that make it simple to build a kite that will fly:

-  Keep the shape simple and symmetrical – this will ensure that the same amount of weight is on either side of the kite. If the sail is not symmetrical, it will need to be balanced using a bridle, which is more difficult.
-  The face of the kite should allow air to flow around the kite, not hold air in its shape. When bowing the kite, ensure the bow is to the back. If it is bowed to the front it makes a cup shape that will catch the wind and not allow air to flow around it.
-  The spars should be light and flexible, allowing the kite to flex with the wind. However, they should be strong enough to support the sail and prevent it from collapsing in the wind.
-  Use a minimum amount of sparing. The spars should hold the kite in shape and support the sail, but too many spars can add too much weight for the kite to lift.
-  The towing point should be about one-third of the way down the kite. To find this point, lay the kite flat and extend the bridle, holding the top line at a 45° angle to the one-third mark. Using the bridle, lift the top of the kite off the floor a couple of centimetres, readjusting the towing point to keep it at 45° . This point may need adjusting to allow for the weight of the tail and for different winds. Using a split ring or curtain ring allows for easy adjustment.
-  Tails can be added for drag and stability – or just because they look good. Materials should be light and free moving. Tails should be attached to the bottom corner. If more than one bottom corner, ensure the same amount of tail is on each corner, although this can be trimmed for balance. If you want a tail that looks like rocks, try painting polystyrene cups grey, rather than using rocks!
-  Keep the flying line light enough for the kite – if the line is too heavy it will not allow the kite to lift easily and will sag below the kite. If it is too light it will have too much tension and can snap when a gust of wind comes along.
-  Choose a kite for the wind of the season – in Canterbury we have very little wind in winter, gusty nor'westers in summer and strong easterlies the rest of the year. Southerly and easterly winds are generally stronger steady winds and good for kite flying.