

Using the Multi-Function Guying Kit

The SOTABEAMS Multi-Function Guying Kit provides you with all you need to guy your telescopic pole safely and securely. The kit consists of:

Two different guying rings.

These will sit at different heights on your pole. Which one to use will depend on your application. In most cases the smaller ring (which sits highest) will be the best one to use. If your application requires you to rotate the pole, the larger ring might be best as it can be lifted slightly to allow the pole to be turned easily. In extreme conditions you might want to use both rings. *Note these parts may be supplied with protective film in place which should be removed before use.*

Two Versatile Top Insulators.

These handy devices slip down over the top section of your pole to provide an attachment point for wires etc. Check out the product web page for these items for a video. <https://www.sotabeams.co.uk/versatile-top-antenna-insulators/> Note that we supply different top insulators for different poles. *Note these parts may be supplied with protective film in place which should be removed before use.*

Guying cord (50m).

This nylon guying cord forms the main part of the guying kit. Poles can be guyed with three guys spaced at 120 degrees or four guys spaced at 90 degrees. Either system is generally adequate for lightweight poles. The four guy system gives a more stable "lift". When using the cord we generally use a bowline knot to attach the cord to the guying rings and a figure of eight knot to form pegging loops. To stop fraying the ends of the cord can be sealed with a flame (care needed).

Four aluminium pegs.

The pegs should be angled so that the guying lines come away from the pegs at right angles to the shaft of the peg.

One Winder.

The winder can be used to keep your guying lines tangle-free (they are great for wire antennas too). The guying lines can either be wound on all together or in series - your choice. We have a short video showing other uses for the winders.

<https://www.sotabeams.co.uk/antenna-wire-winders/>

One Antenna Bag.

Our antenna bags are the right size for storing the winder with guys and they have a sleeve for the pegs.



General tips

Your guying kit will need to be made up before you head out into the field. You will need a large flat area to make up your guying kit. It is also far easier if you have a friend to help lift the pole while you measure and adjust. As a general rule the pegging points should be 60% of the height of the guying ring from the base of the pole for best stability. Thus if the guying ring sits 5 metres above the ground the pegging point should be $5 \times 0.6 = 3$ metres from the base of the pole. You can then use Pythagoras to work out how long the guying line needs to be (add 10% to allow for knots).

When using guys on telescopic poles, always have the lines quite slack - not tight. If you use them tight, they transfer a downward force onto the pole making it likely that the friction joints on the pole will fail.

If using guys in areas that the public has access it is a good idea to tie something to them to make them easier to see to avoid people walking into them. Ribbon is one possible solution.

References

Tying a Bowline Knot

<http://www.101knots.com/bowline-knot.html>

Tying a Figure of Eight Knot on a Bight

<http://www.101knots.com/figure-8-on-a-bight.html>

Online Pythagorus calculator

<https://ncalculators.com/number-conversion/pythagoras-theorem.htm>