

# CUSTOM POLES

Easily assembled poles that are strong, and made to customized lengths for your camping needs. Wooden doweling is placed inside of PVC pipes. Overlapping joints provide the strength. You determine the length of pole required, then determine your cut lengths using 3 pieces of 5/8" wooden dowel and 3 pieces 3/4" PVC pipe. Cut 2 pieces of one length, and 1 piece 1/2 of the other 2 lengths. Example:

3/4" PVC pipe	5/8" * dowel	Total length of pole
2 @ 28", 1 @ 14"	2 @ 28", 1 @ 14"	28+28+14= 70" or 5ft 10"
2 @ 30", 1 @ 15"	2 @ 30", 1 @ 15"	30+30+15=75" or 6ft 3"
2 @ 32", 1 @ 16"	2 @ 32", 1 @ 16"	32+32+16=80" or 6ft 8"

## Materials:

3/4 inch (20mm) PVC pipe (usually sold in 10ft lengths)

5/8 \* inch wooden doweling (find non-warped pieces – be sure it fits inside the PVC pipe)

3/4 inch PVC end caps (2 per pole required)

Hot glue or a glue that will adhere to both wood and PVC

Drill

Saw

2" wood screws (2 per pole)

Pre-drill small hole in top of end cap, Install screw leaving 1/4" protruding from the top. Use this to tie the guy lines to.



**Top pole** – 1/2 length PVC, full length dowel. Glue dowel, PVC and end cap together.

**Middle pole** – cut same length of dowel and PVC. Dowel fits loose inside the PVC pipe.

**Bottom Pole** – 1/2 length dowel, full length PVC. Put glue into the end cap and Glue dowel and PVC into the end cap. Pre-drill small hole into end cap and install screw all the way.

**Assembly** – The middle dowel will drop down into the bottom pole, the top pole will drop down into the middle PVC Pipe. The PVC holds the poles together, and the dowel provides strength and prevents the PVC from bending. To hold it all together you may place strips of duct tape on the PVC joints. The weight of the tarp will hold the poles together if you wish not to tape the joints. Be sure to number each complete pole the same number with a permanent marker as each cut will be slightly different and will assemble easier next time you use the poles. Be careful to ensure that each of the dowels meet on the inside of the PVC pipe.

**To disassemble**, remove duct tape and pull apart. Store in a stuff sack with pegs, guy lines and mallet.