







# GUIDE FOR POLES AND FOOTINGS

NOTE: THIS IS ONLY AN INDICATIVE GUIDE AND IS NOT CERTIFIED BY A STRUCTURAL ENGINEER. THE INFORMATION CONTAINED IS NOT SUITABLE TO USE FOR A BUILDING PERMIT. ALL SIZES BASED ON FIRM GROUND CONDITIONS AND MED/HIGH WIND AREAS. SITES AND SITUATIONS VARY THEREFORE THESE SIZES WILL NOT APPLY TO EVERY SITUATION. PLEASE USE THIS WITH CARE.

SHADE SAIL SIZE	POLE HEIGHT	ROUND TIMBER	SQUARE SECTION STEEL	ROUND SECTION STEEL	FOOTING DEPTH	FOOTING BORE DIAMETER
 3m x 3m	2 m	150 SED	75 x 75 x 3	76.1 x 2.3	0.9m	300mm
	2.5 m	150 SED	75 x 75 x 3	76.1 x 3.6	0.9m	300mm
	3 m	175 SED	75 x 75 x 4	88.9 x 3.2	1.0m	300mm
	3.5 m	175 SED	100 x 100 x 3	88.9 x 3.2	1.0m	300mm
	4 m	200 SED	100 x 100 x 4	102.0 x 3.2	1.1m	350mm
 4m x 4m	4.5 m	200 SED	100 x 100 x 4	102.0 x 3.2	1.1m	350mm
	5 m	200 SED	100 x 100 x 5	114.3 x 3.6	1.2m	350mm
	2 m	175 SED	75 x 75 x 4	88.9 x 3.2	1.0m	350mm
	2.5 m	200 SED	100 x 100 x 3	102.0 x 3.2	1.0m	350mm
	3 m	200 SED	100 x 100 x 4	102.0 x 3.2	1.1m	400mm
 5m x 5m	3.5 m	200 SED	100 x 100 x 4	102.0 x 3.2	1.1m	400mm
	4 m	200 SED	100 x 100 x 5	114.3 x 3.6	1.2m	400mm
	4.5 m	225 SED	100 x 100 x 6	114.3 x 4.5	1.3m	400mm
	5 m	225 SED	125 x 125 x 5	139 x 4.5	1.4m	400mm
	2 m	200 SED	100 x 100 x 4	102.0 x 3.2	1.2m	450mm
 6m x 6m	2.5 m	200 SED	100 x 100 x 4	102.0 x 3.2	1.3m	450mm
	3 m	200 SED	100 x 100 x 5	114.3 x 3.6	1.3m	450mm
	3.5 m	200 SED	100 x 100 x 5	114.3 x 3.6	1.3m	450mm
	4 m	225 SED	100 x 100 x 6	114.3 x 4.5	1.4m	450mm
	4.5 m	225 SED	125 x 125 x 6	139.7 x 4.5	1.4m	450mm
 7m x 7m	5 m	250 SED	150 x 150 x 5	165.1 x 5.0	1.5m	450mm
	2 m	200 SED	100 x 100 x 5	114.3 x 3.6	1.2m	450mm
	2.5 m	200 SED	100 x 100 x 5	114.3 x 3.6	1.3m	450mm
	3 m	225 SED	100 x 100 x 6	114.3 x 4.5	1.3m	450mm
	3.5 m	225 SED	125 x 125 x 5	139.7 x 4.5	1.4m	450mm
 8m x 8m	4 m	250 SED	125 x 125 x 6	139.7 x 4.5	1.4m	450mm
	4.5 m	250 SED	150 x 150 x 5	165.1 x 5.0	1.5m	450mm
	5 m	250 SED	150 x 150 x 5	165.1 x 5.0	1.6m	450mm
	2 m	200 SED	100 x 100 x 5	114.3 x 3.6	1.3m	450mm
	2.5 m	225 SED	100 x 100 x 6	114.3 x 4.5	1.3m	450mm
 9m x 9m	3 m	225 SED	125 x 125 x 5	139.7 x 4.5	1.4m	450mm
	3.5 m	250 SED	125 x 125 x 6	139.7 x 4.5	1.4m	450mm
	4 m	250 SED	125 x 125 x 6	139.7 x 4.5	1.5m	450mm
	4.5 m	250 SED	150 x 150 x 5	165.1 x 5.0	1.6m	450mm
	5 m	275 SED	150 x 150 x 5	165.1 x 5.0	1.7m	450mm

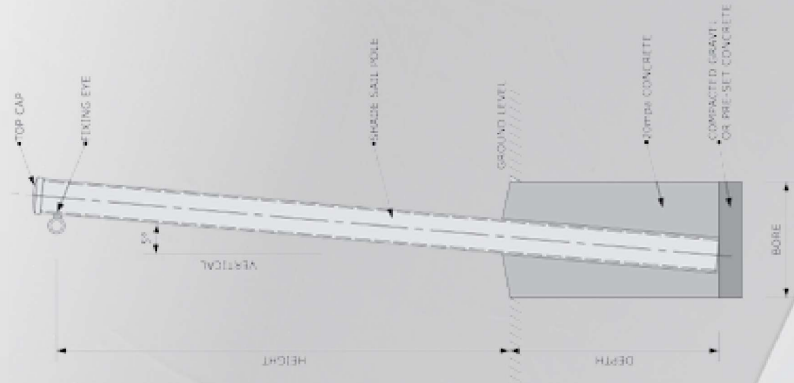
We recommend that shade sail poles are installed with a 5° lean out away from the centre of the sail (direction of pull). This must be taken into account when positioning the poles.

If using steel poles it is advisable to have a galvanised coating to prevent rust. If using timber poles it is advisable to use treated timber. Poles can be painted to match your shade sail or surrounding environment.

Once you have chosen the correct size poles and measured the position of them, dig holes to the required size. Lay a 100mm of medium size gravel at the base of the hole, compact to form a solid pad OR pre-set 100mm of concrete.

Poles should be embedded in concrete footings with a minimum of 20Mpa concrete. The concrete must be mixed to the manufacturers' instructions or supplied by a certified concrete supplier.

Position each pole at a 5° angle leaning out away from the centre of the shade sail and add concrete, ensure the pole remains in the correct position. The top of the concrete surface should be sloping away from the pole to assist with water drainage. You may require bracing while concrete sets. Poles should be left for at least 72 hours to allow the concrete to set.



## TIPS

We recommend that Shade Sails are installed as shown in fig 1 & 2. Shade Sails can also attach to a building (or existing structure) and to additional poles, but are not limited to this. They can be attached in hundreds of different configurations. It is also possible to use a wire cable to extend your Shade Sail corner to a fixing point.



### Hyperbolic Shape

For square and rectangular sails. This helps the shade sail to stay tight and look great!



### Angled

For triangular sails. This helps prevent sagging in the middle of the shade sail