








Guide for Poles + Footings.

Please note, this is an indicative guide for standard shade sails and is not certified by a structural engineer. All sizes are based on firm ground conditions and med/high wind zone areas. Sites and situations vary therefore these sizes will not apply to every situation. Please use with care.

Shade Sail Size	Pole Height	Round Timber	Square Section Steel	Round Section Steel	Footing Depth	Footing Bore Diameter
4m x 4m						
	2.5m	175 SED	75 x 75 x 3	89.0 x 3.2	1.0m	300mm
	3m	200 SED	75 x 75 x 3	102.1 x 3.2	1.0m	300mm
	3.5m	200 SED	100 x 100 x 3	114.3 x 3.6	1.1m	300mm
	4m	225 SED	100 x 100 x 3	114.4 x 3.6	1.2m	300mm
	4.5m	255 SED	100 x 100 x 6	114.3 x 4.5	1.3m	300mm
5m	255 SED	125 x 125 x 5	139 x 4.5	1.4m	300mm	
5m x 5m						
	2.5m	200 SED	75 x 75 x 4	102.0 x 3.2	1.2m	350mm
	3m	200 SED	100 x 100 x 4	114.3 x 3.6	1.2m	350mm
	3.5m	225 SED	100 x 100 x 4	114.3 x 3.6	1.2m	350mm
	4m	225 SED	100 x 100 x 4	114.3 x 4.5	1.3m	350mm
	4.5m	225 SED	100 x 100 x 5	139.7 x 4.5	1.3m	350mm
5m	250 SED	125 x 125 x 4	139.7 x 4.5	1.4m	350mm	
6m x 6m						
	2.5m	200 SED	100 x 100 x 4	114.3 x 3.6	1.2m	400mm
	3m	225 SED	100 x 100 x 5	114.3 x 4.5	1.2m	400mm
	3.5m	225 SED	100 x 100 x 5	139.7 x 4.5	1.3m	400mm
	4m	250 SED	125 x 125 x 4	139.7 x 4.5	1.3m	400mm
	4.5m	250 SED	125 x 125 x 5	165.1 x 5	1.4m	400mm
5m	250 SED	125 x 125 x 5	165.1 x 5	1.5m	400mm	
7m x 7m						
	2.5m	225 SED	100 x 100 x 5	114.3 x 4.5	1.3m	450mm
	3m	225 SED	100 x 100 x 5	139.7 x 4.5	1.4m	450mm
	3.5m	250 SED	125 x 125 x 5	139.7 x 4.5	1.4m	450mm
	4m	250 SED	125 x 125 x 5	139.7 x 4.5	1.5m	450mm
	4.5m	250 SED	125 x 125 x 5	165.1 x 5	1.6m	450mm
5m	275 SED	125 x 125 x 5	165.1 x 5	1.7m	450mm	
8m x 8m						
	2.5m	225 SED	125 x 125 x 5	139.7 x 4.5	1.4m	450mm
	3m	250 SED	125 x 125 x 5	139.7 x 4.5	1.5m	450mm
	3.5m	250 SED	150 x 150 x 5	165.1 x 5	1.6m	450mm
	4m	275 SED	150 x 150 x 5	165.1 x 5	1.6m	450mm
	4.5m	275 SED	150 x 150 x 5	165.1 x 5	1.7m	450mm
5m	300 SED	200 x 200 x 5	219.1 x 6	1.8m	450mm	
9m x 9m						
	2.5m	250 SED	125 x 125 x 5	139.7 x 4.5	1.6m	450mm
	3m	250 SED	125 x 125 x 6	165.1 x 5	1.7m	450mm
	3.5m	275 SED	150 x 150 x 5	165.1 x 5	1.8m	450mm
	4m	275 SED	150 x 150 x 5	165.1 x 5	1.9m	450mm
	4.5m	300 SED	200 x 200 x 5	219.1 x 6	2.0m	450mm
5m	300 SED	200 x 200 x 6	219.1 x 6	2.1m	450mm	
10m x 10m						
	2.5m	250 SED	150 x 150 x 5	165.1 x 5	1.8m	450mm
	3m	250 SED	150 x 150 x 5	165.1 x 5	1.9m	450mm
	3.5m	275 SED	150 x 150 x 5	165.1 x 5	2.0m	450mm
	4m	300 SED	200 x 200 x 5	219.1 x 6	2.1m	450mm
	4.5m	300 SED	200 x 200 x 5	219.1 x 6	2.2m	450mm
5m	325 SED	250 x 250 x 6	219.1 x 6	2.3m	450mm	

How to.

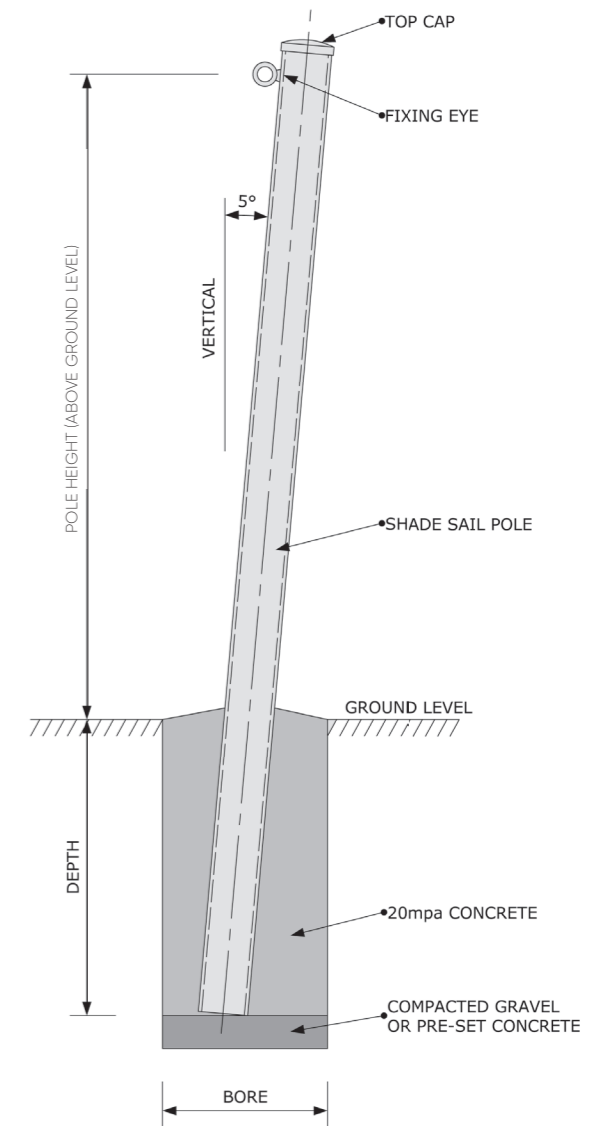
We recommend that shade sail poles are installed with a 5° lean out away from the centre of the sail (direction of pull). This must be taken into account when positioning the poles. If using steel poles it is advisable to have a galvanised coating to prevent rust. If using timber poles it is advisable 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 manufactures' instructions or supplied by a certified concrete supplier.

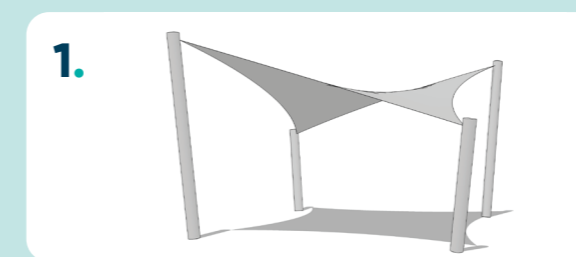
Position each pole at a 5° angle leaning out away from the centre of the shade sail and add concrete, ensure the pole remains in the correct position. The top of the concrete surface should be sloping away from the pole to assist with water drainage. You may require bracing while concrete sets. Poles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

✉ Email make@shadesystems.co.nz to request your pole pricelist today.



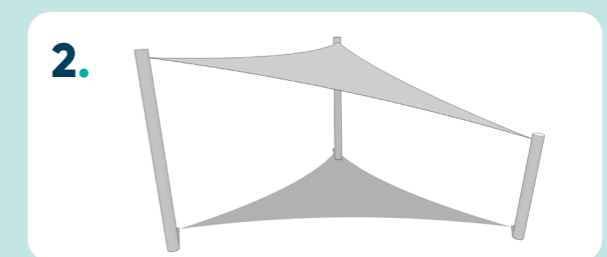
design.

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 (Hypar)

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



Angled Shape

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