

Shade Sail Installation

Design and Layout—Shade Sails can be mounted in a variety of ways. Sails can be mounted flat or with high and low points. A flat sail can be more difficult to properly tension and can catch rain and wind. One of the best methods of mounting a shade sail is to have high points diagonally opposite each other. This creates an architectural “hypar”. Setting a minimum slope of 15 degrees is ideal. This slope creates a rise to run ratio of 1/3.75.

Prior to installation, check with local authorities for any relevant building regulations which may exist and with the local utility companies for any underground services prior to digging holes for posts.

In determining the location for your shade sail, it is important to keep in mind the fact that the sun is constantly moving across the sky from east to west, which means that the shade moves with the position of the sun. You will only have shade directly under the shade sail at midday during mid-summer.

Note: Shade sails should not be used near an open flame. Do not use your grill under the shade structure.

Once you have identified the location for your shade sail, it is important to determine the most suitable mounting points for the corners. Some of these fixing points could already exist, e.g. pergola, large tree, fence post or fascia. You should allow a space between the corner of the shade sail and the mounting point that is at least 10% of the shade sail length. If the shade sail has a 12 foot length, there should be at least 12 inches between the corner of the shade sail and the mounting point. This will provide enough room for tensioning hardware.

Construction—NOTE: This stage of the installation is critical. You should ensure all fixing points are structurally sound.

There is an extensive range of fixing accessories available to help you secure your shade sails. These accessories are readily available from your normal hardware supplier. Rope or wire can be used to extend your shade sail to a fixing point if required. Select the fixing accessories which best suit your own installation.

If the sail is to be attached to the fascia of a building, the use of a fascia support is strongly recommended. The fascia support is used to connect the overhangs of rafters or trusses to fascia ledgers giving a strong connection between the two for improved strength. If unsure, obtain independent advice from a builder or engineer prior to installation.

We recommend the use of a minimum 4 inch, schedule 40 steel pipe or 6” x 6” treated softwood (H5 level treatment). Hardwood of durability Class 1 can also be used. Your local timber supplier can assist you in selection. Post lengths should be calculated taking into account the proposed height of your sail plus the depth of your footings. The footing depth should be ½ the length of the exposed pole. For example, if your post height is to be 10 feet, you would use a 15 foot long post with a footing depth of 5 feet.

Footings—Measure out centers of footing positions and mark as illustrated. Dig holes 16 in. sq. and to the depth required by the post height as described above.

Steel Post Footing—Lay a 4 in. (100mm) depth of ¾ in. diameter gravel the base of the hole. Next, pour a 4 in. (100mm) depth of concrete to provide a solid pad. Patio stones can be substituted in place of the poured concrete. Insert the post with a hold down bolt through the post to keep it secure. Pour the concrete footing and temporarily brace the posts until the concrete has set.

Wood Post Footing—Lay a 4 in. (100mm) depth of ¾ in. diameter gravel at the base of the post. Insert the posts using lag bolts partially driven into the post to hold it in place. Use string lines to ensure they are in plumb alignment. Temporarily brace the posts until the concrete has set.

Concreting—Mix concrete in line with the manufacturer’s instructions. These will be labeled clearly on the package. Your supplier will be able to give you any special advice you may require for your own conditions. Pour concrete to the top of the holes ensuring it is packed well. Ensure the concrete surface is sloping away from the posts to assist water drainage. Allow poles to set in concrete for a minimum of 48 hours. Brace if required.

Installation—Connect fixing accessories to mounting points as required. Ensure all connections face towards the middle of the sail and are tightly secured. Lay your shade sail out and commence the installation. Check again to ensure all mounting points are solid.

Tensioning—Using the selected fixing accessories, commence connecting the corners of the shade sail to the mounting points. A properly mounted and tensioned shade sail will have approximately 100 pounds of tension on it and will have little to no wrinkles. Connect all points, using rope or wire cable if necessary to gain increased leverage. The rope can be threaded around a number of times so that it works as a “pulley” mechanism. Another tensioning method would be to use a turnbuckle which can aid in applying the proper amount of tension. Stop tensioning when the shade sail is rigid with little or no creases. **CAUTION:** Do not over tension. Tension only by hand and only tighten enough to get the wrinkles out of the shade cloth. **Re-tension periodically if required.**

Cleaning—Your shade sails may be cleaned at any time using a solution of mild detergent and water. Apply the solution with a sponge or a very soft brush. Let the solution stand on the fabric for 10 minutes and rinse thoroughly with water from your garden hose. DO NOT put the fabric in your washing machine, clothes dryer, or scrub it with a stiff brush, scouring pad, or an abrasive cleaner.