

### D.I.Y. Shade Sail Installation Tips

*With your own skills and a little help, you can design and install your own shade sail project for considerably less than the cost of professional installation.*

*You have two alternatives to consider:*

- Install mounting points to accommodate our pre-made standard size sails.*
- Install mounting points first and then have us manufacture a custom made shade sail to fit.*

*Whether you opt for our pre-made shade sails or our custom made shade sails, you will have similar decisions to make, such as:*

#### Mounting Points on Buildings / Structures

*When attaching to a building, it is very important to ensure that the mounting points are structurally strong. If attaching to a wooden part of a building, we generally use a diamond pad eye, pad eye, or screw eye. When attaching to a solid concrete wall, we normally epoxy a 3/8-inch eye bolt into the wall. For less common applications, such as going through a wall and using a backing plate or attaching to a roof, alternative hardware may be required.*

#### Posts / Poles

*We often recommend a 3 1/2 to 4-inch thick walled steel pole. While steel is preferred, a large wooden post is a common alternative. The size of the pole depends largely on how many shade sails will be attached to it, the size of the sail and how far from the ground the shade sail will be attached.*

*When it comes to how deep to bury the posts, a conservative rule would be one third in the ground and two thirds above ground. Therefore, a post with eight feet exposed would have four feet buried. This will vary depending on how many sails are attached to the post, soil conditions, size of the sails, etc.*

*A 3/8-inch eye bolt is the most common way to attach to a post or pole. For safety, we highly recommend installing the eye bolt before burying the post. Don't forget to let the concrete base fully dry before installing the shade sails!*

#### Attaching with Turnbuckles / "D" Shackles / Cable / Chain

*In most cases we suggest using a turnbuckle on each corner of the shade sail. "D" shackles are an acceptable alternative, but they do not allow for tensioning of the shade sail. We do not recommend a D shackle on more than one corner*

*When using turnbuckles, it is recommended that you work your way around the shade sail tensioning each turnbuckle as you go to ensure an even amount of tension across the shade sail.*

*Steel cables or chain can be used to span distances from shade sail corners to attachment points. Removing links of chain will allow for future tensioning of the shade sail.*

*DISCLAIMER: These installation tips are offered as general information and not installation instructions. Custom Shade Sails, LLC does not, and cannot, know the specific intentions of purchaser and makes no extension of warranty by these general guidelines and disclaims any responsibility for any installation related matter including, but not limited to, the actual installation, design of installation, engineering requirements, code compliance, soil or wind conditions. No warranties are extended to any works carried out by any person using information covered in this flier*