Design Ideas and Tips

Long and narrow triangle shade sails should be avoided. Ideally, a shade sail should be at least half as wide as it is long. This is especially true with triangles. Long narrow sails can be difficult to tension well and can flutter in the wind. A center attachment point on long sides of the shade sail is possible.

While there can be exceptions to these rules, ideally
- Any one side of a shade sail should not be longer than 30 feet.
- 550-600 square feet is about as large as a shade sail should be (250-300 for triangles).
- The perimeter measurements added together shouldn't be over 80-85 feet.
- Larger sails may be possible but are not generally recommended.

When planning a shade sail design, do not forget to consider the curves in the perimeter of the sail along with the angle of the sun and where the shadow cast from the shade sail fabric will be located.

When installing square or rectangle shade sails the strength may be increased by twisting the sail into a hyperbolic parabola which gives a three dimensional stretch to the fabric. A hyperbolic parabola is preferential to a slope. You can also achieve a third dimension by attaching one corner of the four sided sail significantly higher than the other corners. This distribution of overall tension results in a stronger shade sail that lasts longer than two dimensional shade sails.

Shade sails should slope sufficiently as to prevent water from temporarily pooling during rain. A slope of at least 15-20% is recommended. Larger sails require more of a slant to avoid sagging and to facilitate shedding of rain.

To assure a taut shade sail, a long cable should ideally be used on no more than one corner when connected to a mounting point. All other corners should be attached directly to a secure mounting point or with only a turnbuckle, D shackle, or short cable. The use of long cables or chain on more than one corner of the shade sail allows it to move up and down excessively during wind. This extra movement increases the wear on the shade sail and in turn reduces the life of the shade sail.

Do not leave sails up if you are expecting extremely windy conditions or in snow prone locations during winter months. The longevity of your sail is largely dependent on how well you maintain tension on your sail. If you will be installing and removing your sail on a regular basis, keeping it tensioned is not as critical.

Shade sail installations with several smaller overlapping sails connected at different heights provide a more interesting and dramatic look than just one or two larger non-overlapping sails.

To avoid chafing of the fabric, overlapping shade sails may need up to 18" distance between them. Otherwise, windy conditions may cause the sails to rub against each other and may damage the fabric over time.