



Tension Sails



OVERVIEW

Tension sails are a unique, fully customizable way to provide shade.

Tension sails are the ultimate architectural shade design product. Unique, fully customizable and practical, tension sails are perfect for many uses including hotels, pool decks, parks, and terraces.

The shade sails are fixed in place and will not flap in the wind, sag, or accumulate water. Tension is used to combat the kite effect, in which the lift of the wind and drag of the sail combine to blow it in an upward direction.

Tension sails can be used to protect guests from sun and light rain, keep kids safe from the sun's harmful UVA/UVB rays, and to add a colorful or architectural element to a building or outdoor space. ShadeFLA's tension sails can resist winds up to 82 mph.



COMPONENTS

Sail

Sails can be either triangular or hyperbolic-shaped. A hyperbolic, or hyperbolic paraboloid, has four corners, two attached to high points and two attached to low points. When the sail is tensioned, there is a twisting effect so the sail takes a unique shape (like a Pringle)! The sails are made from shade cloth that is specially designed to block the sun's UVA and UVB rays while allowing air to pass through.

Supports/Attachments

Sails may be attached either to columns or to wall attachments. The immense tension force in the sails requires larger than normal supports. Typically, columns will be 10" in diameter, use Schedule 80 steel, and require a 6' to 10' footer. Depending on the exact size of the sail, columns may be as large as 24" in diameter. Wall attachments can only be used if the wall has a steel frame. We can also design a custom steel frame with cantilevered arms or a square frame shape.

Cables

Marine-grade stainless steel cable is used to tension the perimeter of the sails. For large custom structures, guy wires may be used in addition to columns to tension and stabilize the structure.



Customizable Options:

Tension sails are one of the most customizable shade products in the industry. Select from a wide variety of shapes and sizes, number of sails, fabrics, colors, column colors and styles, attachment options, and more.

Sizes Tension sails have a maximum length of 55'. There is no precise minimum length, but we don't recommend purchasing a sail less with a length less than 15'.

Fabric We offer two types of shade fabric: Comtex by Polyfab and Monotec 370 series. For sails less than 40', we recommend using Comtex. For larger sails, (40' - 55' in length) we recommend Monotec fabric.

Paint We offer a wide variety of colors for column paint. Typically smaller or standard size columns will be powdercoated. For higher-end, custom steel structures, we offer on-site Epoxy painting.

Architectural Features Get creative with multiple sails, sharply angled sails, multiple colors, and multiple attachments to a single column.

Tips and Frequently Asked Questions:

- If you have architectural plans or drawings of the space, please send them to us when you ask for a quote
- Take into account existing buildings that may be used for wall attachments
- Ensure that there is space to install one or more columns (if needed)
- Sketch or explain your vision for the space, or let us get creative!

Can I tie my tension sail to a tree?

Trees simply are not strong enough to hold the tensioned sail in place properly. Typically, tension sails are attached to an existing building or a steel column with footer.

Why does the column need such deep footers?

The tension forces need to be extremely strong to keep the sail in place when it is windy. The columns need deep footers to sustain the tension force.

Can I have my tension sail installed tomorrow?

All our tension sails are custom designed, engineered, manufactured and installed. This is a process that usually takes a minimum of four months.

Do you rent out tension sails for events?

No. All our tension sails are custom-designed, permanent structures.

