

SunSquare SunSails

SunSquare SunSails were designed to provide sun and rain protection for terraces, backyards, rooftop gardens, dining areas, balconies and more. Each motorized sail is designed and installed according to the unique conditions on-site, including sun orientation, primary wind direction, architectural environment, fastening and anchoring options, etc. Wind stresses are offset by means of a spring mechanism. Wind speeds exceeding 40 km/h cause the sail to automatically retract. Shaft length up to 10 meters, extension span from sail end to sail end up to 13 meters, surface area up to 50 m².

PRODUCT DESCRIPTION – The Sails consist of the drive unit and shaft, sail cloth, control unit, supports and fastening and anchoring elements. Four fastening points are required for installation: each end of the shaft, and each sail end. These can be free-standing, using ground supports, or attached to walls or other structural elements. The most common installations are comprised of two wall fastenings and two ground supports. The shaft contains the motor, which is equipped with a wind sensor. The sail is automatically retracted when wind speeds exceed 40 km/h. Dynamic wind forces are compensated for by means of a spring system. The spring is connected to pulleys on the sail end points, which experience the greatest stress within the unit (max. 70 kg). This system allows the sail cloth to be properly tensioned, but also to yield to the wind. The inclination of the units allows rain to run freely off the sail, preventing distortion of the material caused by the accumulation of water. Sail cloths are available in the treated acrylic Panama 321 from Sattler, the PVC net-weave Soltis 86 or 92, or Dixon Sunworker Cristal, a further PVC weave, however with coating to provide waterproofing, as well. All fabrics are available in a variety of colors. Carbon cable is used for the tensioning system. Supports and fastening elements are available in stainless steel or anodized aluminum. Each drive unit includes an emergency hand crank, to allow for manual retraction in case of power outage. Lighting systems for the installations are also available. SunSquare SunSails can protect large rooftop gardens, terraces, playgrounds, al fresco dining areas, pools, etc. Up to 50 m² can be shaded by one unit, and multiple units can be connected for larger areas.

SIMULATION – Once technical details have been checked on-site, the collaborative work with the client begins. In order to provide the client with an accurate spatial representation of the unit, tripods and measuring tape are used to represent the outer edges of the sail cloth. This 3D simulation allows for ideal placement, orientation and size of the unit to be collaboratively determined with the client. Sail cloths need not be entirely symmetrical. Mag. Gerald Wurz, the inventor of the SunSail, considers the advantages of SunSquare's product and process to be two-fold: "the Sail itself is an architectural design element, and each Sail is designed, manufactured and installed according to the structural conditions on-site and the desires of the client."

SOLARIUM SHADING – A further use for SunSails is in connection with solaria, winter gardens and other glass facade structures. Sails can be mounted at radical inclinations (to approx. 35°). Depending upon the weave and structure of the textile used, the most diverse lighting effects can be achieved. Winter garden installations are equipped with light and wind sensors.

INTERIOR SHADING – large surface area interior sun and privacy protection is typically provided with a net weave textile.

For questions, please contact:

Jimmy Lee, Creative Director for Marketing & Sales

T: +43-2272-81817-35

E: j.lee@sunsquare.com