

Proposal for  
**City of Joshua**

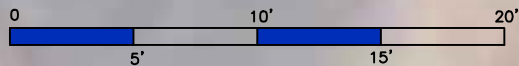
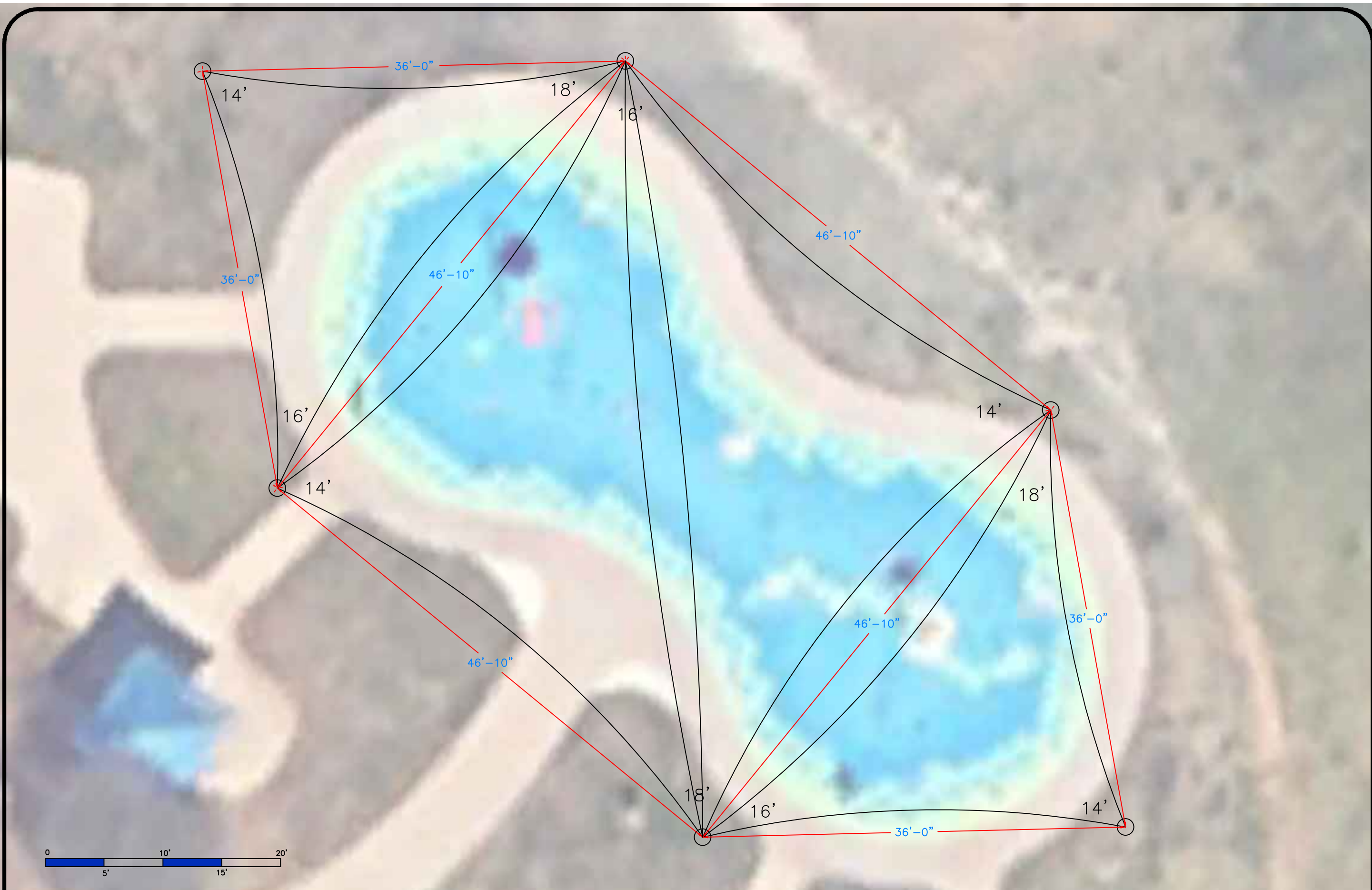
Prepared by



01/8/2025  
PROJECT: 17362  
Splash Pad Shade



800-438-2780 | [cunninghamrec.com](http://cunninghamrec.com)



150 PlayCore Drive SE  
 Fort Payne, AL 35967  
[www.gametime.com](http://www.gametime.com)

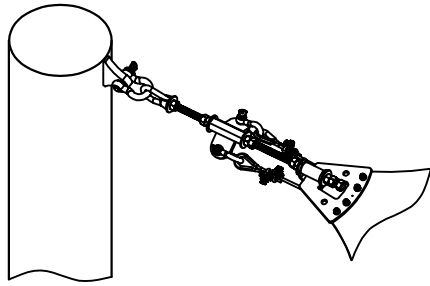
City of Joshua  
 Splash Pad Shade  
 Joshua, TX  
 Representative  
 Cunningham Recreation

This play equipment is recommended for children ages -

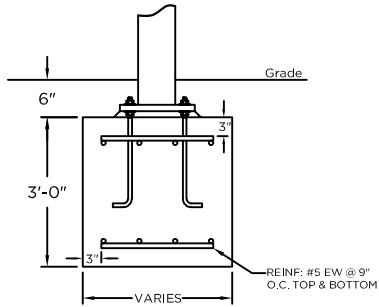
Minimum Area Required:  
 Scale:  
 This drawing can be scaled only when in an 18" x 24" format

**IMPORTANT:** Soft resilient surfacing should be placed in the use zones of all equipment, as specified for each type of equipment, and at depths to meet the critical fall heights as specified by the U.S. consumer Product Safety Commission, ASTM standard F 1487 and Canadian Standard CAN/CSA-Z-614

Drawn By:  
 TCV  
 Date:  
 12/17/2024  
 Drawing Name:  
 173-262-01-01



Fabric Connection

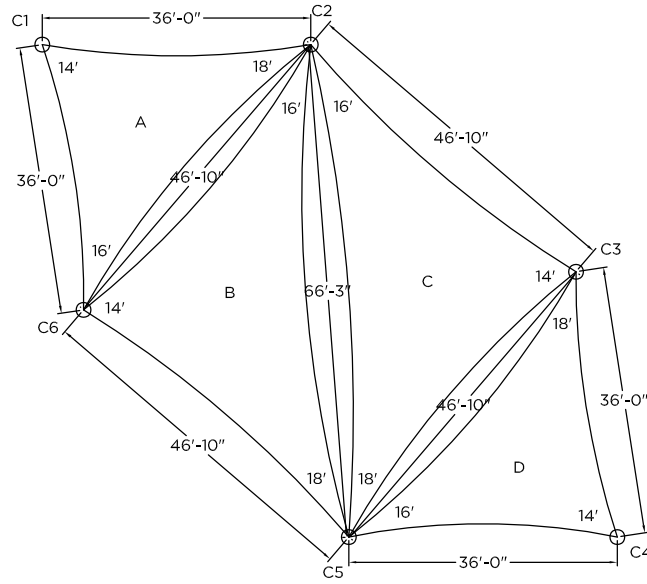


Footer Detail

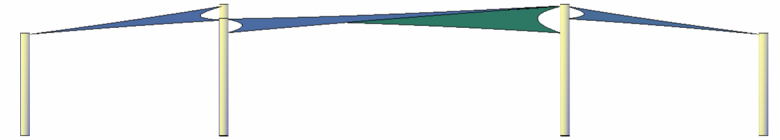
FOUNDATION NOTE: ALL FOUNDATION SIZES ARE ESTIMATIONS ONLY ACTUAL SIZING SHOULD BE DETERMINED BY A LOCALLY QUALIFIED STRUCTURAL ENGINEER PRIOR TO INSTALLATION.

**Column & Footing Schedule**

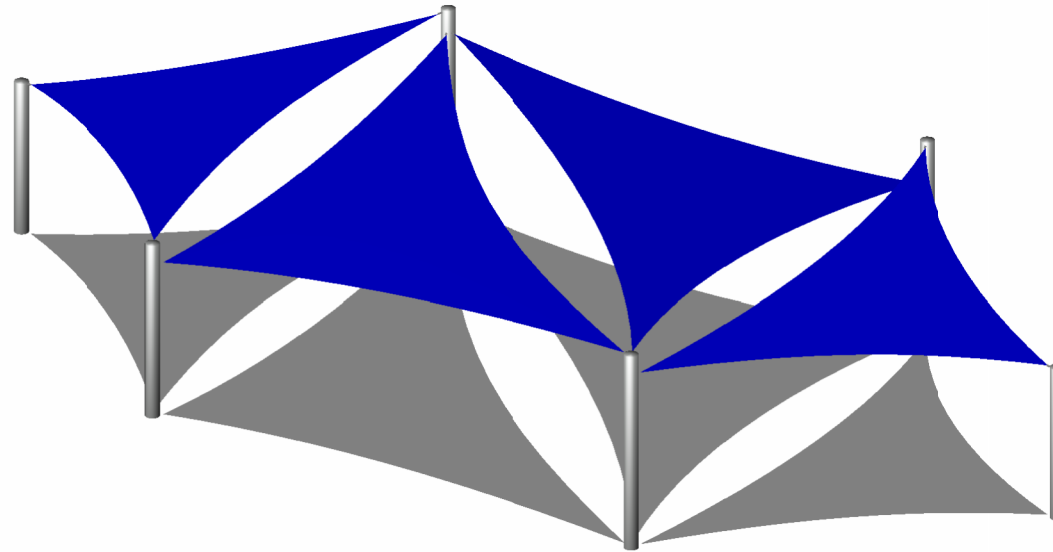
Column ID	Column Size	Est. Footing Size
C1	10" Sch. 40	4.8' X 4.8' X 3.0'
C2	16" Sch. 40	11.2 X 11.2' X 3.0'
C3	12" Sch. 40	8.7' X 8.7' X 3.0'
C4	10" Sch. 40	4.8' X 4.8' X 3.0'
C5	16" Sch. 40	11.2' X 11.2' X 3.0'
C6	12" Sch. 40	8.2' X 8.2' X 3.0'
C7	N/A	N/A
C8	N/A	N/A
C9	N/A	N/A
C10	N/A	N/A



Plan View



Front View



Isometric



PROJECT NAME  
**Splash Pad**

DATE  
**1/6/2025**

DRAWN BY  
**JLK**

QUOTE  
**QUO0297432**

TITLE  
**Proposal**

SCALE  
**Not to Scale**

SHEET  
**1 of 1**

*These drawings are for reference only and should not be used as construction details. They show the general character and rough dimensions of the structural features. Superior Recreation Products is not responsible for deviation of final shade dimensions. All final dimensions must be verified in the field by the customer. Exact spans, fasteners, materials, and foundations can be determined by a licensed professional engineer upon request.*



GameTime c/o Cunningham Recreation  
 PO Box 240981  
 Charlotte, NC 28224  
 800.438.2780  
 704.525.7356 FAX

01/08/2025  
 Quote #  
 173262-01-01

## Splash Pad Shade

City of Joshua  
 Attn: Steven Gill  
 101 South Main Street  
 Joshua, TX 76058  
 United States  
 Phone: 682-317-2614  
 sgill@cityofjoshuatx.us

Ship to Zip 76058

Quantity	Part #	Description	Unit Price	Amount
1	CUSTOM	Superior Recreational Products - Custom Sail Shade	\$79,530.00	\$79,530.00
1	ABT	Superior Recreational Products - Advanced Anchor Bolts and Templates	\$215.00	\$215.00
1	DWG	Superior Recreational Products - Engineered Drawings	\$1,286.00	\$1,286.00
1	INSTALL	MISC - Installation of Above Shade Structure-  <i>Spread footings required for the shade may conflict and/or go under the existing concrete sidewalks and pad. Plumbing lines will need to be marked prior to shade installations.</i>	\$43,210.00	\$43,210.00
Contract: Buy Board Contract #679-22			<b>Sub Total</b>	\$124,241.00
			<b>Discount</b>	(\$2,385.90)
			<b>Freight</b>	\$5,210.65
			<b>Total</b>	<b>\$127,065.75</b>

### Comments

\* Site must be clear, level, free of obstructions, and accessible. Site should permit installation equipment access. Purchaser shall be responsible for unknown conditions such as buried utilities, tree stumps, bedrock or any concealed materials or conditions that may result in additional costs.



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## Splash Pad Shade

### GAMETIME - TERMS & CONDITIONS:

- **PRICING:** Due to fluctuating economic conditions, pricing is valid for 30 days and is subject to change. Please request updated pricing if your quote is older than 30 days before making a purchase.
- **TERMS OF SALE:** For equipment & material purchases, Net 30 days from date of invoice for governmental agencies and those with approved credit. All others, full payment for equipment, taxes and freight up front. Balance for services & materials due upon completion or as otherwise negotiated upon credit application review. Pre-payment may be required for equipment orders totaling less than \$5,000. Payment by VISA, MasterCard, or AMEX is accepted (**If you elect to pay by credit card, GameTime charges a 2.50% processing fee that is assessed on the amount of your payment. This fee is shown as a separate line item and included in the total amount charged to your credit card. You have the option to pay by check, ACH or Wire without any additional fees.**). Checks should be made payable to Playcore Wisconsin, Inc. dba GameTime unless otherwise directed. **Any order exceeding \$300,000 will require progress payments during the course of completion.**
- **CREDIT APPLICATION:** Required for all non-governmental agencies and those entities who have not purchased from GameTime within the previous twelve calendar months.
- **FINANCE CHARGE:** A 1.5% monthly finance charge (or maximum permitted by law) will be added to all invoices over 30 days past due.
- **CASH WITH ORDER DISCOUNT:** Orders for GameTime equipment paid in full at time of order via check or electronic funds transfer (EFT) are eligible for a 3% cash-with-order (CWO) discount. Consult local sales representative for CWO terms.
- **ORDERS:** All orders shall be in writing by purchase order, signed quotation or similar documentation. Purchase orders must be made out to Playcore Wisconsin, Inc. dba GameTime.
- **FREIGHT CHARGES:** Shipments shall be F.O.B. destination. Freight charges prepaid and added separately.
- **SHIPMENT: Standard Lead time is 6-8 weeks (some items may take longer)** after receipt and acceptance of purchase order, credit application, color selections and approved drawings or submittals.
- **PACKAGING:** All goods shall be packaged in accordance with acceptable commercial practices and marked to preclude confusion during unloading and handling.
- **RECEIPT OF GOODS:** Customer shall coordinate, receive, unload, inspect and provide written acceptance of shipment. Any damage to packaging or equipment must be noted when signing delivery ticket. If damages are noted, receiver must submit a claim to Cunningham Recreation within 15 Days. Receiver is also responsible for taking inventory of the shipment and reporting any concealed damage or discrepancy in quantities received within 60 days of receipt.
- **RETURNS:** Returns are only available on shipments delivered within the last 60 days. A 25% (min.) restocking fee will be deducted from any credit due. Customer is responsible for all packaging & shipping charges. Credit is based on condition of items upon return. All returns must be in unused and merchantable condition. GameTime reserves the right to deduct costs associated with restoring returned goods to merchantable condition. Uprights & custom products cannot be returned.
- **TAXES:** Sales tax is shown as a separate line item when included. A copy of your tax exemption certificate must be submitted at time of order or taxes will be added to your invoice.

### INSTALLATION CONDITIONS:

- **ACCESS:** The site must be clear, level, and provide unrestricted access for trucks and machinery. Any site that is inaccessible may incur additional charges.
- **STORAGE:** The customer is responsible for providing a secure area for off-loading and storing equipment during installation. Once equipment is delivered to the site, the owner assumes responsibility for any theft or vandalism unless alternative arrangements are made and documented in the quotation.
- **FOOTER EXCAVATION:** Installation pricing is based on footer excavation through earth/soil only, prior to the installation of drains, subbase, or surfacing. The customer is responsible for any unforeseen conditions such as buried utilities (public or private), tree stumps, rocks, or any other concealed materials or conditions that may result in additional labor or material costs.
- **UTILITIES:** The installer will contact 811 to locate all public utilities before layout and excavation of footer holes. The owner is responsible for identifying any private utilities. Cunningham Recreation and the installer are not liable for any damage to unmarked private utilities.
- **ADDITIONAL COSTS:** Pricing is based on a single mobilization for installation unless otherwise stated. The price includes only the items specified in this quotation. Additional site work or specialized equipment needs may result in price adjustments.
- **SITE CONDITIONS:** The site must have a slope of less than 1.5%. Any excavation or grading required to achieve an acceptable slope is the responsibility of others unless otherwise noted. All demolition and site preparation must be completed before the installation crew is mobilized.
- **GENERAL INSTALLATION NOTES:** Installation will be performed according to the manufacturer's specifications by a GameTime-certified installer. A one-year warranty on all labor is provided from the date of completion. Product warranty and service claims may not include labor.



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## Splash Pad Shade

**ACCEPTANCE OF QUOTATION:**

*Acceptance of this proposal indicates your agreement to the terms and conditions stated herein.*

Accepted By (printed): \_\_\_\_\_ Title: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

P.O. Number: \_\_\_\_\_ Date: \_\_\_\_\_

Purchase Amount: **\$127,065.75**

SALES TAX EXEMPTION CERTIFICATE #: \_\_\_\_\_

(PLEASE PROVIDE A COPY OF CERTIFICATE)

\_\_\_\_\_  
Salesperson's Signature

\_\_\_\_\_  
Customer Signature

**BILLING INFORMATION:**

Bill to: \_\_\_\_\_

Contact: \_\_\_\_\_

Address: \_\_\_\_\_

Address: \_\_\_\_\_

City, State: \_\_\_\_\_ Zip: \_\_\_\_\_

Tel: \_\_\_\_\_ Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

**SHIPPING INFORMATION:**

Ship to: \_\_\_\_\_

Contact: \_\_\_\_\_

Address: \_\_\_\_\_

Address: \_\_\_\_\_

City, State: \_\_\_\_\_ Zip: \_\_\_\_\_

Tel: \_\_\_\_\_ Fax: \_\_\_\_\_

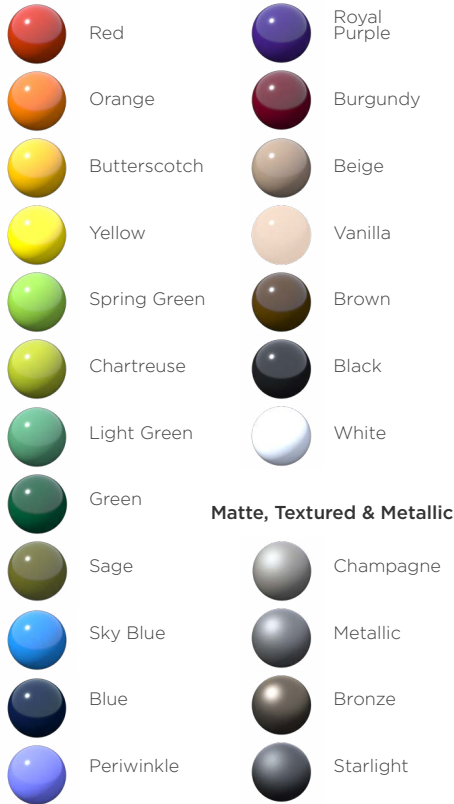
E-mail: \_\_\_\_\_

## Color Options

### Frames

Backed by a [5-year limited warranty](#).

### Gloss



### RainGuard<sup>®</sup> Waterproof Shade Fabric

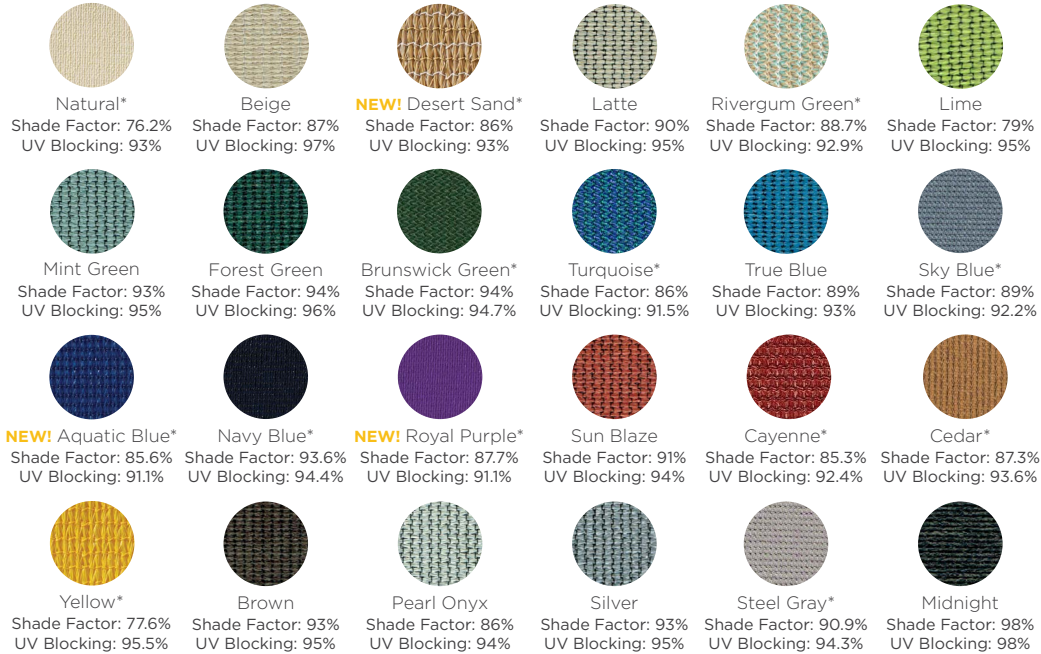
For our Single Post Waterproof Umbrella.

Backed by a [10-year limited warranty](#).



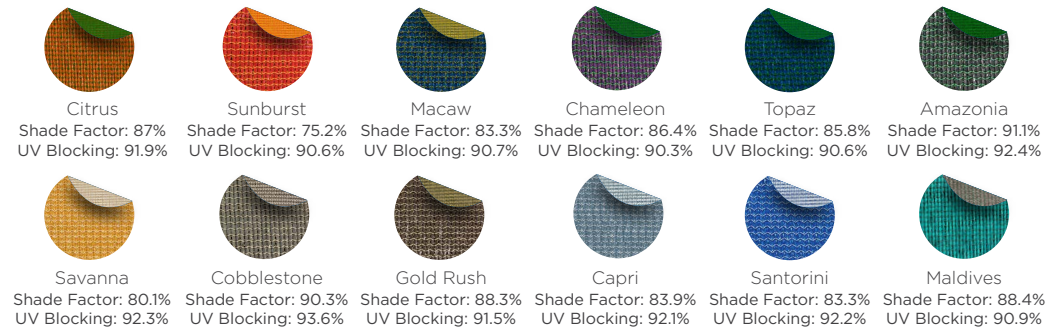
### Traditional Fabric

This selection of fabric colors are California Fire Marshal certified, fire retardant, and pass the NFPA 701 or ASTM E84 tests. Colors marked with an asterisk are available as both flame retardant and non-flame retardant. Backed by a [10-year limited warranty](#).



### Dual Shade Fabric

Available for an upcharge for our Hypar Umbrella, Triangle Sail, and Hyperbolic Sail. Backed by a [10-year limited warranty](#).



### 2 REASONS TO CHOOSE FLAME RETARDANT FABRIC

- ① Helps meeting appropriate federal, state, and local building codes.
- ② Permanent and reliable flame retardant properties, as opposed to fabrics treated with FR additives in a post-production application.

## Shade Warranty

Superior Recreational Products (SRP) warrants that its product will be free from defects in materials and workmanship as well as maintain structural integrity for the periods listed below from the date of invoice and once SRP has been paid in full. This warranty is in effect only if the product has been assembled and installed strictly in accordance with the setup instructions provided by SRP, good construction practices, general maintenance and care is provided as per instructions in the customer packet, and has been subjected only to normal use and exposure. Product should be maintained per the instructions given at time of delivery.

- |           |   |          |   |
|-----------|---|----------|---|
| <b>LW</b> | <b>Lifetime* Warranty on stainless steel hardware</b> | <b>5</b> | <b>5-Year Limited Warranty on powder coat</b>         |
| <b>20</b> | <b>20-Year Limited Warranty on framework</b>          | <b>1</b> | <b>1-Year Limited Warranty on cables</b>              |
| <b>10</b> | <b>10-Year Limited Warranty on fabric</b>             | <b>1</b> | <b>1-Year Limited Warranty on materials not above</b> |

The Limited Warranty excludes abnormal conditions, contingent liability, cosmetic defects such as scratches, dents, marring, stripping, peeling, or fading; damage due to incorrect installation, vandalism, misuse, accident wear and tear from normal use; exposure to extreme weather, immersion in salt or chlorine water, damage due to sand, salt spray, or other abrasive and corrosive material; unauthorized repair or modification, abnormal use, or lack of maintenance. The warranty does not cover damages due to "acts of God" such as hail, flooding, lightning, tornadoes, sand storms, shifts of terrain, earthquakes, mudslides, and wind-storms.

SRP does not warrant product for defects caused by erection, harsh site conditions, lack of maintenance, and/or other conditions beyond SRP's control. SRP will not be held responsible for any materials that were not properly stored prior to installation. SRP reserves the right to void the limited warranty if it not installed per the installation instructions and/or unauthorized modifications.

In the unlikely event of failure, SRP reserves the right to alter the design, color, or contributing factors to rectify the condition and help prevent any future reoccurrence(s). SRP has the option to repair or replace any defect in materials.

The warranty is void if any changes, modifications, additions, or attachments are made to the product without the written consent of the manufacturer.

No signs, objects, ornaments, fans, lights, fixtures, or decorations may be hung from the structure unless specifically designed and engineered by the manufacturer or has manufacturers written approval.

SRP excludes any implied warranty of merchantability, fitness, or purpose, and there are no warranties which extend beyond the description of the face hereof. Under no circumstances will SRP be responsible for any indirect, special, consequential, incidental, or liquidated damages due to breach of warranty and such damages are specifically excluded from the warranty.

The owner shall notify SRP with original Sales Order Number issued from SRP to arrange for an inspection within 30 days after discovery of any defect under this warranty and before any alteration or repair is made or attempted. This Limited Warranty shall be null and void if the owner makes any alterations in design.

This warranty is the only express warranty given by the company. No person has authority to change or add to these obligations and liabilities. The company reserves the right to determine whether the fault is caused by faulty workmanship, material, or the part that is defective.

SRP will repair or replace at its discretion any defective part/s on an Ex-Works basis only. It is the responsibility of the customer to return the whole unit or the defective part/s at their own cost back to SRP for inspection along with proof of the date of purchase. SRP will not be liable for any costs incurred by the customer as a result of replacing the defective part/s, including but not limited to the costs of site visits and the labor costs involved with the removal and reinstallation of the whole unit or the defective part/s. Furthermore SRP will not be liable for any claimed compensation while the unit is not working or not present at the site whatsoever. This guarantee does not entitle the customer to a complete new product due to a defective component.

### Limited Warranty: Structural Steel

SRP offers a 20-year Limited Warranty on structural steel frames for shade canopies against failure due to rust-through corrosion under normal environmental conditions. Should the fabric or parts need to be replaced under the warranty, SRP will manufacture and ship new replacement parts at no charge for the first ten years, thereafter pro-rated at 10% per annum over the last ten years.



Workmanship is warranted for a period of five years. This steel warranty shall be void if damage to the steel is caused by the installer or from physical damage, damage by salt spray or sprinkler systems, contact with chemicals, chlorine, pollution, misuse, vandalism, or any act of God.

## Limited Warranty: Powder Coat

Superior Recreational Products offers a 5-year Limited Warranty for powder coating to the original purchaser. This Limited Warranty is for factory applied finish only. Damage occurring from shipping, erection, vandalism, accidents, or field modification is not covered in this limited warranty and will require field touch-up immediately and periodically thereafter. The owner must report any defect in powder coat at the time the installation is completed. Not covered by this Limited Warranty are acute angles, welds, and end plates.

The Limited Warranty for powder coating provides the following after a 5-year exposure period when applied according to the recommendations listed on the product's technical data sheet and appropriate surface preparation has been utilized.

- The coatings shall retain their original color with a  $\Delta E$  of  $<7.5$  units for high chroma colors (yellows, reds, oranges, etc.) and a  $\Delta E$  of  $<5.0$  units for low chroma colors, when tested in accordance with ASTM D 2244.
- The coating shall retain a minimum of 50% of its original gloss level after washing, when tested in accordance with ASTM D 523.
- The coating shall exhibit chalking no worse than numerical rating of 6, when evaluated in accordance with ASTM D 659-80.

## Limited Warranty: Shade Fabric

Traditional shade fabric made with PTFE fiber that is high strength and low shrinkage and VALMEX<sup>®</sup> MEHATOP F 1 waterproof fabric carry a 10-year limited warranty. This warranties that the sewing thread used on the traditional shade fabric will be free from defects in material and workmanship and will not be damaged by exposure to sunlight, weather, and water. All other warranties are disclaimed.

SRP fabrics carry a 10-Year Limited Manufacturer's Warranty from the date of delivery against failure from significant fading\*\*, deterioration, breakdown, outdoor heat, cold, or discoloration. Should the fabric need to be replaced under the warranty, SRP will manufacture and ship new fabric at no charge for the first six years, thereafter pro-rated at 18% per annum over the last four years.

\*\*The colors red and yellow are warranted against significant fading for only two years.

If the corners of the fabric are equipped with both holes in the fabric corner PLUS reinforcing straps, BOTH the strap and fabric hole must be placed over each corner hook or the fabric warranty is void.

Fabric curtains, valences, or flat vertical panels are not covered under the warranty.

Fabric is not warranted where it is installed on a structure that is not engineered and built by SRP or its agents.

This warranty shall be void if damage to or failure to the shade is caused by contact with chemicals, chlorine, bleaching agents, hydrocarbons or hydrocarbon containing solvents, misuse, vandalism, or any act of God, including but not limited to wind in excess of the wind limitations set forth below.

All fabric tops are warranted for sustained winds up to 76 mph (Hurricane Force 1) and for gusts of up to 3 seconds duration up to 90 mph. Removal of the shade fabric is required if damaging winds are called for. Damage due to snow and/or ice accumulation is not covered by this warranty. Canopies should be removed during the "off season."

These structures have been designed to eliminate any friction between the rafters and the fabric. The warranty will, therefore, be voided if any modification (temporary or permanent) is made to the rafter, cross pieces, or ridge beams, or if the fastening apparatus or canopy are not secured accordingly.

Structures are warranted for winds up to 90 or 105 mph only if shade canopies have been removed as per requirement set forth above in the fabric paragraph. Removal and re-installation must be performed by a qualified person or authorized dealer.

*\*For the purpose of this warranty, lifetime encompasses no specific term of years, but rather that seller warrants to its original customer for as long as the original customer owns the product and uses the product for its intended purpose that the product and all parts will be free from defects in materials and manufacturing workmanship. This warranty does not cover damage caused by vandalism, misuse or abuse, altered or modified parts, or cosmetic damage such as scratches, dents, or fading or weathering and normal wear and tear. This warranty is valid only if the structures are installed in conformity with instructions provided by Superior Recreational Products using approved Superior Recreational Products parts. Superior Recreational Products will deliver the repaired or replacement part or parts to the site free of charge, but will not be responsible for labor or the labor costs of replacement. Warranty claims must be filed within the applicable warranty period and accompanied by a sales order or invoice number.*

## Policies

### Pricing Policy

All prices are F.O.B. factor and do not include freight, installation, shipping and handling, surfacing, or applicable taxes. All prices listed were current at the time of printing and in U.S. currency. Prices are subject to change without notice.

### Cancellation and Return Policy

To view our return policy, please visit [superiorrecreationalproducts.com/returns](http://superiorrecreationalproducts.com/returns). For information on Return Material Authorizations please call 1.800.327.8774.

### Shipping Policy

To view our shipping policy, please visit [superiorrecreationalproducts.com/shipping](http://superiorrecreationalproducts.com/shipping). For any further information please call 1.800.327.8774.

## Appendix

### Proper Care, Maintenance, and Safe Removal of the Shade Canopy

#### THINGS TO AVOID

**SNOW, ICE, AND HIGH WINDS:** Remove the canopy in winter conditions as ice and snow loads are not covered by the warranty. The same goes for winds in excess of hurricane force 1.

**SHARP OBJECTS:** Always avoid dragging the fabric across surfaces, etc. Roll or fold the fabric and carry it. Avoid sharp objects, bolts, snags, and other protrusions including mounting hardware.

**OBSTRUCTIONS:** Keep foliage, such as tree limbs, shrubbery, and bushes, trimmed back and away from fabric at least three to four feet.

**SOURCES OF HEAT:** Avoid contact with heat sources such as hot lights, torches, and avoid using grills, etc. under the fabric or fireworks near the fabric..

**SLACK CABLE IN CANOPY:** Canopies with loose cables can fail.

#### CLEANING THE FABRIC

The fabric itself is generally maintenance free with the exception of necessary removal due to weather or seasonal requirements. The fabric does not harbor mildew or mold, but residues such as tree sap, leaves, bird droppings, dust and dirt may need to be removed. To clean the fabric, use water and mild soap. A soft mop or soft broom may also be used. Cleaners that do not contain hydrocarbons, solvents, bleach or ammonia may be used. Use of solvents, hydrocarbons, bleach, and ammonia type cleaners will void the fabric warranty. A pressure washer may be used if necessary using a wide-spray nozzle.

#### CABLES AND HARDWARE

It is recommended that the cables be replaced every 3 to 4 years or if corrosion is visible, whichever comes first. Canopy cables that are not maintained at optimum tension will be subject to shorter lifespans and potential failures earlier than our recommend cable replacement scheduling. The cable ends must be wrapped with tape to secure any wires; thus, preventing the wires from tearing the fabric. Taping must be done when removing old cable as well as when installing new cable. Clamps should be replaced when the cable is replaced. If the cable appears slack on a still day (no wind), immediately have the cable and clamps re-tightened by a qualified person. The cable should not be slack.

#### GLIDE ELBOW™

Lubricate Glide Elbows™ annually and before operating. A waterproof grease is recommended such as a lithium-based grease or anti-seize thread lubricant.

#### STORAGE

Fabric must be stored in a clean, dry place free from snags, sharp edges, etcetera. The storage area must be rodent-free. Wrap all hardware fittings with rags or some other protector, as they can damage the fabric.

#### UNINSTALLING THE SHADE CANOPY

**NECESSARY CARE:** It is important to take necessary care when handling the fabric during removal and installation to prevent damage to the fabric as well as SAFE control of the fabric in a breeze or wind. The fabric is tough and engineered for use as a shade, but it can tear or cut when or if pulled over a snag or sharp item; it can puncture from bolts or other protruding objects; and it can melt from objects such as like cigarettes, matches, hot torch tips, sparks and the like. In addition, care must be exercised to avoid the fabric hooks after the fabric is unhooked from the elbow corners and sides of the structure where there are intermediate supports. It is best to wrap any connected mounting hardware to prevent it from harming the fabric.

**PROPER AND SAFE:** Based on the size of the canopy, several persons may be needed to properly and safely handle the fabric during the uninstalling process. You will need several commercial ladders or other means to work safely at heights such as scissor lifts, etc. It is advised that you pad the post side of the ladder and tie the ladder to the post. The pad is to protect the post finish. Also keep in mind that every 100 square feet of fabric (10' X 10') weighs approximately five pounds; a large canopy can get heavy fast. For proper control of the fabric, read below. It is best to remove the fabric on a still day. Do not attempt to remove the canopy in strong or gusty winds.

**REMOVAL OF THE CANOPY:** Do not attempt to remove the canopy in strong or gusty winds.

**STANDARD ELBOWS:** For shade structures with Standard Elbows, loosen the turnbuckle several turns in order to put enough slack in the cable to allow the fabric and cable to unhook from all the elbow hooks. Attach 3/8" or larger ropes to each corner of the fabric and cable before unhooking to secure and properly control the fabric from ground level. If uninstalling in breezy conditions, choose the windy side of the fabric and tie these corners to the posts with the ropes with enough slack to allow for unhooking the fabric from the structure. These ropes are to prevent the shade from flying away in the breeze and to help prevent injury to ground personnel. Once the corners have been secured to the posts, unhook the fabric and cables from each corner.

On the side away from the wind, release the corners of the fabric and cable and have a person hold on to each rope. It may help to wrap the rope around a column to help hold it from getting caught in the wind. Fold the fabric back away from the hooks. Now it will be necessary to remove the cable clamps to allow the cable to be free from the structure and the turnbuckle. If the cable ends are frayed, wrap them with tape. It is usually not necessary nor is it recommended that the cable be removed from the canopy. With a person on each rope, starting at the windy side, gently pull the canopy down in between the framework of the structure. The side away from the wind can be guided with the ropes toward the persons pulling the canopy down. It is important when reinstalling the canopy, that it is put back in its original orientation to the structure. Starting at the turnbuckle corner, the fabric and cable corners should be returned to their original positions.

**GLIDE ELBOWS:** For shade structures with Glide Elbows, remove the protective covers from the ends of the glide elbows. Then, using the proper wrench, turn the hex nuts on the end of the Glide Elbow to run the glide hooks to their top most position. Do not loosen the cable clamps, leave the cable intact. Attach 3/8" ropes to each corner of the fabric and cable before unhooking to secure and properly control the fabric from ground level. If uninstalling in breezy conditions, choose the windy side of the fabric and tie these corners to the posts with the ropes with enough slack to allow for unhooking the fabric from the structure. These ropes are to prevent the shade from flying away in the wind and to help prevent injury to ground personnel. Once the corners have been secured to the posts, unhook the fabric and cables. On the side away from the wind, release the corners of the fabric and cable and have a person hold on to each rope. Fold the fabric back away from the hooks. It is a good idea to put the Glide Elbow protective covers back in place. With Glide Elbow installations it is not necessary to loosen or remove the cable clamps nor to remove the cable from the canopy. If the cable ends are frayed, wrap them with tape. When uninstalling the canopy, mark or identify the corner of origin in such a way that when reinstalling the canopy, it is put back in its original orientation to the structure. The fabric and cable corners should be returned to their original positions when reinstalling the canopy. The cable and fabric should tighten properly when the glide elbows are adjusted down into their tension positions.

**SHADE SAILS WITH FANS:** For shade sails equipped with fans, loosen the adjustable threaded rod several turns in order to put enough slack in the cable to allow the shackle pin to be removed (do not remove the pins until the fabric corners have been secured with ropes). Attach 3/8" or larger ropes to each corner of the fabric and fan before unhooking to secure and properly control the fabric from ground level. If uninstalling in breezy conditions, choose the windy side of the fabric and tie these corners to the posts with the ropes with enough slack to allow for unhooking the shackle from the structure. These ropes are to prevent the shade from flying away in the breeze and to help prevent injury to ground personnel. Once the corners have been secured to the posts, unhook the shackles and lower the fabric and cable to the ground.

## **REINSTALLING HINTS**

Using the same rope technique, install from the windy side (if it is breezy) making sure to secure these ropes to the posts. Then, throw the remaining corner ropes over the structure and gently pull the canopy into position. The cables and fabric corners can now be fastened on the hooks (and cable guides if so equipped). Next reinstall the clamps if applicable and tightened the cable with the turnbuckle or the Glide Elbows. Do not attempt to install the canopy in strong or gusty winds.

## Material Specifications, Warranty, and Policies

### Material Specifications

#### Fabric

- Shade fabric is made of UV stabilized cloth manufactured by Alnet Americas or approved equal
- The high density polyethylene material shall be manufactured with tensioned fabric structures in mind
- The fabric knit is to be made using monofilament and tape filler which has a weight of 9.38 to 10.32 oz. sq. yd. Material to be Rachel-knitted to ensure material will not unravel if cut
- Cloth meets fire resistance tests as follows:

Alnet Americas Extra Block: California State Fire Marshall Reg. #F-93501

Others: NFPA 701-99 (Test Method 2) and ASTM E-84

#### Fabric Properties

Stretch	Stentored
Tear Tests (lbs/ft)	WARP 44.8 WEFT 44
Burst Tests (lbs ft)	828 lbf (ASTM 3786)
Fabric Weight (oz/sqFT)	Avg 1.02 to 1.07 oz.
Fabric Width	9' 10"
Roll Length	150'
Roll Size	63" x 16 ½"
Weight	120 lbs.
Life Expectancy	10 Years
Fading	Minimum Fading After 6 years, 3 Years for Red and Yellow
Min. Temperature	-77°
Max. Temperature	+167°

#### Shade Protection and UV Screen Protection Factors

Color	Shade Cover	UVR Block Out
True Blue	93%	89%
Beige	97%	87%
Forest Green	96%	94%
Sun Blaze	94%	91%
Silver	95%	93%
Rivergum Green	88.7%	92.9%
Sky Blue	89%	92.2%
Navy Blue	93.6%	94.4%
Turquoise	86%	91.5%
Yellow	77.6%	95.5%

To view a complete list of fabrics, please reference the Color Options page of our catalog by clicking [here](#).

#### Thread

- Shall be 100% expanded PTFE fiber that is high strength and low shrinkage
- Shall have a wide temperature and humidity range
- Abrasion resistant and UV radiation immunity
- Shall be unaffected by non-hydrocarbon based cleaning agents, acid rain, mildew, chlorine, saltwater, and pollution
- Lockstitch thread - 1200 Denier or equal
- Chain stitch thread - 2400 Denier or equal

## Steel Tubing

- All fabricated steel must be in accordance with approved shop drawings and calculations
- All steel is cleaned, degreased, or etched to ensure proper adhesion of Superdurable powder coat in accordance with manufacturer's specifications
- All Steel used on this project needs to be new and accompanied by the mill certificates if requested. Structural steel tubing up to 5"-7 gauge shall be galvanized per Allied Steel FLO-COAT specifications. Schedule 40 black pipe fabrications shall be sand-blasted and primed as described below
- All non-hollow structural shapes comply with ASTM A-36, unless otherwise noted
- All hollow structural steel shapes shall be cold formed HSS ASTM A-53 grade C, unless otherwise noted
- Plate products shall comply with ASTM A-36

## Superdurable Powder Coat and Primer

- All non-galvanized steel shade to be sand-blasted and primed prior to Superdurable powder coating using reclaimable blast media in a mixture of GL50 & GL80 Steel Grit
- All non-galvanized steel must be coated with rust inhibiting primer prior to applying the Superdurable powder coat. Primer shall be Marine Grade Cardinal Industrial Finishes Corp. E396-GR1372 epoxy Superdurable powder coating semi-gloss smooth zinc rich primer
- Welds shall be primed with rust inhibiting primer prior to applying the Superdurable powder coat. Primer shall be Marine Grade Cardinal Industrial Finishes Corp E396-GR1372 epoxy Superdurable powder coating semi-gloss smooth zinc rich primer
- All steel parts shall be coated for rust protection and finished with a minimum 3.5 mil thick UV-inhibited weather resistant Superdurable powder coating

Powder Coat Tests		Results
ASTM	Gloss at 60°	85-95
HOI TM 10.219	PCI Powder Smoothness	7
ASTM D2454-91	Over-Bake Resistance Time	200%
ASTM D3363-92A	Pencil Hardness	H-2H
ASTM D2794-93	Dir/Rev Impact, Gardner	140/140 in/lbs
ASTM D3359-95B	Adhesion, Cross Hatch	5B Pass
ASTM D522-93A	Flexibility Mandrel	¼" dia. No fracture
ASTM B117-95	Salt Spray	1,000 hours
UL DtOV2	Organic Coating Steel Enclosures, Elect Eq.	Recognized

### Powder Coat Process Characteristics

N.3.1	Specific Gravity	1.68+/-0.05
N.3.2	Theoretical Coverage	114+/- 4 ft 2/lb/mil
N.3.3	Mass Loss During Cure	<1%
N.3.4	Maximum Storage Temperature	75° F

### Application Criteria

N.5.1	Electrostatic Spray Cold	Substrate:0.032 in. CRS
N.5.2	Cure Schedule	10 minutes at 400° F
N.5.3	Pretreatment	Bonderite 1000
N.5.4	Film Thickness	3.5 Mils

## Welds

- All shop welds shall be executed in accordance with the latest edition of the American Welding Society Specifications
- Welding procedures shall comply in accordance with the AWS D1.1-AWS Structural Welding Code-Steel
- All welds to be performed by a certified welder. All welds shall be continuous where length is not given, unless otherwise shown or noted on drawings
- All welds shall develop the full strength of the weaker member. All welds shall be made using E70xx.035 wire
- Shop connections shall be welded unless noted otherwise. Field connections shall be indicated on the drawings. Field welded connections are not acceptable
- All fillet welds shall be a minimum of ¼" unless otherwise noted
- All steel shall be welded shut at terminations to prevent internal leakage
- Internal weld sleeving is not acceptable
- On-site welding of any component is not acceptable

## Sewing

- On-site sewing of a fabric will not be accepted
- All corners shall be reinforced with extra non-tear cloth and strap to distribute the load
- The perimeters that contain the cables shall be double lock stitched

## Installation Hardware

- Bolt and fastening hardware shall be determined based on calculated engineering loads
- All bolts shall comply with SAE-J429 (Grade 8) or ASTM A325 (Grade BD). All nuts shall comply with ASTM F-594, alloy Group 1 or 2
- Upon request, Stainless Steel hardware shall comply with ASTM A-304
- 1/4" galvanized wire rope shall be 7x19 strand with a breaking strength of 7,000 lbs. for shades generally under 575 sq. ft. unless requested larger by the customer. For shades over 575 sq. ft., cable shall be 5/16" with a breaking strength of 9,800 lbs. Upon request, 1/4" Stainless Steel wire rope shall be 7x19 strand with a breaking strength of 6,400 lbs. 5/16" Stainless Steel wire rope shall be 7/19 strand with a breaking strength of 9,000 lbs.
- All fittings required for proper securing of the cable are hot dipped galvanized

## Concrete

- Concrete work shall be executed in accordance with the latest edition of American Concrete Building Code ACI 318 unless specified by the governing municipality
- Concrete specifications shall comply in accordance with, and detailed as, per plans as follows:
  1. 28 Days Strength F'c = 2500 psi
  2. Aggregate: HR
  3. Slump: 3-5
  4. Portland Cement shall conform to C-150

CONCRETE CONTINUED ON NEXT PAGE

5. Aggregate shall conform to ASTM C-33

- All reinforcement shall conform to ASTM A-615 grade 60
- Reinforcing steel shall be detailed, fabricated and placed in accordance with the latest ACI Detailing Manual and manual of Standard Practice
- Whenever daily ambient temperatures are below 80° F, the contractor may have mix accelerators and hot water added at the batch plant (see table)
- The contractor shall not pour any concrete when daily ambient temperature is below 55° F

**Concrete Temperate Chart**

<b>Temperature Range</b>	<b>% Accelerator</b>	<b>Type Accelerator</b>
75-80°	1%	High Early (non calcium)
70-75°	2%	High Early (non calcium)
Below 70°	3%	High Early (non calcium)

## Footings

- All anchor bolts set in new concrete shall be ASTM A-307, or ASTM F-1554 if specified by engineer
- All anchor bolts shall be zinc plated unless specified otherwise
- Footing shall be placed in accordance with and conform to engineered specifications and drawings



# SHADE

BY SUPERIOR RECREATIONAL PRODUCTS

## Shade Structure Material Specifications

### FABRIC SPECIFICATIONS

- Shade fabric is made of UV stabilized cloth manufactured by ALNET or approved equal.
- The high density polyethylene material shall be manufactured with tensioned fabric structures in mind.
- The fabric knit is to be made using monofilament and tape filler which has a weight of 9.38 to 10.32 oz. sq. yd. Material to be Rachel-knitted to ensure material will not unravel if cut.
- Burst strength of 828 lbf (ASTM 3786).
- Cloth meets fire resistance tests as follows:

Alnet Extra Block: California State Fire Marshall Reg. #F-93501

Others: NFPA 701-99 (Test Method 2) and ASTM E-84

### FABRIC PROPERTIES

STRETCH	STENTORED
Tear Tests (lbs/ft)	WARP 44.8 WEFT 44
Burst Tests (lbs ft)	828
Fabric Weight (oz/sqFT)	avg 1.02 to 1.07
Fabric Width	9'-10"
Roll Length	150'
Roll Size	63" x 16.5"
Weight	120 lbs.
Life Expectancy	10 years
Fading	Minimum fading after 6 years, 3 years for red and yellow
Temperature	-77 degrees
Maximum Temperature	+167 degrees

*Continued on Page 2*

- Shade protection and UV screen protection factors are as follows:

**SHADE PROTECTION AND UV BLOCK OUT**

Color	Shade Cover	UVR Block Out
True Blue	93%	89%
Beige	97%	87%
Forest Green	96%	94%
Sun Blaze	94%	91%
Silver	95%	93%
Black	98%	97%
River Gum Green	95%	92%
Sky Blue	95%	94%
Navy Blue	96%	95%
Turquoise	94%	94%
Yellow	76%	94%
Cream	74%	92%

**THREAD**

- Shall be 100% expanded PTFE fiber which carries a 10 year warranty that is high strength and low shrinkage.
- Shall have a wide temperature and humidity range.
- Abrasion resistant and UV radiation immunity.
- Shall be unaffected by non-hydrocarbon based cleaning agents, acid rain, mildew, chlorine, saltwater, and pollution.
- Lockstitch thread - 1200 Denier or equal.
- Chain stitch thread - 2400 Denier or equal.

**STEEL TUBING**

- All fabricated steel must be in accordance with approved shop drawings and calculations.
- All steel is cleaned, degreased or etched to ensure proper adhesion of Superdurable powder coat in accordance with manufacturer’s specifications.
- All Steel used on this project needs to be new and accompanied by the mill certificates if requested. Structural steel tubing up to 5”-7 gauge shall be galvanized per Allied Steel FLO-COAT specifications. Schedule 40 black pipe fabrications shall be sand-blasted and primed as described below.
- All non-hollow structural shapes comply with ASTM A-36, unless otherwise noted.
- All hollow structural steel shapes shall be cold formed HSS ASTM A-53 grade C, unless otherwise noted.
- Plate products shall comply with ASTM A-36.

**SUPERDURABLE POWDER COATING & PRIMING**

- All non-galvanized steel shade to be sand-blasted and primed prior to Superdurable powder coating using reclaimable blast media in a mixture of GL50 & GL80 Steel Grit.
- All non-galvanized steel must be coated with rust inhibiting primer prior to applying the Superdurable powder coat. Primer shall be Marine Grade Cardinal Industrial Finishes Corp. E396-GR1372 epoxy Superdurable powder coating semi-gloss smooth zinc rich primer.

- Welds shall be primed with rust inhibiting primer prior to applying the Superdurable powder coat. Primer shall be Marine Grade Cardinal Industrial Finishes Corp E396-GR1372 epoxy Superdurable powder coating semi-gloss smooth zinc rich primer.
- All steel parts shall be coated for rust protection and finished with a minimum 3.5 mil thick UV-inhibited weather resistant Superdurable powder coating.
- Powder used in the Superdurable powder coat process shall have the following characteristics:

**CHARACTERISTICS**

N.3.1	Specific Gravity	1.68+/-0.05
N.3.2	Theoretical Coverage	114+/- 4 ft 2/lb/mil
N.3.3	Mass Loss During Cure	<1%
N.3.4	Maximum Storage Temperature	75° F

- Superdurable powder coating shall meet the following tests:

**TESTS**

ASTM	Gloss at 60 Degree	85-95
HOI TM 10.219	PCI Powder Smoothness	7
ASTM D2454-91	Over-Bake Resistance Time	200%
ASTM D3363-92A	Pencil Hardness	H-2H
ASTM D2794-93	Dir/Rev Impact, Gardner	140/140 in/lbs
ASTM D3359-95B	Adhesion, Cross Hatch	5B Pass
ASTM D522-93A	Flexibility Mandrel	¼" dia. No fracture
ASTM B117-95	Salt Spray	1,000 hours
UL DtoV2	Organic Coating Steel Enclosures, Elect Eq.	Recognized

- Application criteria:

**APPLICATION CRITERIA**

N.5.1	Electrostatic Spray Cold	Substrate:0.032 in. CRS
N.5.2	Cure Schedule	10 minutes at 400° F
N.5.3	Pretreatment	Bonderite 1000
N.5.4	Film Thickness	3.5 Mils

**WELDING**

- All shop welds shall be executed in accordance with the latest edition of the American Welding Society Specifications.
- Welding procedures shall comply in accordance with the AWS D1.1-AWS Structural Welding Code-Steel.
- All welds to be performed by a certified welder. All welds shall be continuous where length is not given, unless otherwise shown or noted on drawings.
- All welds shall develop the full strength of the weaker member. All welds shall be made using E70xx.035 wire.
- Shop connections shall be welded unless noted otherwise. Field connections shall be indicated on the drawings. Field welded connections are not acceptable.
- All fillet welds shall be a minimum of ¼" unless otherwise noted.
- All steel shall be welded shut at terminations to prevent internal leakage.

- Internal weld sleeving is not acceptable.
- On-site welding of any component is not acceptable.

## **SEWING**

- On-site sewing of a fabric will not be accepted.
- All corners shall be reinforced with extra non-tear cloth and strap to distribute the load.
- The perimeters that contain the cables shall be double lock stitched.

## **INSTALLATION HARDWARE**

- Bolt and fastening hardware shall be determined based on calculated engineering loads.
- All bolts shall comply with SAE-J429 (Grade 8) or ASTM A325 (Grade BD). All nuts shall comply with ASTM F-594, alloy Group 1 or 2.
- Upon request, Stainless Steel hardware shall comply with ASTM A-304.
- 1/4" galvanized wire rope shall be 7x19 strand with a breaking strength of 7,000 lbs. for shades generally under 575 sq. ft. unless requested larger by the customer. For shades over 575 sq. ft., cable shall be 5/16" with a breaking strength of 9,800 lbs. Upon request, 1/4" Stainless Steel wire rope shall be 7x19 strand with a breaking strength of 6,400 lbs. 5/16" Stainless Steel wire rope shall be 7/19 strand with a breaking strength of 9,000 lbs.
- All fittings required for proper securing of the cable are hot dipped galvanized.

## **CONCRETE**

- Concrete work shall be executed in accordance with the latest edition of American Concrete Building Code ACI 318 unless specified by the governing municipality.
- Concrete specifications shall comply in accordance with, and detailed as per plans as follows:
  1. 28 Days Strength F'c = 2500 psi
  2. Aggregate: HR
  3. Slump: 3-5
  4. Portland Cement shall conform to C-150
  5. Aggregate shall conform to ASTM C-33
- All reinforcement shall conform to ASTM A-615 grade 60.
- Reinforcing steel shall be detailed, fabricated and placed in accordance with the latest ACI Detailing Manual and manual of Standard Practice.
- Whenever daily ambient temperatures are below 80° Fahrenheit, the contractor may have mix accelerators and hot water added at the batch plant (see table).

- The contractor shall not pour any concrete when daily ambient temperature is below 55° Fahrenheit.

#### TEMPERATE

Temperature Range	% Accelerator	Type Accelerator
75-80°	1%	High Early (non calcium)
70-75°	2%	High Early (non calcium)
Below 70°	3%	High Early (non calcium)

#### FOOTINGS

- All anchor bolts set in new concrete shall be ASTM A-307, or ASTM F-1554 if specified by engineer.
- All anchor bolts shall be zinc plated unless specified otherwise.
- Footing shall be placed in accordance with and conform to engineered specifications and drawings.

## Shade Warranty

### GENERAL CONDITIONS

The warranty set forth shall be the purchaser's sole and exclusive warranty. All warranties below are effective from the date of delivery by Superior Shade, its subsidiaries, or agents. Superior Shade reserves the right to repair or replace any item covered by this warranty.

- This warranty will be void if the structures are not paid for in full. The warranty is void if the structures are not installed in strict compliance with the manufacturer specifications.
- Purchaser shall notify Superior Shade or its agent in writing detailing any defect for which a warranty claim is being made.
- Superior Shade shall not in any event be liable for indirect, special, consequential or liquidated damages.
- Superior Shade specifically denies the implied warranties of fitness for a particular purpose and merchantability.
- The warranty is void if any changes, modifications, additions or attachments are made to the structures or fabric without the written consent of the manufacturer.
- No signs, objects, ornaments, fans, lights, fixtures or decorations may be hung from the top part of the structure, unless specifically designed and engineered by the manufacturer. These items may interfere with the fabric causing the warranty to be voided.
- 1 year limited warranty on all moving parts and any item not specifically listed above.

### THREAD

Thread shall be 100% expanded PTFE fiber that is high strength and low shrinkage, which carries a 10 year warranty. This warranties that the sewing thread will be free from defects in material and workmanship and will not be damaged by exposure to sunlight, weather and water. All other warranties disclaimed.

### FABRIC

Superior Shade fabrics carry a ten-year limited manufacturer's warranty from the date of delivery against failure from significant fading\*, deterioration, breakdown, outdoor heat, cold, or discoloration. Should the fabric need to be replaced under the warranty, Superior Shade will manufacture and ship a new fabric at no charge for the first six years, thereafter pro-rated at 18% per annum over the last four years.

*\*The colors Red and Yellow are warranted against significant fading for only two years.*

If the corners of the fabric are equipped with both holes in the fabric corner PLUS reinforcing straps, BOTH the strap and fabric hole must be placed over each corner hook or the fabric warranty is void.

Fabric curtains, valences or flat vertical panels are not covered under the warranty.

Fabric is not warranted where it is installed on a structure that is not engineered and built by Superior Shade or its agents.

This warranty shall be void if damage to or failure to the shade structure is caused by contact with chemicals, chlorine, bleaching agents, hydrocarbons or hydrocarbon containing solvents, misuse, vandalism or any act of God, including but not limited to wind in excess of the wind limitations set forth below.

All fabric tops are warranted for sustained winds up to 76mph (hurricane force 1) and for gusts of up to 3 seconds duration up to 90mph. Removal of the shade fabric is required if damaging winds are called for. Damage due to snow and/or ice accumulation is not covered by this warranty. Canopies should be removed during the "off season".

These structures have been designed to eliminate any friction between the rafters and the fabric. The warranty will, therefore, be voided if any modification (temporary or permanent) is made to the rafter, cross pieces or ridge beams, or if the fastening apparatus is not secured accordingly.

Superior Shade reserves the right, in cases where certain fabric colors have been discontinued, to offer the customer a choice of available colors to replace the warranted fabric of the discontinued color. The company does not warrant that any particular color will be available for any period of time and reserves the right to discontinue any color for any reason it may determine, without recourse by the owner of the discontinued fabric color.

## **STEEL STRUCTURE**

The structural steel frames are covered for a period of twenty years against failure due to rust-through corrosion under normal environmental conditions. Workmanship is warranted for a period of five years.

Structures are warranted for winds up to 90 mph only if shade canopies have been removed as per requirement set forth above in the fabric paragraph. Removal and re-installation must be performed by a qualified person or authorized dealer following the instructions in APPENDIX A below.

This steel warranty shall be void if damage to the steel frame is caused by the installer or from physical damage, damage by salt spray or sprinkler systems, contact with chemicals, chlorine, pollution, misuse, vandalism, or any act of God.

## **SUPERDURABLE POWDER COAT FINISH**

The limited warranty for powder coating provides for the following after a five year exposure period when applied according to the recommendations listed on the product's technical data sheet and appropriate surface preparation has been utilized.

- The coatings shall retain their original color with a  $\Delta E$  of  $< 7.5$  units for high chroma colors, (Yellows, Reds, Oranges, Etc.) and a  $\Delta E$  of  $< 5.0$  units for low chroma colors, when tested in accordance with ASTM D 2244.
- The coating shall retain a minimum of 50% of its original gloss level after washing, when tested in accordance with ASTM D 523.
- The coating shall exhibit chalking no worse than a numerical rating of 6, when evaluated in accordance with ASTM D 659-80.

## **ACTS OF NATURE**

This warranty does not cover natural disasters, such as earthquakes, shifts of terrain, or tornadoes. If the structure is installed in an area exposed to hurricanes, removal of the shade fabric is required when a hurricane warning is issued.

# **Appendix A: Proper Care, Maintenance, and Safe Removal of the Shade Canopy**

## **AVOID**

**SNOW, ICE, AND HIGH WINDS:** Remove the canopy in winter conditions as ice and snow loads are not covered by the warranty. The same goes for winds in excess of hurricane force 1.

**SHARP OBJECTS:** Always avoid dragging the fabric across surfaces, etc. Roll or fold the fabric and carry it. Avoid sharp objects, bolts, snags, and other protrusions including mounting hardware.

**OBSTRUCTIONS:** Keep foliage, such as tree limbs, shrubbery, and bushes, trimmed back and away from fabric at least three to four feet.

**SOURCES OF HEAT:** Avoid contact with heat sources such as hot lights, torches, and avoid using grills, etc. under the fabric.

## **CLEANING THE FABRIC**

The fabric itself is generally maintenance free with the exception of necessary removal due to weather or seasonal requirements. The fabric does not harbor mildew or mold, but residues such as tree sap, leaves, bird droppings, dust and dirt may need to be

removed. To clean the fabric, use water and mild soap. A soft mop or soft broom may also be used. Cleaners that do not contain hydrocarbons, solvents, bleach or ammonia may be used. Use of solvents, hydrocarbons, bleach, and ammonia type cleaners will void the fabric warranty. A pressure washer may be used if necessary using a wide-spray nozzle.

## **CABLES AND HARDWARE**

It is recommended that the cables be replaced every 3 to 4 years or if corrosion is visible, whichever comes first. The cable ends must be wrapped with tape to secure any wires; thus, preventing the wires from tearing the fabric. Taping must be done when removing old cable as well as when installing new cable. Clamps should be replaced when the cable is replaced. If the cable appears slack on a still day (no wind), immediately have the cable and clamps re-tightened by a qualified person. The cable should not be slack.

## **GLIDE ELBOW™**

Lubricate Glide Elbows™ annually and before operating. A waterproof grease is recommended such as a lithium-based grease or anti-seize thread lubricant.

## **STORAGE**

Fabric must be stored in a clean, dry place free from snags, sharp edges, etcetera. The storage area must be rodent-free. Wrap all hardware fittings with rags or some other protector, as they can damage the fabric.

## **UNINSTALLING THE SHADE CANOPY**

**NECESSARY CARE:** It is important to take necessary care when handling the fabric during removal and installation to prevent damage to the fabric as well as SAFE control of the fabric in a breeze or wind. The fabric is tough and engineered for use as a shade, but it can tear or cut when or if pulled over a snag or sharp item; it can puncture from bolts or other protruding objects; and it can melt from objects such as like cigarettes, matches, hot torch tips, sparks and the like. In addition, care must be exercised to avoid the fabric hooks after the fabric is unhooked from the elbow corners and sides of the structure where there are intermediate supports. It is best to wrap any connected mounting hardware to prevent it from harming the fabric.

**PROPER AND SAFE:** Based on the size of the canopy, several persons may be needed to properly and safely handle the fabric during the uninstalling process. You will need several commercial ladders or other means to work safely at heights such as scissor lifts, etc. It is advised that you pad the post side of the ladder and tie the ladder to the post. The pad is to protect the post finish. Also keep in mind that every 100 square feet of fabric (10' X 10') weighs approximately five pounds; a large canopy can get heavy fast. For proper control of the fabric, read below. It is best to remove the fabric on a still day. Do not attempt to remove the canopy in strong or gusty winds.

**REMOVAL OF THE CANOPY:** Do not attempt to remove the canopy in strong or gusty winds.

**STANDARD ELBOWS:** For shade structures with Standard Elbows, loosen the turnbuckle several turns in order to put enough slack in the cable to allow the fabric and cable to unhook from all the elbow hooks. Attach 3/8" or larger ropes to each corner of the fabric and cable before unhooking to secure and properly control the fabric from ground level. If uninstalling in breezy conditions, choose the windy side of the fabric and tie these corners to the posts with the ropes with enough slack to allow for unhooking the fabric from the structure. These ropes are to prevent the shade from flying away in the breeze and to help prevent injury to ground personnel. Once the corners have been secured to the posts, unhook the fabric and cables from each corner.

On the side away from the wind, release the corners of the fabric and cable and have a person hold on to each rope. It may help to wrap the rope around a column to help hold it from getting caught in the wind. Fold the fabric back away from the hooks. Now it will be necessary to remove the cable clamps to allow the cable to be free from the structure and the turnbuckle. If the cable ends are frayed, wrap them with tape. It is usually not necessary nor is it recommended that the cable be removed from the canopy. With a person on each rope, starting at the windy side, gently pull the canopy down in between the framework of the structure. The side away from the wind can be guided with the ropes toward the persons pulling the canopy down.



It is important when reinstalling the canopy, that it is put back in its original orientation to the structure. Starting at the turnbuckle corner, the fabric and cable corners should be returned to their original positions.

**GLIDE ELBOWS:** For shade structures with Glide Elbows, remove the protective covers from the ends of the glide elbows. Then, using the proper wrench, turn the hex nuts on the end of the Glide Elbow to run the glide hooks to their top most position. Do not loosen the cable clamps, leave the cable intact. Attach 3/8" ropes to each corner of the fabric and cable before unhooking to secure and properly control the fabric from ground level. If uninstalling in breezy conditions, choose the windy side of the fabric and tie these corners to the posts with the ropes with enough slack to allow for unhooking the fabric from the structure. These ropes are to prevent the shade from flying away in the wind and to help prevent injury to ground personnel. Once the corners have been secured to the posts, unhook the fabric and cables. On the side away from the wind, release the corners of the fabric and cable and have a person hold on to each rope. Fold the fabric back away from the hooks. It is a good idea to put the Glide Elbow protective covers back in place. With Glide Elbow installations it is not necessary to loosen or remove the cable clamps nor to remove the cable from the canopy. If the cable ends are frayed, wrap them with tape.

When uninstalling the canopy, mark or identify the corner of origin in such a way that when reinstalling the canopy, it is put back in its original orientation to the structure. The fabric and cable corners should be returned to their original positions when reinstalling the canopy. The cable and fabric should tighten properly when the glide elbows are adjusted down into their tension positions.

**SHADE SAILS WITH FANS:** For shade sails equipped with fans, loosen the adjustable threaded rod several turns in order to put enough slack in the cable to allow the shackle pin to be removed (do not remove the pins until the fabric corners have been secured with ropes). Attach 3/8" or larger ropes to each corner of the fabric and fan before unhooking to secure and properly control the fabric from ground level. If uninstalling in breezy conditions, choose the windy side of the fabric and tie these corners to the posts with the ropes with enough slack to allow for unhooking the shackle from the structure. These ropes are to prevent the shade from flying away in the breeze and to help prevent injury to ground personnel. Once the corners have been secured to the posts, unhook the shackles and lower the fabric and cable to the ground.

## **REINSTALLING HINTS**

Using the same rope technique, install from the windy side (if it is breezy) making sure to secure these ropes to the posts. Then, throw the remaining corner ropes over the structure and gently pull the canopy into position. The cables and fabric corners can now be fastened on the hooks (and cable guides if so equipped). Next reinstall the clamps if applicable and tightened the cable with the turnbuckle or the Glide Elbows. Do not attempt to install the canopy in strong or gusty winds.