The Solar Series™
Shade Specifications

The Solar Series offers a variety of aesthetic choices that give you sun protection, artistry in pattern, and airflow, like sitting under a shade tree.

**FRAMED SHADE STRUCTURE**

*Framed structures are ideal for defined spaces, edges, and rectilinear forms.*

![Framed corner view from top](image)

12’ x 15’ x 9’
Outside dimensions

![Framed corner view from bottom](image)

15’ x 20’ x 9’
Outside dimensions

**UNFRAMED SHADE STRUCTURE**

*Unframed structures are defined by organic forms creating a sense of unrestricted openness.*

![Unframed corner view from top](image)

12’ x 15’ x 9’
Outside dimensions

![Unframed corner view from bottom](image)

15’ x 20’ x 9’
Outside dimensions

8’ x 11” x 9’
Inside dimensions

11’ x 16” x 9’
Inside dimensions

*Note: Base plates are below grade.*

Updated 02/13/20
The Solar Series™ SHADE SPECIFICATIONS

**SHADE LOAD AND PRESSURE RATINGS**

<table>
<thead>
<tr>
<th>Rating</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated wind pressure with no snow</td>
<td>50 psf</td>
</tr>
<tr>
<td>Rated wind pressure with 20 psf snow</td>
<td>33.3 psf</td>
</tr>
<tr>
<td>Rated wind pressure with 30 psf snow</td>
<td>16.7 psf</td>
</tr>
</tbody>
</table>

**50 psf design wind pressure is equivalent to**
- 180 mph for Exposure B (in larger cities/urban areas)
- 148 mph for Exposure C (in suburban areas)
- 135 mph for Exposure D (in rural/flat areas)

**33.3 psf design wind pressure is equivalent to**
- 147 mph for Exposure B (in larger cities/urban areas)
- 121 mph for Exposure C (in suburban areas)
- 110 mph for Exposure D (in rural/flat areas)

**16.7 psf design wind pressure is equivalent to**
- 104 mph for Exposure B (in larger cities/urban areas)
- 86 mph for Exposure C (in suburban areas)
- 78 mph for Exposure D (in rural/flat areas)

**STRUCTURAL DESIGN**

- Opening percentage for patterns can be provided once the pattern is determined.
- Commercial grade warranty on defects, structure, and finish.
- All metals protected with minimum 2-coat corrosion resistance or non-corrosive metals.

**Load and pressure rating notes:**
The load and pressure ratings listed only reflect the Parasoleil pre-engineered Solar Series framed and unframed shade structures. Values in the shade and screen tables are based on ground level installations. Reference AISC 360 and ASCE 7-10.

**INSTALLATION**

- Solar Series panel installation methods are based on IAPMO UES EVALUATION REPORT 0488 used for Parasoleil product certification.
- Solar Series installation methods based on patented PFL bracket system that has been IAPMO certified for wind and snow loads.
- Hardware list and installation instructions provided.
- Overall installed height of Solar Series product assemblies are based on base plate/anchor bolt connections located 4" below the finish surface.
- For ease and efficiency of anchor bolt installation, a “drill and epoxy” method is intended over “cast-in-place” to minimize the risk of misaligned anchor bolts. Anchor bolt and epoxy specifications are to be provided by contractor or project engineer.

For specific product engineering calculations, call us at 303.589.4524 or email hello@parasoleil.com.

**PERMITTING**
For your reference and for permitting purposes, Parasoleil provides a complete set of pre-engineered fabrication drawings and specifications of the assembly with each order, to be combined with the permit set and wet-stamped by owner’s engineer of record. Site specific footing details including anchor bolt specifications must also be provided by engineer of record.

**FRAMED SHADE STRUCTURE**

<table>
<thead>
<tr>
<th>Component</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>COLUMN</td>
<td>6” x 6” x 9’8” tube steel</td>
</tr>
<tr>
<td>BEAM</td>
<td>4” x 6” tube steel</td>
</tr>
<tr>
<td>PURLIN</td>
<td>2” x 3” tube steel</td>
</tr>
<tr>
<td>FINISH</td>
<td>Proprietary powdercoat with zinc primer (UV stable and corrosion resistant)</td>
</tr>
<tr>
<td>PANEL</td>
<td>1/8” aluminum with proprietary powdercoat</td>
</tr>
</tbody>
</table>

**UNFRAMED SHADE STRUCTURE**

<table>
<thead>
<tr>
<th>Component</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>COLUMN</td>
<td>4” x 6” x 9’8” tube steel</td>
</tr>
<tr>
<td>BEAM</td>
<td>8” H x 6” W steel angle</td>
</tr>
<tr>
<td>PURLIN</td>
<td>2” x 3” tube steel</td>
</tr>
<tr>
<td>FINISH</td>
<td>Proprietary powdercoat with zinc primer (UV stable and corrosion resistant)</td>
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<td>PANEL</td>
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