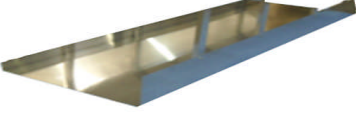










## SolarRac2

### A Division of PV Thermal Solar

---

### Parts Identifier List

	10 Foot Ballast Pans
	Customized Ballast Pans
	Splice Plates (15° and larger systems)
	Long Connection Angle pre-drilled (dot marks N end)
	Angle Clips for Long Connection Angles Pre-drilled
	Inner-Row Connectors Pre-drilled
	Struts
	Grounding Clips
	Bolts, Nuts, Star Washers necessary for complete SolarRac2 installation

Contact: Michael Moulder  
 Phone: (302) 322-2610  
 Email: [info@pvthermalsolar.com](mailto:info@pvthermalsolar.com)

PV Thermal Solar  
 200 Center Point Blvd. Suite D  
 New Castle, DE 19720

**SolarRac2**  
**A Division of PV Thermal Solar**

---

## **Installation Instructions**

**NOTE: Only one grounding lug required per array – up to 660 panels!** That is equivalent to 165 kW of 250 watt panels. Every joint (between two ballast trays) must have a Long Connection Angle or Inner-Row Connector attachment in order to maintain grounding. Extra bars could be used (and identified on drawing) for uneven rows.

Leave a 1/2” gap between ballast trays and modules.

Install ballast only after row is secure with Long Connection Angle or Inner-Row Connector as identified on drawing.

All parts are pre-drilled except for ballast tray connection to allow for roof undulations.

*(Continue to Pages 3 and 4 for Team Instructions)*

## SolarRac2

### A Division of PV Thermal Solar

---

## Installation Instructions – TEAM ONE

Use 5/16” drill bit for all drilling and 7/16” mag socket and open end wrench

### 1. To Begin TEAM ONE:

- Set string line North and South, East and West.
- Lay out long connection angles according to mechanical drawing.***
- Attach angle clip to pre-drilled location on long connection angle.
- Place first row of ballast trays in place leaving a ½” gap between trays.
- Fasten clip angle by drilling into ballast tray and fastening with bolt, 2 star washers and nut to clip angle.
- Place second row of ballast trays in place and fasten clip angle as in previous step.
- Place third row of ballast trays in place and fasten clip angle as in previous step.
- 10 degree tilt system continue to next  bullet.** Complete “O” bullets for 15 degree systems or greater:
  - Attach ballast tray splice to ballast trays.
  - Position tray splice over top of ballast tray equally between each ballast tray. Use a ratchet clamp to hold tray splice in place.
  - Drill one hole on through tray splice and into each ballast tray.
  - Attach bolt, 2 star washers a nut into each hole.
- Add ballast to first three rows and continue with placement of trays, angle clips and inner-row connectors according to mechanical drawing. (See inner-row connector assembly in step 2.)

### 2. Inner-row connectors (specified on mechanical drawing):

- Place next row of ballast trays in place.
- Connect with inner-row connector (pre-drilled) as necessary to front of last completed row of ballast trays by drilling pilot hole and attach using bolt, 2 star washers and nut per connection.
- Attach to back of back of next row of ballast trays by drilling pilot hole and attach using bolt, 2 star washers and nut per connection.
- Repeat for next row continuing until you the inner-row connectors and trays have been assembled.

### 3. Attach panel/strut assembly as completed by Team Two.

Contact: Michael Moulder  
 Phone: (302) 322-2610  
 Email: [info@pvthermalsolar.com](mailto:info@pvthermalsolar.com)

PV Thermal Solar  
 200 Center Point Blvd. Suite D  
 New Castle, DE 19720

# SolarRac2

## A Division of PV Thermal Solar

### Installation Instructions – TEAM TWO

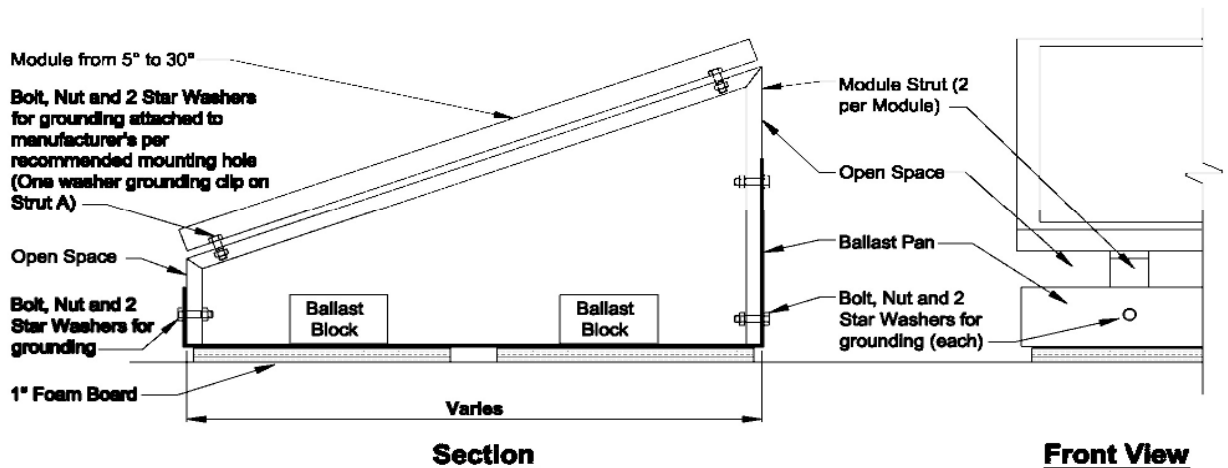
Use 5/16” drill bit for all drilling and 7/16” mag socket and open end wrench

#### 1. Panel Connection with Grounding Clip:

- Lay module upside on a saw-horse protecting module
- Panel Connection - **Attach Strut A** with Grounding Clip (*Strut A must be the same location on ALL modules*)
  - Panel Connection - 1 Washer Grounding Clip (included) between panel and strut.
  - Strut connected with bolt, 2 star washers and nut to panel manufacturer’s recommended mounting holes.
- Panel Connection - **Attach Strut B** (*Strut B must be the same location on ALL modules*)
  - Bolt, nut and 2 star washers per connection to panel manufacturer’s recommended mounting holes.

#### 2. Ballast Pan Connection:

- Flip module/strut assembly back to upright position
- Ballast Pan Connection to **Strut A and Strut B**
  - Place all modules with struts into ballast trays completing the row.
  - Maintain a ½” gap between panels.
  - Drill hole thru strut and ballast tray keeping hole distance equally spaced; **one front connection; two back connections.**
  - Connect struts to ballast tray using bolt, nut and 2 star washers (providing grounding path) per connection.



A
**SR2 Installation Detail**  
 SCALE: 1 1/2" = 1'-0"

Contact: Michael Moulder  
 Phone: (302) 322-2610  
 Email: info@pvthermalsolar.com

PV Thermal Solar  
 200 Center Point Blvd. Suite D  
 New Castle, DE 19720