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# Roof Attachment with Strut – EcoFoot2+ and EcoFoot5D Installation Guide Addendum

## **Overview of Attachment System**

Follow the attachment instructions to mechanically attach EcoFoot5D and EcoFoot2+ to the roof. Photos show EcoFoot2+ and also apply to EcoFoot5D. When fully attaching EcoFoot5D, the Mid-Support and Ballast Tray are not required. The Mid-Support may be used for high snow loads. For systems not using Mid-Supports, complete the row to row bonding using the 38" Bond Jumper or by installing a Ground Lug on each row connected by copper wire.



#### **Hardware Kits**









### Sold Separately, Available from Ecolibrium Solar

Strut, 1-5/8" x 1-5/8" (Length specified on array layout)



Roof Attachment\*
(Specified based on roof type)



# **Torque Settings**

14 ft-lbs. for fasteners

### **Tools Required**

1/2" Deep Socket 9/16" Deep Socket 1/2" Box End Wrench Calibrated Torque Wrench Impact Drill **Available by Others** 

available by others. Check with building engineer or attachment manufacturer for screw requirements.

\*Roof Attachments require roofing screws,

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# **Attachment with Strut - Instruction**

Strut runs North/South under PV modules, near the center of the module, placed as indicated on array layout. Strut does not connect to EcoFoot2+ Bases. Strut is attached to Roof Attachment, low or south edge of PV modules and Wind Deflector.

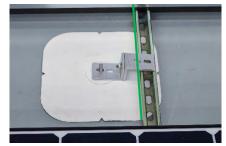
**Tip:** Steps 8, 9 and 10 vary depending on which Roof Attachment you are using. Use the guidelines for your specific Roof Attachment.



 Position Strut under and near center of PV module in line with center slots on Wind Deflector. Position Strut throughout the array as shown on array design layout.



2. Determine which side of Strut you will install Roof Attachment. Roof Attachment can be installed on either side.



3. Place Roof Attachment within 1.5"- 4" from attachment-side edge of Strut, illustrated by green line.



 Slide Strut away and install Roof Attachment per manufacturer's instructions.



5. Slide Strut back into position over Roof Attachment.







6. Assemble Clamp components as shown. Attach South row Module Clamps onto Strut and Modules. Place Strut Nut into Strut channel. Slide Clamp to Module Frame. Tighten Bolt to 14 ft-lbs.

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7. Using Strut Strap Components shown, attach North row Strut Strap to Wind Deflector and Strut. Place Bolt behind Wind Deflector and bottom of Strut Strap in Strut channel. Tighten Bolt to 14 ft-lbs.

**Tip:** For easier Strut Strap installation, loosen Wind Deflector Clamp bolts and lean Wind Deflector away from Clamp. Install Strut Strap, then reposition and reattach Wind Deflector.

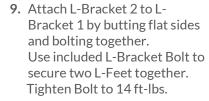






8. Attach L-Bracket 1 to Roof Attachment. Place long side of L-Bracket on Roof Attachment and secure L-Bracket 1 to Roof Attachment with Bolt. Tighten Bolt to 14 ft-lbs.

Important: If you are using OMG Roof Attachment, see guidelines on the next page for correct installation of L-Bracket 2.



10. Attach L-Bracket 2 to Strut. Place L-Bracket 2 on Strut and secure with L-Bracket Bolt. Tighten Bolt to 14 ft-lbs.

**Note:** When using U-Anchor Roof Attachment, the short side of L-Bracket 2 butts to the short side of L-Bracket 1, as shown above.



11. Repeat Step 7 as needed to attach North row Wind Deflector to Strut.

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## Steps 8, 9 & 10 for OMG Roof Attachment



8. Attach L-Bracket 1 to Roof Attachment. Place short side of L-Bracket on Roof Attachment and secure L-Bracket 1 to Roof Attachment with Bolt. Tighten Bolt to 14 ft-lbs.

Important: If you are using U-Anchor Roof Attachment, see guidelines on previous page for correct installation of L-Bracket 2.



9. Attach L-Bracket 2 to L-Bracket 10. Attach L-Bracket 2 to Strut. 1 by butting flat sides and bolting together. Use included L-Bracket Bolt to secure two L-Feet together. Tighten Bolt to 14 ft-lbs.



Place L-Bracket 2 on Strut and secure with L-Bracket Bolt. Tighten Bolt to 14 ft-lbs.

Note: When using OMG Roof Attachment, the short side of L-Bracket 2 butts the long side of L-Bracket 1, as shown above.

#### Strut Installation Note

Per the array layout plan, Strut attachment locations may cover one or two or more modules per attachment location. Strut length and number of connected modules are specified on the array layout. Strut may need to be cut to meet the attachment requirements in the project's Layout Plan or engineering report.

# **Field Support Contact Information**

Ecolibrium Solar proudly offers dedicated engineering expertise and superior customer support. For questions about the installation procedures or a specific application, please contact our Field Support Specialists at 866-488-6794 or FieldSupport@EcolibriumSolar.com.