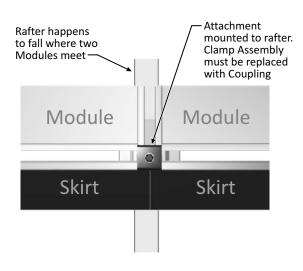
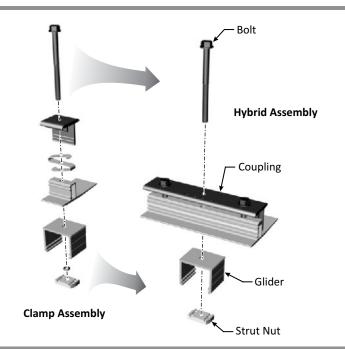
# Clamp/Coupling Hybrid

The Clamp Assembly may be reconfigured utilizing a Coupling when a rafter falls where two Modules meet.



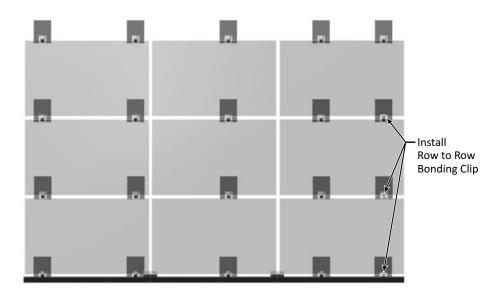


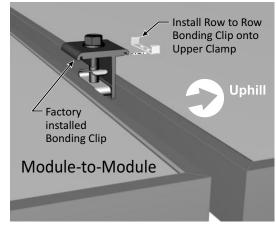
## **Bonding**

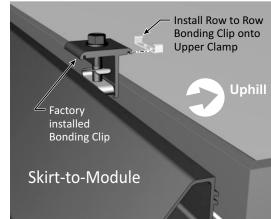
Install a row to row Bonding Clip on one Clamp in each row of Attachments.

See the EcoX Installation Guide for more details and alternative bonding methods.

Row to row bonding of 32mm modules is done with a bonding jumper that is tested to UL2703 (see the EcoX Installation Guide for more details).







## Thermal Gap

To prevent excessive thermal movement in an array, thermal breaks should be installed for arrays longer than 35 feet.

\*See Appendix B of the EcoX Installation Guide for more details.

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# Installation Tips & Quick Reference



This is not an installation guide or manual. This is a quick reference of helpful tips, key measurements, and reminders about certain EcoX features that can make installation fast and easy. This reference does not include all the necessary instructions to safely and properly install EcoX.

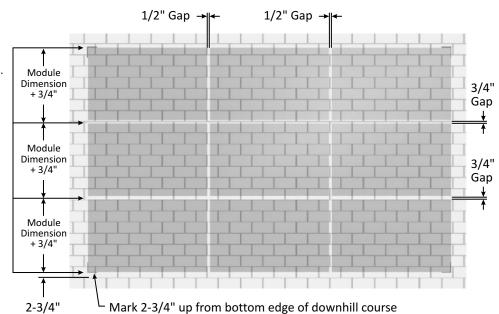
For complete instructions read the EcoX Installation Guide prior to installation; it can be requested at fieldsupport@ecolibriumsolar.com or by calling 866-488-6794

Please contact the Field Team at Ecolibrium Solar with any questions about EcoX or about any specific project.



## Layout

- For the first row of attachments, mark 2-3/4" up from the bottom edge of shingle.
- Measure module dimension plus 3/4" up for each row on each side of the array.
- Snap chalk lines for rows of attachments
- Follow rafter spacing according to job specific engineering documents.
- Designers can request a link to the EcoX Estimator.



Align Clamp Assembly

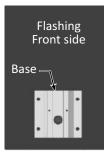
to string, leaving gap

#### **Attachments**

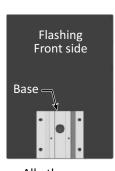
Drill 3/16" pilot holes 4-1/4" deep into rafters.



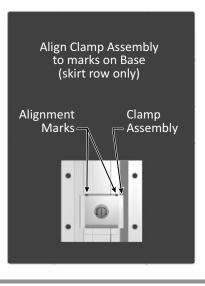
∠ Apply sealant in a horseshoe pattern on back of flashing.



Install skirt row with offset hole of Base is downhill.



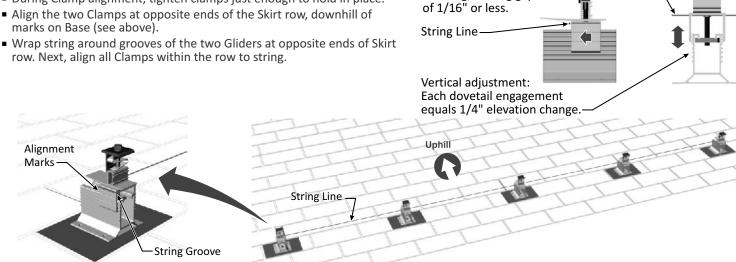
All other rows (no Skirt) offset hole of Base is uphill



String

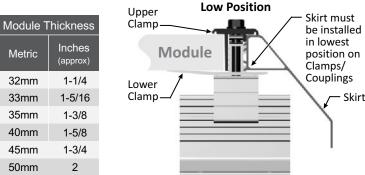
## String Line

- During Clamp alignment, tighten clamps just enough to hold in place.
- marks on Base (see above).
- row. Next, align all Clamps within the row to string.



#### **Skirt Installation**

- Measure thickness of Module frame then install Skirt in corresponding height setting. Install one Skirt at a time.
- Tighten Clamp to 14 ft.-lbs. Slide Coupling on to join Skirts. Set Coupling to same height as Clamps. Tighten Couplings to 14 ft.-lbs.
- Install one Module per landscape Skirt and two Modules per portrait Skirt. In portrait, install (centered) one Coupling per Skirt.



Couplings

33, 35 & 45mm Skirt Position

**High Position** Module Skirt must be installed in upper position, one groove up from the bottom of Clamps/Couplings 40 & 50mm Skirt Position

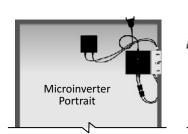
Slide Coupling

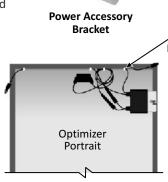
by next Skirt.

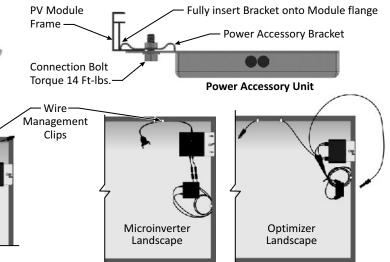
onto Skirt, followed

**Module Preparation** 

- Prepare modules on the ground while attachments are being installed.
- Use the Power Accessory Bracket to install power conditioning units and wire management clips to secure conductors.

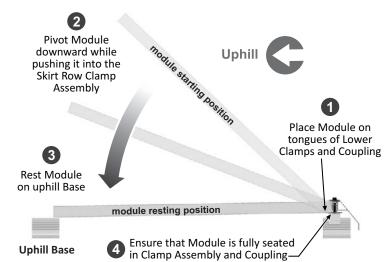


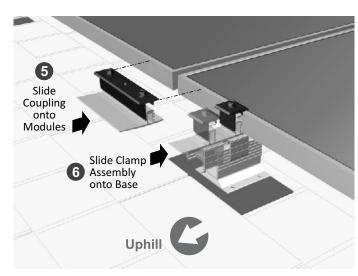




#### Module Installation

Follow these steps for quick and easy module installation.





Note: Refer to EcoX Installation Guide for tightening sequence and torque values.

Field Support Line: 866-488-6794 Field Support Line: 866-488-6794 January 2016, Rev 1.0 January 2016, Rev 1.0