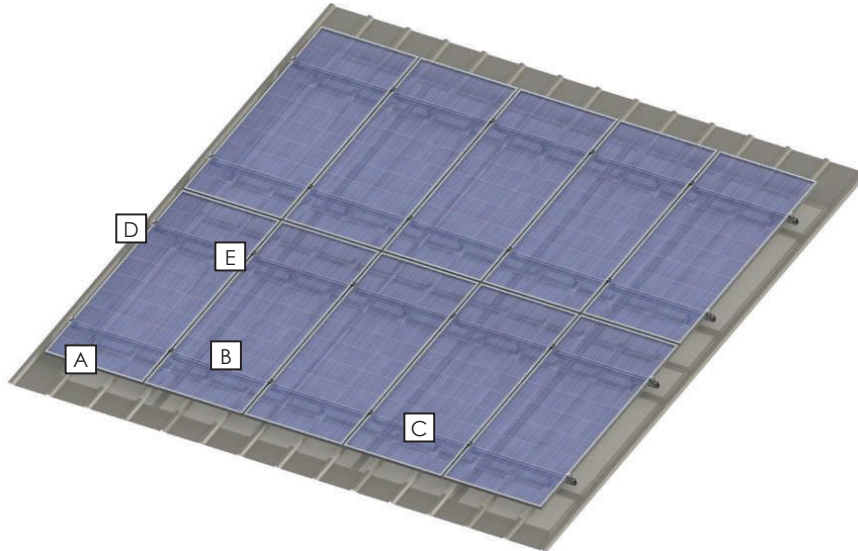
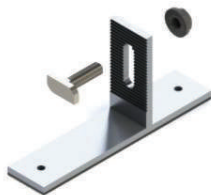


Installation Instructions:
 alSkye Metal Roof Mounting System
 *For framed PV-modules in portrait orientation



System Component List:

A Angle Plate
 For fastening rail to metal roof deck



B Rail 13/60
 For mounting solar modules



C HatiBond Splice 13
 For connecting rails



D End Clamp
 For clamping module to rail



E Mid Clamp
 For clamping module to rail



Hardware:

#12-14X1 SS 18-8 Self-Drilling Screw Hex Washer Head with Bonded Washer
 For connecting angle plate to metal roof deck



WEEB and WEEB Lug (optional)
 For electrical grounding of the system



Tool Requirements:

Open Ended Wrench
 Size: 13mm



Cordless Screwdriver



Metric Allen Wrench
 Size: 5mm



5/16" Socket Driver
 Size: 8mm

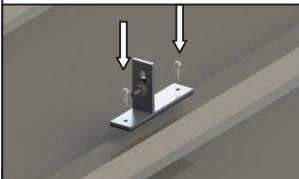


Other requirements:
 - Metal deck 22ga or heavier

These mounting instructions reflect the state of technology and our experience in how to install our systems on site. Due to the individual characteristics of each roof, we highly recommend commissioning a professional assessment before beginning the installation.

Step 1: Angle Plate to metal deck

HatiCon Solar's aISkye metal roof mounting system must be attached to an approved metal roof deck 22 ga or thicker.

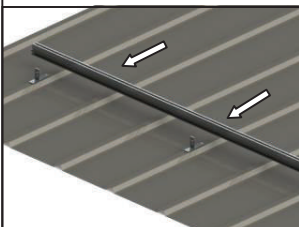


Note: Refer to design layout regarding Angle Plate location. Wrong location will result in improper modules clamping.

Place Angle Plate [A] at center flanges of metal roof deck. Fasten to metal deck using (2) screws with bonded washers. Fasten using cordless drill. **Note:** Keep drill speed under 2500rpm (lowest speed setting) do not overdrive or underdrive when seating the fastener with drill. See picture on the left. Repeat this step until all Angle Plate are fastened per design.

Proper Installation

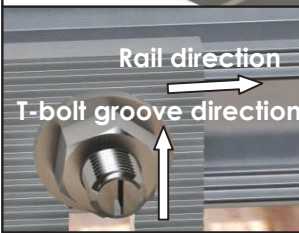
Step 2: Mounting rail to angle plate



Attach the Rail 13/60 [B] to the Angle plate [A]. Insert the T-bolt on the Angle plate into the C-channel on the rail. Turn the T-bolt clockwise until it stops (approx. ¼ turn.)

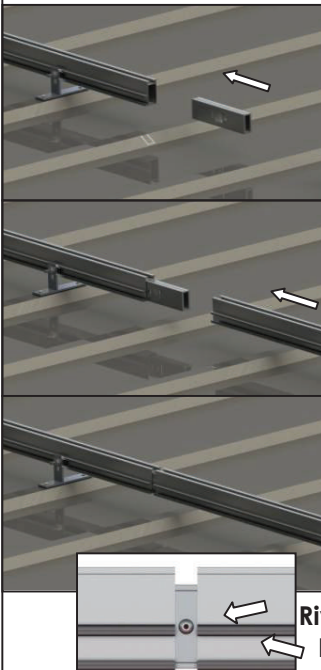
Properly align the T-bolt by ensuring the groove on the bottom of the T-bolt is perpendicular to the direction of the rail (see picture). Tighten Serrated Flange Nut.

Torque: 7 ft-lbs (10 N-m)
 Continue fastening all the rails to the Angle plate until system is completely attached to roof deck.



Rail direction
 T-bolt groove direction

Step 3: Connecting Rails



A HatiBond Splice 13 [C] is required to connect rails together. Slide the rail splice into the first rail until the rivet head stops the splice.

Slide the second rail over the rail splice until the rivet head stops the rail.

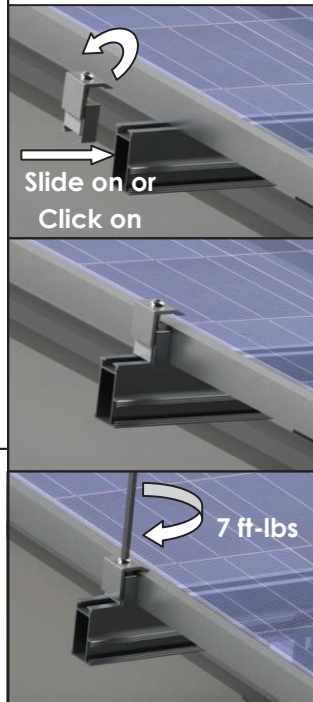
Note: ½" thermal gap with module end clamps are required at 40 feet maximum on center. For details on thermal breaks, please refer to *Thermal Break Instructions*, available online at www.haticonsolar.com or by request.

Note: No through bolt is required for the splice connection.

*In case of re-installing HatiBond splice 13. Insert it backward for optimal performance

Rivet head
 Rail 13/60

Step 4: Module Installation, End Clamps



Slide on or Click on

Place the first module onto the rails and hold in place (installer's means & methods). Slide or click the End Clamp [D] onto the end of the mounting rail and up to the edge of the module frame.

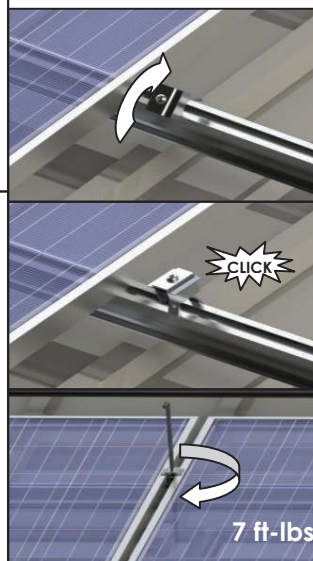
An End Clamp must be attached at each end of the rail on every module row.

Note: Rows must be interrupted every 40 feet with an End-Clamp to allow for thermal expansion.

Tighten the End Clamp [D] by turning the bolt clockwise.

Torque: 7 ft-lbs (10 N-m)

Step 5: Module Installation, Mid-Clamps



Note: For the optional WEEB grounding system, see *Installation Instructions: WEEB Grounding System*, available online at www.haticonsolar.com or by request.

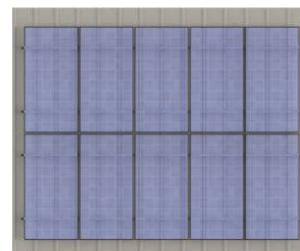
Attach the Mid Clamp [E] by clicking it onto the rail as shown.

Slide the Mid Clamp [E] up to the module. Slide the next module up to the Mid-Clamp and tighten the clamp by turning the bolt clockwise.

Torque: 7 ft-lbs (10 N-m)

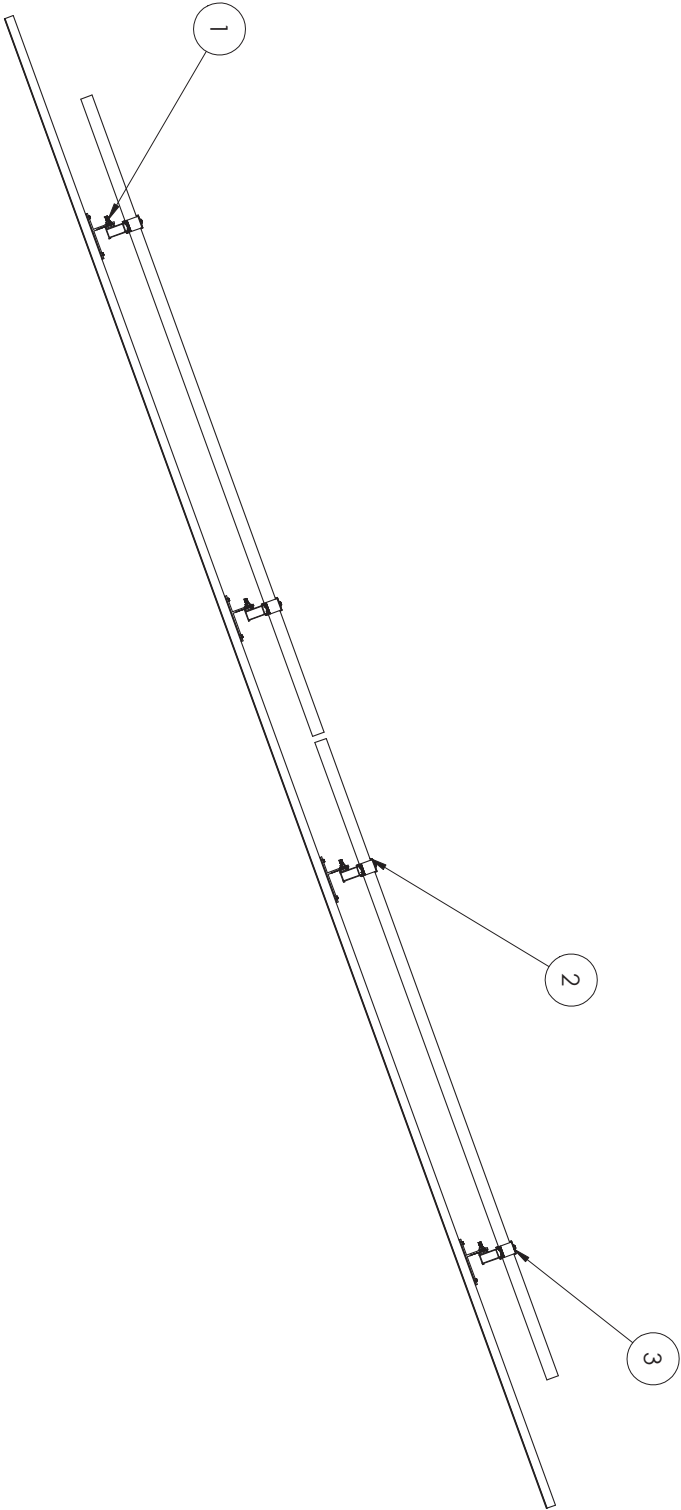
Continue the same process with the rest of the modules in the row.

System Overview



*Optional: Install Micro-inverters between Step3 & Step4
 Installation per manufacturers' installation manual

Haticon Solar Torque Requirement (a/Skyve Metal Roof System)			
Location ID#	Connection	Hardware	Torque Requirement
1	Angle Bracket - Bottom Rail	M8 x 25 MM T-Headed Bolt 18-8 SS	11 lb-ft / 15 N·m
2	Module Mid Clamp	M8 x 35 MM BHCS 18-8 SS	7 lb-ft / 10 N·m
3	Module End Clamp	M8 X35 MM BHCS 18-8 SS	7 lb-ft / 10 N·m



HATICON SOLAR a/Skyve METAL ROOF SYSTEM TORQUE REQUIREMENT ILLUSTRATION (Portrait)

REV	DESCRIPTION	DATE	PROJECT:
			DRAWN: _____ DATE: _____
			CHECKED: _____ DATE: _____
			PROJECT NO: _____
			DRAWING NAME: a/Terrain, a/Life, a/Home, a/Lite System Torque Table
			SHEET SIZE: 11" x 17" SHEET 5 OF 5 DO NOT SCALE DRAWING

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