

Sky Bite Solar Module Grounding Clamp - INSTALLATION GUIDE

Product Features

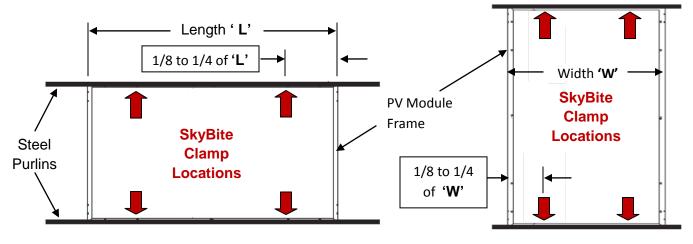
- One Part For Module Attachment & Grounding
- One Part For Varied Module Frame Sizes
- Saves Cost of Additional Grounding Devices
- Eliminates Grounding Lugs and Copper Wire
- Saves Time on Installation Labor & Fasteners
- No 'Top Clamps' Installs from Below Module
- Reusable if Solar Module is Replaced





The SkyBite Grounding Clamp (SBGC) is tested to perform structural fastening and ground bonding of PV module coated aluminum frames to pre-galvanized or painted steel members. Engineered to be in combination with the 'Super SkyPurlin™, by Skyline Solar of AZ. Primarily intended (but not limited) for solar carport structures to attach PV module frames to structural purlins from below the solar array, eliminating safety risks of installing top-clamps from above the module's glass surface while saving time and expense of additional grounding devices. Stainless steel 'teeth' bite the module's frame when secured by the set screw (supplied assembled) completing the ground path and securely holds the module in place. The SkyBite clamp includes a down-leg with a single hole for placement of a #12-14 self drilling screw into the purlin for added strength insuring ground bond integrity while resisting vibration in high winds. The SkyBite's jaw opening accepts a combined thickness of 1/4" inch for PV module frame and purlin.

SkyBite clamp attachment locations can be installed on the *'long side'* or *'short end'* of the solar module's frame lower flange (given the 'short end' frame has a lower flange) in line and parallel to the purlin. Follow the solar module manufacturer's mounting instructions for clamp placement guidelines. SkyBite will allow module frame lower flange widths between 1-1/8" to 1-3/8" inches. Four (4) Clamps are needed per PV module, each located at the manufacturers recommended clamping locations. Adjacent rows of PV modules will share the supporting Super SkyPurlin, which has a dual top flange. The outer rows of modules would be with a single flange purlin (shown in detail next page). Illustrations below are suggested SkyBite clamping locations.

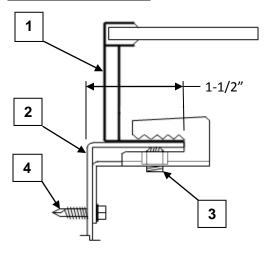


Module in Landscape-Purlins along Frame Long-Sides

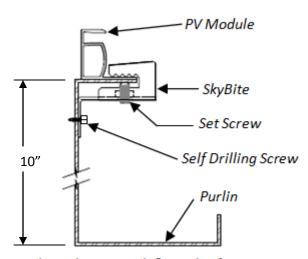
Module in Portrait-Purlins along Frame Short-Ends



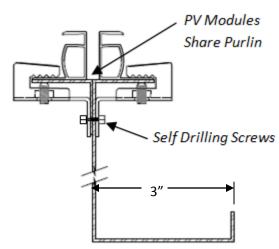
Installation Sequence



- Place PV module squarely on top of the purlins in the orientation as illustrated on the previous page. Allow 1/4" space between all modules
- Align the edge of the PV module frame to the edge 2 of the purlin's 1-1/2" top flange. Adjacent module rows will share purlin with a dual top flange design.
- Place the SkyBite clamp onto PV module frame and purlin 3 flange as show. Adjust screw gun clutch to a setting to achieve 48in-lbs. Tighten set screw using screw gun and 5/32" hex bit driver, check with torque wrench.
- Using the screw gun with a 5/16" magnetic hex driver, adjust the clutch to achieve a torque of 30 to 36in-lbs. Secure SkyBite clamp to the side of the purlin wall with a #12-14 x 3/4" self drilling screw.
- When placing adjacent PV modules, plan for thermal 5 expansion by spacing the modules with a minimum of 1/4" gap in between.



Single Purlin on North & South of Structure



Shared Purlin in Center Rows of Structure

Tools

- A. Battery Powered Drill W/Adjustable Torque Clutch
- B. Magnetic Hex Driver 5/16"
- C. Torque Wrench, 3/8" drive, 0-150in-lbs
- D. 1/4" Hex bit Insert (1" long) 5/32" Hex Drive

Hardware

- E. #12-14 x 3/4" Self Drilling Screw-hex washer head
- F. SkyBite Ground Clamps model SBGC-2 (4/module)









A. Battery Powered Drill

B. Magnetic Hex Driver C. Torque Wrench

D. Hex Bit-5/32"

E. Self Drilling Screw