

# PVKIT<sup>®</sup> 3.0 Installation Instructions

Providing *The Right Way!*<sup>®</sup> to attach virtually anything to metal roofs!



**S-5!® WARNING!** Please use these products responsibly! Visit our website or contact your S-5! distributor for available load test results. The user and/or the installer of these parts is responsible for all necessary engineering and design for the intended use of these parts in an assembly or application. Note that a continuous ground must be followed in accordance with National Electric Code (NEC), ANSI/NFPA 70. Installation in Canada must be in accordance with CSA C22.1, Safety Standard for Electrical Installations, Canadian Electrical Code, Part 1. For UL 2703 Listed assemblies (UL Listed), use only with PV modules rated for a maximum fuse of 25A or less. Prior to installation, contact the local code Authority Having Jurisdiction (AHJ) to determine the proper grounding requirements. Visit [www.S-5.com](http://www.S-5.com) for more details.

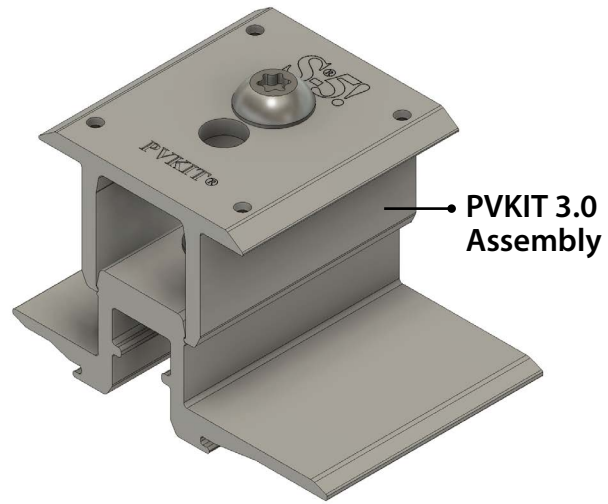


## Included in the Box [Based on One Part]

- ☐ PVKIT 3.0 Assembly\*
- ☐ T30 Torx bit tip

## What You'll Need for Installation

- ☐ String Line
  - ☐ S-5! Clamp or Bracket
  - ☐ Screw Gun
  - ☐ Compatible M8 nut for ProteaBracket™ installations [not provided]
  - ☐ Dial Indicating Torque Wrench\*
- \*For accurate tension values, do NOT use a clicking torque wrench.



## BEFORE YOU BEGIN



Plan the module layout according to the array design. Identify and mark the roof seams or ribs that will receive attachments. Verify the attachment spacing before fastening any clamps or brackets. In these instructions, downslope means toward the roof eave; upslope means toward the roof ridge.

## Wire Management, Bonding and Grounding

Before placing each module, use UL-listed PV wire clips to secure the leads and excess wire to the underside of the module frame. Space the clips to prevent the wires from sagging or contacting the roof. Encase the home run and any exposed wire in a wire tray or conduit. Attach the tray or conduit intermittently to the roof using S-5! clamps or brackets. Module frames within each column are electrically bonded by the PVKIT and have an established ground path. Bond adjacent module columns to each other with a jumper. Attach a UL-listed grounding lug to a module frame at the edge of the array and connect the array grounding conductor.

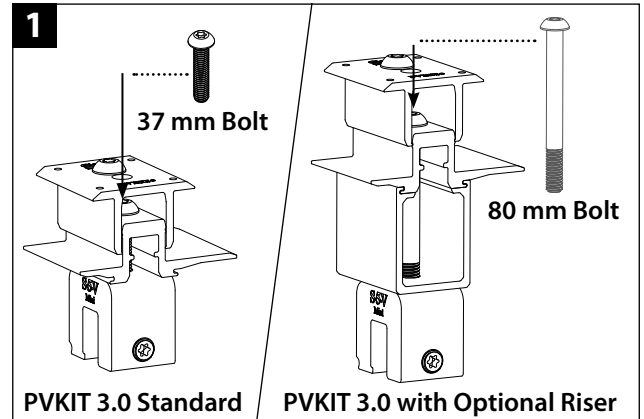
Note: Any S-5! warranty and/or calculation may be void if a third-party structural engineer has not specified the hardware used. Failure to follow a structural engineer's guidance may result in a substandard installation. These instructions are intended for experienced users. Follow safety precautions and use appropriate tools.

S-5! Warning! Please use product responsibly!

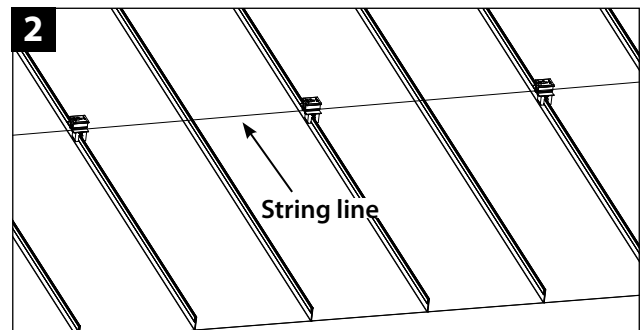
S-5! Warning! Please use this product responsibly! Products are protected by multiple U.S. and foreign patents. For published data regarding holding strength, fastener torque, patents and trademarks, visit [www.s-5.com](http://www.s-5.com). Copyright 2026, Metal Roof Innovations, Ltd. S-5! products are patent protected. S-5! aggressively protects its patents, trademarks and copyrights. 081026

## How To Install PVKIT 3.0

- 1 Attach the PVKIT 3.0 Assemblies to the S-5! Clamps or Brackets:** Using a screw gun equipped with the supplied T30 bit tip, drive the bottom M8 bolt into the clamp or bracket until the assembly is securely fastened. Ensure that the orientation of the PVKIT 3.0 and clamp/bracket are assembled correctly for your roof and application. See clamp/bracket instructions for proper clamp/bracket installation orientation. The longer flange on the PVKIT 3.0 faces upslope, to receive the modules during installation. For clamp installations, thread the bolt directly into the clamp. For bracket installations, install a compatible M8 nut (not provided) and tighten the connection. Tighten the lower M8 bolt to 120-130 inch-pounds (13.6-14.7 Nm).

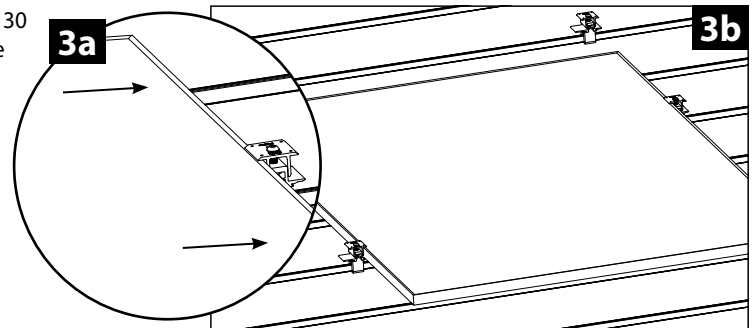


- 2 Install the First Row of PVKIT 3.0 Assemblies:** Attach a PVKIT 3.0 assembly to each clamp or bracket. Beginning at the edge of the array, install one assembly at each end of the row. Stretch a string line between the two end attachments to establish a straight reference line. Install the remaining assemblies along the marked roof seams or ribs according to the array design, the module manufacturer's approved mounting zones and the applicable S-5! installation instructions.



- 3 Install the First Module:** Position the first module within the PVKIT 3.0 grabs, ensuring the module frame is properly seated (3a).

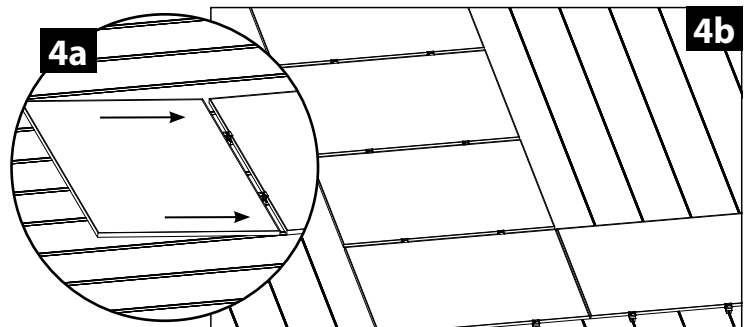
Using the module as a spacing guide, position the next clamp or bracket with the attached PVKIT 3.0 assembly on the roof seam. Install the clamp or bracket according to its S-5! installation instructions. Ensure the grabs are fully seated against the module frame. Once the module is aligned and fully seated, tighten the M8 bolts on the downslope row to 120-130 inch-pounds (13.6-14.7 Nm). Leave the upslope grabs open to receive the next module. (3b).



**PRO TIP** When roof seams or ribs are not perfectly aligned, you can loosen the lower bolt, align the PVKIT 3.0 to the module, and retighten.

- 4 Install the Remaining Modules:** Place the next module into the downslope grabs left open in the previous step. As you lower the module, ensure each grab is fully seated against the module frame. Using the module as a spacing guide, position the next clamp or bracket with the attached PVKIT 3.0 assembly on the roof seam. Install the clamp or bracket according to its S-5! installation instructions. (4a).

Once the module is aligned and seated, tighten the top M8 bolts on the downslope row until the grabs fully engage the module frame. Leave the upslope grabs open to receive the next module. Work vertically up each column, then proceed laterally across the array one column at a time. Repeat this procedure until all modules are installed. (4b).



- 5 Final Tightening and Inspection:** After all modules are installed, verify that every grab is fully engaged with the module frame and that all M8 bolts are tightened to 120-130 inch-pounds (13.6-14.7 Nm). Confirm that the array is straight, secure and free of pinched or unsupported wiring.