BONDING & GROUNDING *Explained*

S-5!® The Right Way

SOLUTIONS THAT SIMPLIFY

Bonding and grounding without the use of rails is simple! With the help of tested, engineered solutions backed by decades of real-world experience, efficient grounding is a breeze. The **PVKIT®** DirectAttach™ rail-less solar roof mount, as well as most S-5! standard and mini clamps, are listed to UL 2703.

Bonding Jumper

MLPE Mount™

Lug

BTCGC4SS

Cable Clips

ACC-F90-1

ACC-F2-90

ACC-F1-270

BALANCE OF SYSTEM (BOS) COMPONENTS

Properly designed BOS components, such as mounting systems, wiring and grounding solutions, ensure that the solar array functions efficiently while maintaining structural integrity and electrical safety. Effective bonding and grounding are essential for preventing electrical faults and ensuring compliance with safety standards. Additionally, streamlined BOS setups can facilitate quick installation and maintenance, ultimately enhancing the longevity and reliability of the solar system. By prioritizing a well-designed BOS, installers can maximize energy production while ensuring safety and code compliance.

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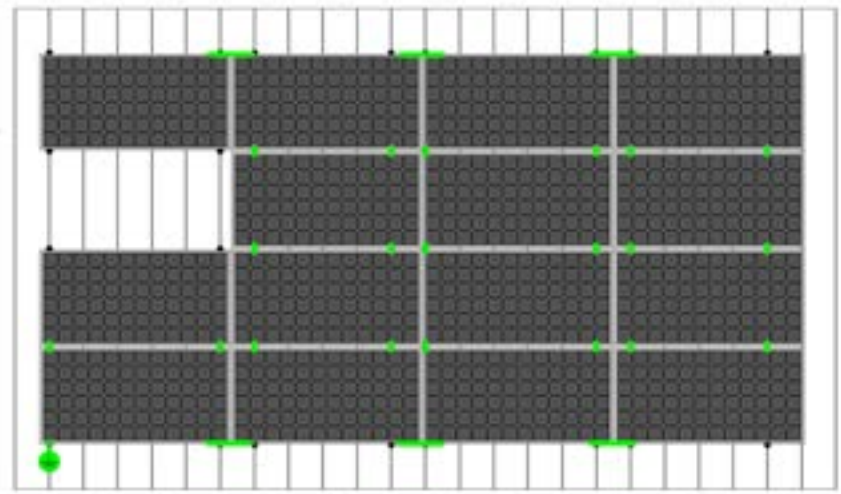
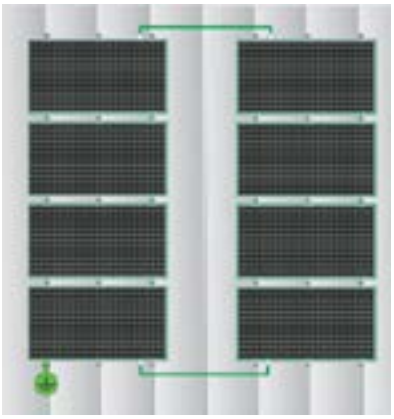
FOR A VIDEO WITH STEP-BY-STEP INSTRUCTIONS

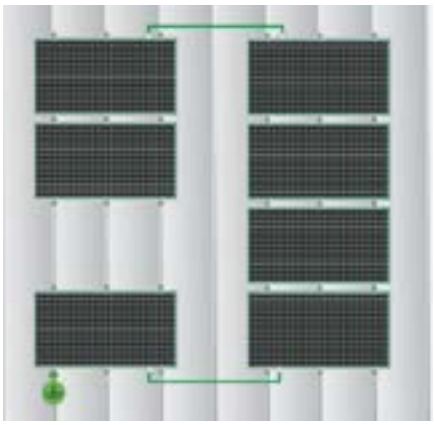
HOW TO *Ground?*

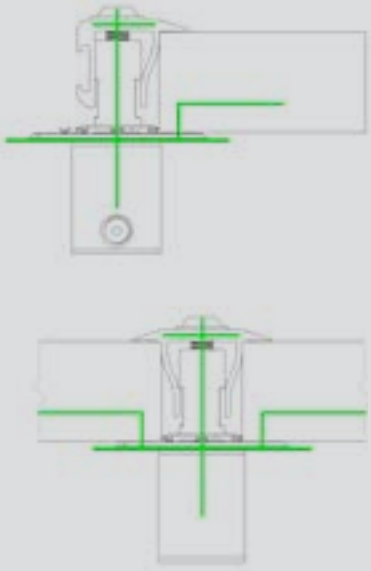


The diagram above shows the continuous grounding path running vertically between PV modules in a column and horizontally between the columns. Removing a module does not interrupt the bonding and grounding path between module frames. The **PVKIT** disk provides electrical continuity along the columns from each module frame to the next. The tops and bottoms of the columns are electrically bonded using either ground lugs and wires or the S-5! bonding jumper.

Once the array is fully bonded, connect it to the system ground using a ground lug. When columns are spaced far apart, as pictured below, they still need to be electrically connected at both the top and bottom to maintain proper bonding. This can be achieved with ground lugs attached to the module frames and wired together. Another lug on the corner module frame can go to the system ground.







The **PVKIT** disk features bonding teeth that penetrate the PV module frame's anodization and electrically bond the column.

A lug attached to the module frame is used to continue the path to the system ground.

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TO ENROLL IN S-5-UNIVERSITY™

Need More Help? CONTACT SUPPORT AT **888.825.3432** OR **support@s-5.com**