

S-5-PV Kit and EdgeGrab™

1. Manufacturer

S-5![®] Attachment Solutions
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CSI Masterformat Categories:
07 72 00 Roof Accessories
26 31 00 Photovoltaic Collectors

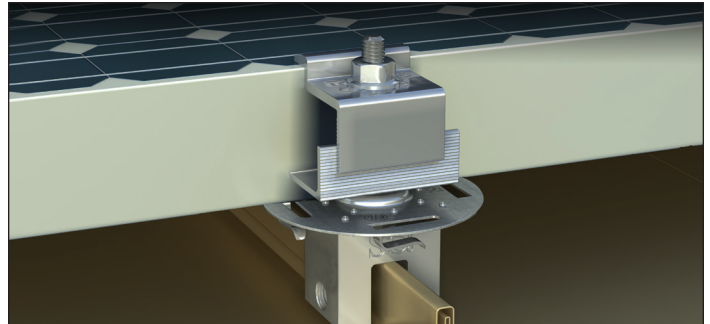
2. Product Description

BASIC USE:

The S-5-PV Kit and EdgeGrab™ are designed to attach solar modules to standing seam metal roofs. Solar modules and photovoltaic arrays can be easily attached and cost effective—without causing damage to the metal roof.

ADVANTAGES:

- The S-5-PV Kit and EdgeGrab enables simple and cost-effective attachment of solar panels and photovoltaic arrays to standing seam metal roofs. The S-5-PV Kit is one of the first solar module mounting solutions in the industry to be listed to the new UL subject 2703, a standard that covers both bonding and mounting. Furthermore, the S-5! Mounting Disk has gained ETL Listing to UL 1703.
- The S-5-PV Kit features a stainless steel mounting disk with twelve nodes designed to ensure module-to-module conductivity of anodized aluminum module frames. This means it automatically provides a ground path in the module frame. No lugs or wires required except to connect adjacent strings of modules to one another and to ground the system. This connection detail represents installed electrical cost savings of \$6–\$12 per unit. In most cases, the savings in time and materials is sufficient to pay for the entire S-5-PV Kit, EdgeGrab, and clamp setup.
- The stainless steel mounting disk can be installed multi-directionally eliminating the use of mounting rails for the solar modules. Four strategically placed under-disk hooks assist in wire management.
- Hundreds of independent laboratory tests have been performed on S-5! attachment clamps across all major roof profiles and manufacturers. No other attachment solution is as lab-tested, time-tested, or durable, with documented strength measured in tons.



- The S-5! attachment clamp does not penetrate the standing seam metal roof panel nor void the roof manufacturer's warranty. The systems utilize round-point setscrews to securely grip the metal roof panel seam without penetrating the weathering membranes. The round-point setscrews mechanically attach to the roof by tightening the setscrews with an industrial-grade screw gun to "dimple" the seam material into a mechanical interlock with the clamp.

PRODUCT TYPES:

S-5-PV Kit and EdgeGrab™

The S-5-PV Kit and EdgeGrab is the most versatile solar module mounting system for all applications. The system utilizes the S-5! attachment clamp which is the most tested and specified standing seam metal roof attachment in the world.

System Components:

- S-5-PV Kit—attaches solar modules within the field condition (between two adjacent panels). It is compatible with most common roofing materials, including brass. It will accommodate PV frame thicknesses of 30–51 mm.
- EdgeGrab—attaches solar modules on the end condition of the panel. It is compatible with most common roofing materials, including brass. It will accommodate PV frame thicknesses of 30–48 mm if serrated L-flange is positioned below the stud's hex nut and 34–51 mm if serrated L-flange is positioned above the stud's hex nut.
- S-5! mini clamps—sold separately from the S-5-PV Kit and EdgeGrab due to the variety of attachment needs. For installation on standing seam metal roofs and tested for specific metal roof manufacturer's system and configuration. Find specific metal roof manufacturer product and profile test data at **www.S-5.com/LoadTable**.
- S-5! VersaBracket™, CorruBracket™, TrapBracket™, RibBracket™, and ProteaBracket™—sold separately

from the S-5-PV Kit and EdgeGrab™ due to the variety of attachment needs. For installation on most exposed-fastened and corrugated metal roofs.

3. Composition & Materials

S-5-PV Kit and EdgeGrab are made of mill-finished stainless steel and aircraft quality aluminum.

S-5-PV Kit and EdgeGrab are attached with aluminum S-5!® mini clamps which are compatible with painted or unpainted G-90 galvanized steel, bare or painted Aluminized, Galvalume®, Zinalume®, Zinalume® Plus, Acrylume®, Galvalume® Plus, Galfan® and Galvannealed steel, aluminum (painted, bare, or anodized), titanium-zinc (VM & Rheinzink®), and stainless steel metal roofs.

S-5-PV Kit and EdgeGrab may also be attached with brass S-5! mini clamps to provide metallurgical compatibility with copper roofs.

Aluminum components of the S-5-PV Kit and EdgeGrab can accept powder-coated finishes to match the metal roof color if desired*.

4. Technical Data

S-5! products are manufactured to meet or exceed the following standards:

- A. Underwriters Laboratory (UL) subject 2703.
- B. Intertek ETL listed to Underwriters Laboratory (UL) 1703.
- C. Aluminum Association (AA) - Aluminum Standards and Data, 2003 Edition.
- D. ASTM International (ASTM):
 - 1. B85-03—Standard Specification for Aluminum-Alloy Die Castings.
 - 2. B221-04a—Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.

*Optional; Not supplied by S-5!
Version 011215

ENVIRONMENTAL CONSIDERATIONS:

Where possible, S-5! products include a high percentage of recycled material, which lowers the environmental footprint. Additionally, S-5! products offer service lives equal to the roof itself, and are 100% recyclable at the end of their extended service life, which may reduce the solid waste stream.

5. Installation

Detailed installation instructions can be obtained from manufacturer's website: www.S-5.com.

Store materials protected from harmful weather, damage, or abuse. Verify that site conditions are acceptable before proceeding.

Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.

6. Limitations

Any loads imposed upon the S-5! clamps will be transferred to the roof panels to which they are attached. Roof panels must be adequately fastened to building structure, and have sufficient beam strength to resist these loads. When relying upon testing load values, setscrew tensions should be verified and factors of safety should be used as appropriate.

Always install S-5! systems in strict accordance with manufacturer's published installation instructions.

7. Cost & Availability

Contact manufacturer-authorized distributors listed at www.S-5.com/Distributors for the most current product prices and product availability.

8. Warranty

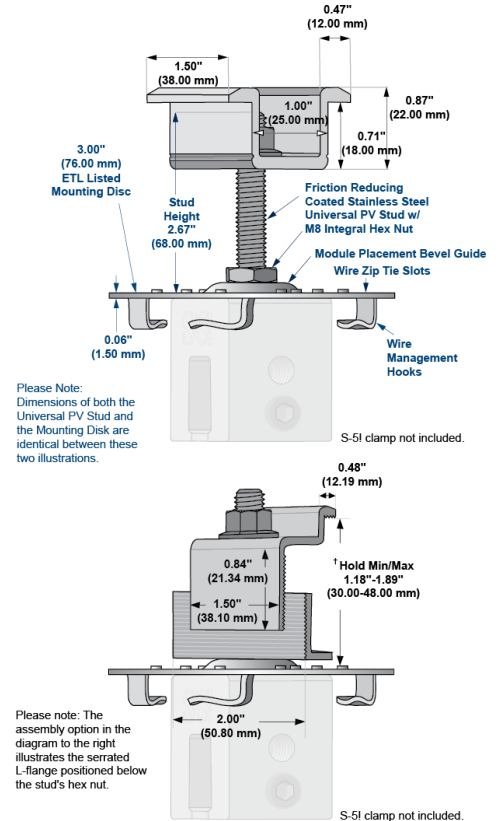
Free 25-Year Limited Warranty:
All S-5!® products and components are warranted to be free from defects in material and workmanship.

9. Maintenance

When S-5 PV Kit is properly installed, maintenance is not required, however periodic inspection may reveal errors in installation that should be corrected if found. If cleaning is desired, systems can be washed with mild soap and water with a clean water rinse. Do not use ammonia or solutions that contain strong acids or alkali.

10. Technical Services

Technical assistance, including more detailed information, product literature, test results, project lists, assistance in preparing project specifications, and arrangements for application supervision is available by contacting S-5! or the nearest S-5! distributor.



Job Name: _____

Contractor: _____

Date: _____

(Place Submittal Approvals Here)