



# Descriptive Report and Test Results

**MASTER CONTRACT:** 301533

**REPORT:** 80099468

**PROJECT:** 80099468

**Edition 1:** June 7, 2022; Project 80099468 - Irvine  
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## **PRODUCTS**

**CLASS - C531382 - POWER SUPPLIES - PHOTOVOLTAICS-PV Racking and clamping systems - Certified to US Standards**

Models: WSS - WSS Elevated Racking System, PV racking system for bonding and grounding of photovoltaic modules  
PSS - PSS Elevated Racking System, PV racking system for bonding and grounding of photovoltaic modules  
FSS - FSS Flush Mount Racking System, PV racking system for bonding and grounding of photovoltaic modules

The system listed is designed to provide bonding/grounding for PV modules mounted on the racking system. The modules are bonded to the racking system with top-down clamps using bonding washers to pierce anodization. Uses a certified grounding device for grounding system.

Racking system has been evaluated for bonding/grounding only. System is not mechanical load or fire rated.

The grounding of the system is intended to comply with the latest edition of the National Electrical Code, to include NEC 250 & 690 or in accordance with CSA C22.1, Safety Standard for Electrical Installations, Canadian Electrical Code, Part I. Local codes compliance is required, in addition to national codes. All grounding/bonding connections are to be torqued in accordance with the Installation Manual and the settings used during the certification testing for the current edition of the project report.

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**Conditions of Acceptability:**

Installation is subject to acceptance of the local inspection authorities having jurisdiction. The certification of these products relates only to the methods of installation, bonding, and grounding as outlined in the Installation Manual for each product.

**APPLICABLE REQUIREMENTS**

UL 2703-1st Edition - Mounting Systems, Mounting Devices, Clamping/Retention Devices, and Ground Lugs for Use with Flat-Plate Photovoltaic Modules and Panels.

**MARKINGS**

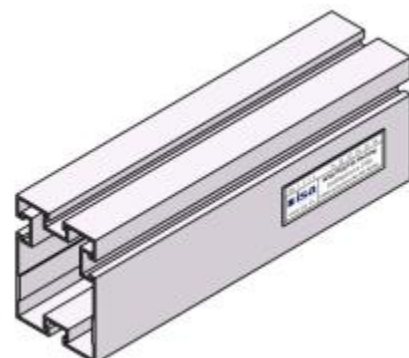
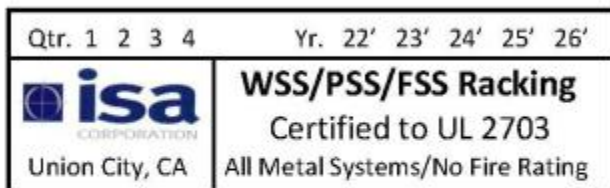
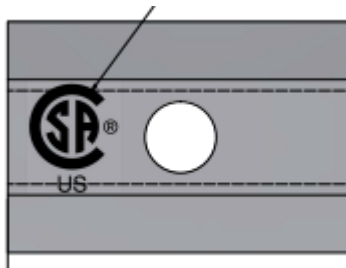
The manufacturer is required to apply the following markings:

- Products shall be marked with the markings specified by the particular product standard.

Additional bilingual markings not covered by the product standard(s) may be required by the Authorities Having Jurisdiction. It is the responsibility of the manufacturer to provide and apply these additional markings, where applicable, in accordance with the requirements of those authorities.

The following markings appear on the clamp component for CSA mark and other information on adhesive label applied on the rail:

1. Submitter’s name and/or CSA Master Contract number “301533”.
2. Model designation.
3. Manufacturing date, year-quarter;
4. “Not Fire Rated”



### **ALTERATIONS**

none

### **FACTORY TESTS**

None

### **SPECIAL INSTRUCTIONS FOR FIELD SERVICES**

1. Component descriptions marked with either the "(INT)" or "(INT\*)" identifiers may be substituted with other components providing the requirements specified under the notes in the "Description" are complied with.

### **COMPONENT SPECIAL PICKUP**

1. Component descriptions marked with the identifier "(CT)" are subject to annual pickup and Conformity Testing.

### **DESCRIPTION**

Notes:

1. Component Substitution
  - a) Critical components (those identified by mfr name, cat no), which are NOT identified with either "INT" or "INT\*" are not eligible for substitution without evaluation and report updating
  - b) The term "INT" means a "Certified" and/or "Listed" (or a "Recognized" and/or "Accepted") component may be replaced by one "Certified" and/or "Listed" by another certification organization accredited by the appropriate accreditation body or scheme requirements to the correct standard, for the same application; providing the applicable country identifiers are included and requirements in item "d" below are complied with.
  - c) The Term "(INT\*)" means a "Recognized" and/or "Accepted" component may be replaced by a component that is CSA Certified. The applicable country identifiers shall be included, the requirements in item "d" below as well as any "conditions of suitability" for the component (as recorded in this descriptive report) shall be complied with;
  - d) Components which have been substituted, must be of an equivalent rating, configuration (size, orientation, mounting) and the applicable minimum creepage and clearance distances are to be maintained from live parts to bonded metal parts and secondary parts.
  - e) Substitution of a "Certified" and/or "Listed" component with a component that is "Recognized" or "Accepted" is not permitted without evaluation and report updating.
  - f) Substitution of a "Recognized" and/or "Accepted" component by one that is not CSA Certified is not permitted without a proper evaluation as well as a report update because the Conditions of Acceptance of the original component may be different than the Conditions of Acceptance of the substitute component.

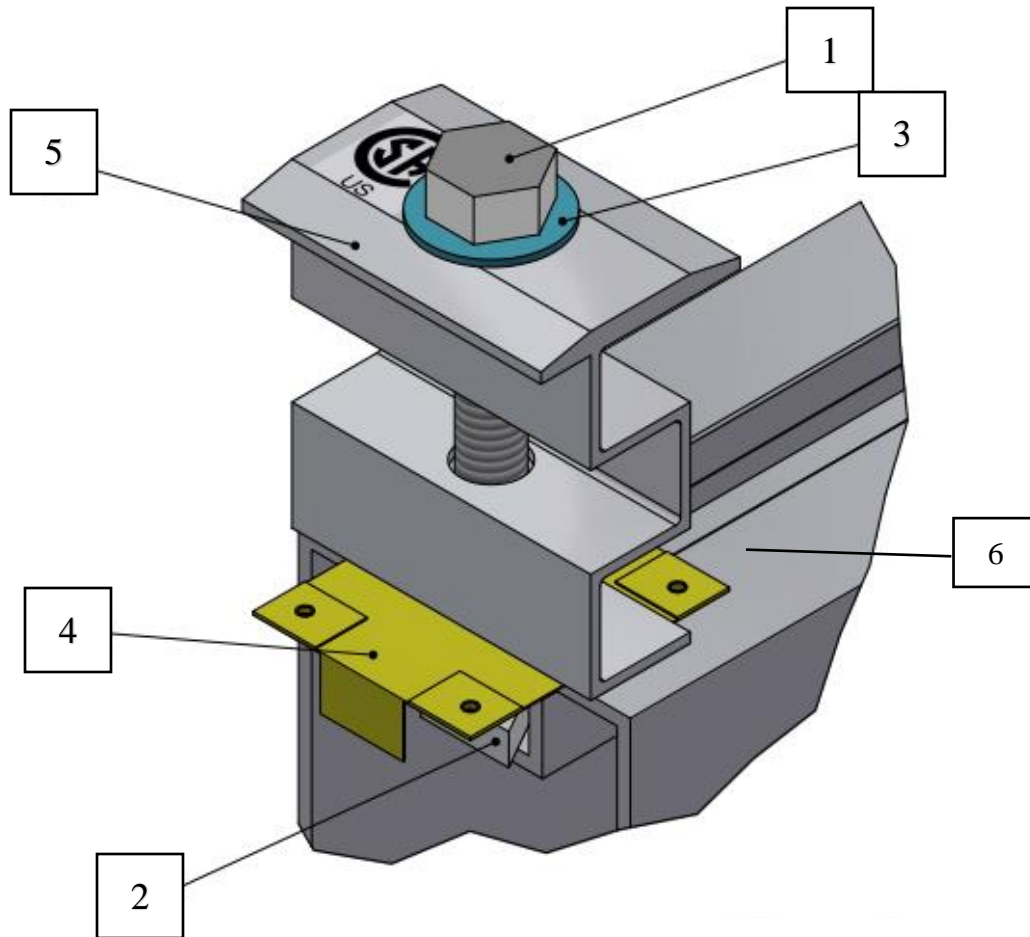
The certification of the products relates to the methods of assembly, bonding, and grounding as outlined in the Installation Manual for each product.

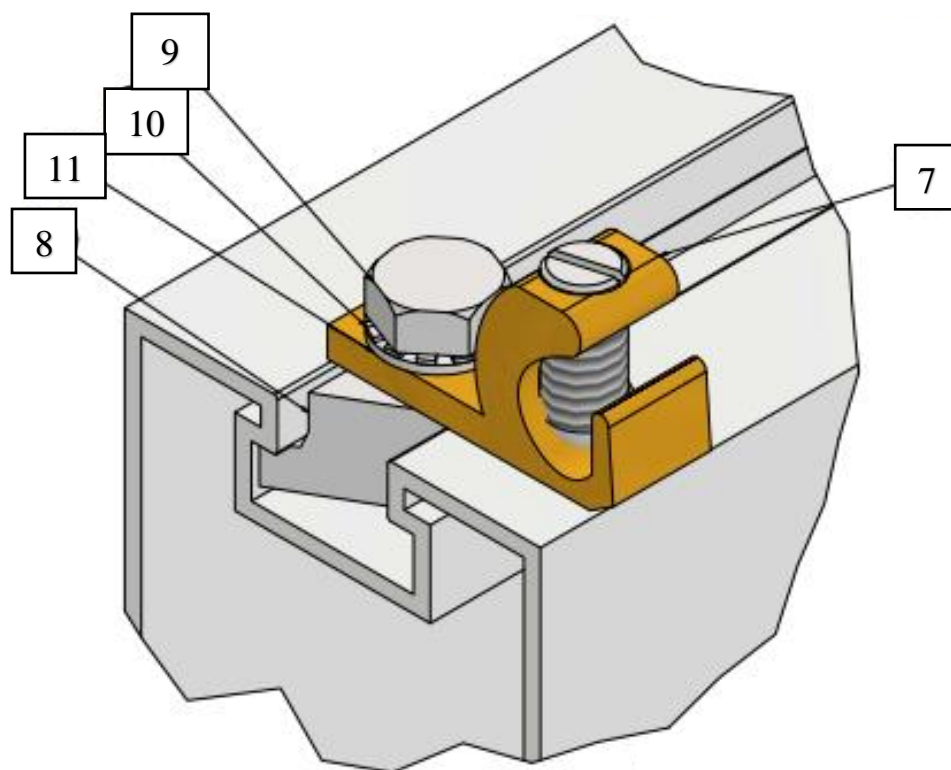
The critical components identified below may be formed at other locations and shipped directly to the construction site provided they are made with the material/coatings identified and conform to the physical dimensions described and shown in their respective illustrations. Physical specimens may not be present at the location where the CSA mark is applied.

<b>MODULE RACKING SYSTEM TYPE/S</b>			
<b>IDENTIFICATION OF COMPONENTS AND MATERIALS</b>			
<b>Item #</b>	<b>Description</b>	<b>Part #</b>	<b>Materials, ratings, certs</b>
1	Hex Head Bolt.....:	HH31175, 31200, Or 31225	Hex Head Bolt, 5/16-18 x 1.75, 2.00, or 2.25 Long, SST  Material: 304 or 18-8 Stainless Steel
2	Angle Nut.....:	AN31	Angle Nut, 5/16”  Material: Aluminum 6061-T6 or 6005A-T61
3	Flat Washer .....	WF31	Flat Washer, 5/16, SST  Material: 304 or 18-8 Stainless Steel
4	Grounding WEEB .....	WEEB-WMC	Manufacturer: Burndy  MATERIAL: 304 SS.
5	CW Series – Waffle Clip.....:	CW30, CW35, or CW40	Waffle Clip, for 30 mm, 35 mm, or 40 mm Module  Material: Aluminum 6061-T6 or 6005A-T61
6	Rail/Strut .....	3x2	Material: Aluminum, 6061-T6 or 6005.
7	Ground Lug.....:	IlSCO # 1/0- GBL	Manufacturer: ILSCO  UL 467, UL file number E34440

8	Angle Nut.....:	AN25	Angle Nut, 1/4-20  Material: Aluminum 6061-T6 or 6005A-T61
9	Hex Head Bolt.....:	HH25125P	Hex Head Bolt, 1/4-20 x 1.25 Piercing
10	Lockwasher .....	WL25	Lockwasher, 1/4" External Tooth, SST  Material: 304 or 18-8 Stainless Steel
11	Washer .....	WF250	Washer, 0.25  Material: 304 or 18-8 Stainless Steel
12	Adhesive label.....:	713-E3, 713-E3/30, 714-E3, 714-E3/30	Manufacturer: Coast Label Company UL 969, file# MH19670 Outdoor use, -40C to 150C
13	Install Manuals.....:	NA	FSS - 2703 Installation Instructions PSS - 2703 Installation Instructions WSS -2703 Installation Instructions

IMAGES





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## **TEST HISTORY**

### Project 80099468

Evaluation, testing, and certification of models WSS, PSS, and FSS. Solar Photovoltaic Mounting System for rooftop applications for CSAus.

Test results were found to be compliant for UL 2703:

Bonding Path Resistance Test: Section 13

Humidity Test: Section 18

Bonding Conductor Test: Section 22

### Construction Review:

Construction review performed with satisfactory results.

---End of Report---