

ICC-ES Evaluation Report

ESR-5606

Issued May 2025

This report also contains:

Subject to renewal May 2026

- [City of LA Supplement](#)
- [City of Chicago Supplement](#)
- [CA Supplement w/DSA and OSHPD](#)

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<p>DIVISION: 05 00 00 — METALS</p> <p>Section: 05 50 00 — Metal Fabrications</p>	<p>REPORT HOLDER: SOLAR STACK INC</p> 	<p>EVALUATION SUBJECT: SOLAR STACK®</p> 	
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1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2024, 2021 and 2018 [International Building Code® \(IBC\)](#)

Property evaluated:

- Structural

2.0 USES

The SOLAR STACK® solar mounting pedestal is used to attach photovoltaic (PV) panels to flat and sloped roof systems.

3.0 DESCRIPTION

3.1 General:

When attached to a supporting structure, the SOLAR STACK® solar mounting pedestal is compatible with tile, metal, granulated cap sheet (roll roofing), BUR (build up roofing), modified bitumen, TPO, EPDM, PVC, hypalon, SPF (spray polyurethane foam), and concrete roof systems. The SOLAR STACK® solar mounting pedestal is not compatible with shingle, shake, architectural metal, or silicone coated roof systems.

3.2 Material:

The SOLAR STACK® solar mounting pedestal consists of a 0.095-inch thick (2.4 mm) extruded aluminum with an alloy-temper designation of 6005A-T61 in accordance with ASTM B221. The SOLAR STACK® solar mounting pedestal is 5-inches wide (127 mm), 8-inches (203 mm) or 12-inches (305 mm) long, and 4.5-inches (114 mm) tall. See [Figure 1](#).

4.0 DESIGN

4.1 Design:

The allowable strength value shown in [Table 1](#) of this report represents the tension / uplift capacity of the SOLAR STACK® solar mounting pedestal center top c-channel, see [Figure 1](#). The connection of the SOLAR STACK® solar mounting pedestal to the roof deck must be designed by a registered design professional and must not exceed the published allowable load value shown in [Table 1](#).

4.2 Installation:

Installation of the SOLAR STACK[®] solar mounting pedestal must comply with this report and the manufacturer's published installation instructions. If there is a conflict between this report and the manufacturer's published installation instructions, this report governs.

5.0 CONDITIONS OF USE:

The SOLAR STACK[®] solar mounting pedestal described in this report complies with, or is a suitable alternative to what is specified in, the codes listed in [Section 1.0](#) of this report, subject to the following conditions:

- 5.1 Calculations showing compliance with this report must be submitted to the code official. The calculations must be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed.
- 5.2 The attachment of the SOLAR STACK[®] mounting pedestal to the supporting structure is outside the scope of this report.
- 5.3 The SOLAR STACK[®] solar mounting pedestals are manufactured under a quality control program with inspections by ICC-ES.

6.0 EVIDENCE SUBMITTED

- 6.1 Data in accordance with Section 3.2 of the [ICC-ES Acceptance Criteria for Proprietary Attachment Systems of Photovoltaic \(PV\) Arrays to Roof Assemblies \(AC467\)](#), approved June 2016 (editorially revised February 2024).
- 6.2 Quality documentation in accordance with the ICC-ES Acceptance Criteria for Quality Documentation (AC10).
- 6.3 Published installation instructions.

7.0 IDENTIFICATION

- 7.1 The ICC-ES mark of conformity, electronic labeling, or the evaluation report number (ICC-ES ESR-5606) along with the name, registered trademark, or registered logo of the report holder must be included in the product label.
- 7.2 In addition, the SOLAR STACK[®] solar mounting pedestal is identified with the product name or designation.
- 7.3 The report holder's contact information is the following:

SOLAR STACK INC
1071 SW 30 AVENUE
DEERFIELD BEACH, FLORIDA 33442
(877) 757-7822
www.SolarStack.com
tim@solarstack.com

TABLE 1 — ALLOWABLE LOAD VALUE OF SOLAR STACK[®] SOLAR MOUNTING PEDESTAL¹

LOAD CONDITION ²	ULTIMATE LOAD ³ (lbf)	ALLOWABLE LOAD ⁴ (lbf)
TENSION / UPLIFT	938	313

For SI: 1 lbf = 4.45 N.
¹The attachment of the SOLAR STACK solar mounting pedestal to the supporting structure is outside the scope of this report.
²Load condition is based on attachment to the center-top channel of the SOLAR STACK solar mounting pedestal. See [Figure 1](#) for details.
³Ultimate load is from the average of five specimens.
⁴Allowable load based on an average ultimate test load divided by a safety factor of three.

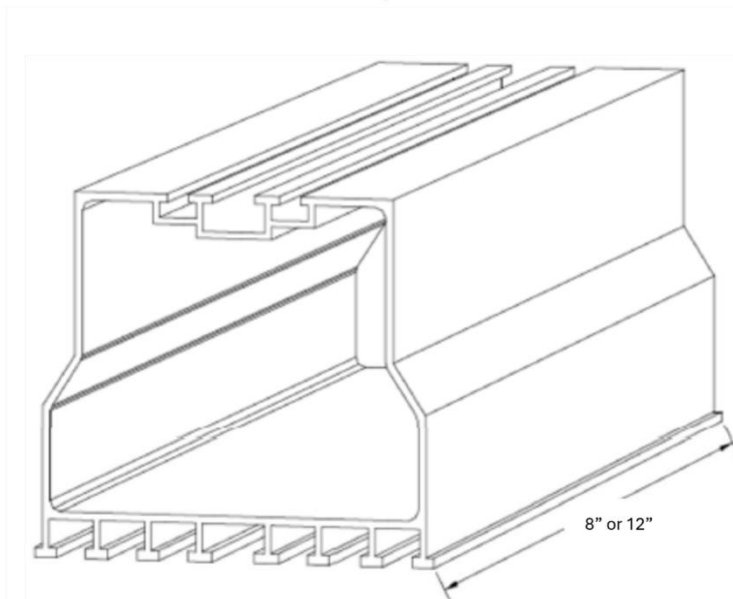
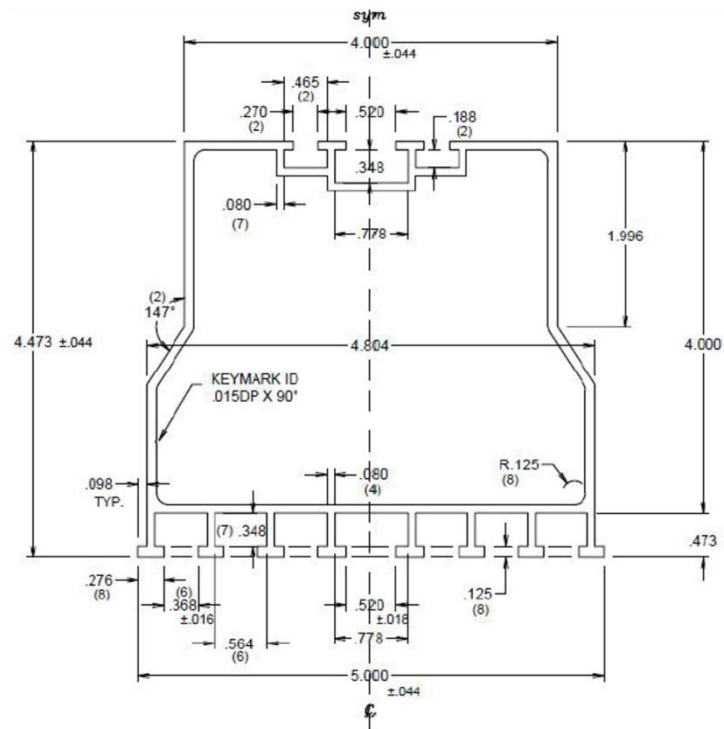


FIGURE 1—SOLAR STACK® SOLAR MOUNTING PEDESTAL

DIVISION: 05 00 00—METALS

Section: 05 50 00—Metal Fabrications

REPORT HOLDER:

SOLAR STACK INC

EVALUATION SUBJECT:

SOLAR STACK®

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that the SOLAR STACK® solar mounting pedestal, described in ICC-ES evaluation report [ESR-5606](#), has also been evaluated for compliance with the code noted below as adopted by the Los Angeles Department of Building and Safety (LADBS).

Applicable code editions:

- 2023 City of Los Angeles Building Code ([LABC](#))

2.0 CONCLUSIONS

The SOLAR STACK® solar mounting pedestal, described in Sections 2.0 through 7.0 of the evaluation report [ESR-5606](#), complies with the LABC Chapter 15, and is subject to the conditions of use described in this supplement.

3.0 CONDITIONS OF USE

The SOLAR STACK® solar mounting pedestal described in this evaluation report supplement must comply with all of the following conditions:

- All applicable sections in the evaluation report [ESR-5606](#).
- The design, installation, conditions of use and identification of the SOLAR STACK® solar mounting pedestal are in accordance with the 2021 *International Building Code*® (IBC) provisions, as applicable, noted in the evaluation report [ESR-5606](#).
- The design, installation and inspection are in accordance with additional requirements of LABC Chapters 15, 16 and 17, as applicable.
- Roof slope must not exceed 4:12.
- Solar photovoltaic system installation must comply with Los Angeles Fire Department Requirement No. 96.

This supplement expires concurrently with the evaluation report issued May 2025.

DIVISION: 05 00 00—METALS**Section: 05 50 00—Metal Fabrications****REPORT HOLDER:****SOLAR STACK INC****EVALUATION SUBJECT:****SOLAR STACK®****1.0 REPORT PURPOSE AND SCOPE****Purpose:**

The purpose of this evaluation report supplement is to indicate that the SOLAR STACK® solar mounting pedestal, described in ICC-ES evaluation report ESR-5606, has also been evaluated for compliance with the code noted below.

Applicable code edition(s):

- 2022 California Building Code (CBC)

For evaluation of applicable Chapters adopted by the California Office of Statewide Health Planning and Development (OSHPD) AKA: California Department of Health Care Access and Information (HCAI) and the Division of State Architect (DSA), see Sections 2.1.1 and 2.1.2 below.

2.0 CONCLUSIONS**2.1 CBC:**

The SOLAR STACK® solar mounting pedestal, described in Sections 2.0 through 7.0 of the evaluation report ESR-5606, complies with CBC Chapter 15, provided the design and installation are in accordance with the 2021 *International Building Code*® (IBC) provisions noted in the evaluation report and the additional requirements of CBC Chapters 15, 16 and 17, as applicable.

2.1.1 OSHPD:

The SOLAR STACK® solar mounting pedestal, described in Sections 2.0 through 7.0 of the evaluation report ESR-5606, complies with CBC Chapters 15 and applicable amendments, [OSHPD 1, 1R, 2, 3, 4 and 5], 16 and applicable amendments [OSHPD 1R, 2, 3 and 5], 17 and applicable amendments [OSHPD 1R, 2, 3 and 5], and Chapters 16A [OSHPD 1 and 4] and 17A [OSHPD 1 and 4], provided the design and installation are in accordance with the 2021 *International Building Code*® (IBC) provisions noted in the evaluation report.

2.1.2 DSA:

The Solar Stack® solar mounting pedestal, described in Sections 2.0 through 7.0 of the evaluation report ESR-5606, complies with CBC Chapters 15 and applicable amendments [DSA-SS and DSA-SS/CC], 16 and applicable amendments [DSA-AC and DSA-SS/CC], CBC Chapters 16A and applicable amendments [DSA-AC and DSA-SS] and 17A [DSA-SS and DSA-SS/CC], provided the design and installation are in accordance with the 2021 *International Building Code*® (IBC) provisions noted in the evaluation report.

This supplement expires concurrently with the evaluation report, issued May 2025.

ICC-ES Evaluation Report

ESR-5606 City of Chicago Supplement

Issued May 2025

This report is subject to renewal May 2026.

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DIVISION: 05 00 00—METALS

Section: 05 50 00—Metal Fabrications

REPORT HOLDER:

SOLAR STACK INC

EVALUATION SUBJECT:

SOLAR STACK®

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that the SOLAR STACK® solar mounting pedestal, described in ICC-ES evaluation report ESR-5606, has also been evaluated for compliance with the Chicago Construction Codes (Title 14 of the Chicago Municipal Code) as noted below.

Applicable code editions:

- 2019 *Chicago Building Code* (Title 14B)

2.0 CONCLUSIONS

The SOLAR STACK® solar mounting pedestal, described in Sections 2.0 through 7.0 of the evaluation report ESR-5606 complies with Title 14B, and is subject to the conditions of use described in this supplement.

3.0 CONDITIONS OF USE

The SOLAR STACK® solar mounting pedestal described in this evaluation report supplement must comply with all of the following conditions:

- All applicable sections in the evaluation report ESR-5606.
- The design, installation, conditions of use and identification of the Solar Stack® solar mounting pedestal are in accordance with the 2018 *International Building Code*® (IBC) provisions noted in the evaluation report ESR-5606.
- The design, installation and inspection are in accordance with additional requirements of Chapters 15 and 16 of Title 14B, as applicable.

This supplement expires concurrently with the evaluation report, issued May 2025.