

SNR SOLAR LLC. DBA SNAPNRACK MIAMI-DADE TEST REPORT

SCOPE OF WORK

TAS 100(A)-23 TESTING ON ULTRAFOOT, RAFTER (SPECIMEN E)

REPORT NUMBER

S1173.01-109-18 R1

TEST DATE

12/16/24

ISSUE DATE

01/21/25

REVISION DATE

02/04/25

MIAMI-DADE COUNTY NOTIFICATION NO.

ATI 24086

LABORATORY CERTIFICATION NO.

22-0428.14

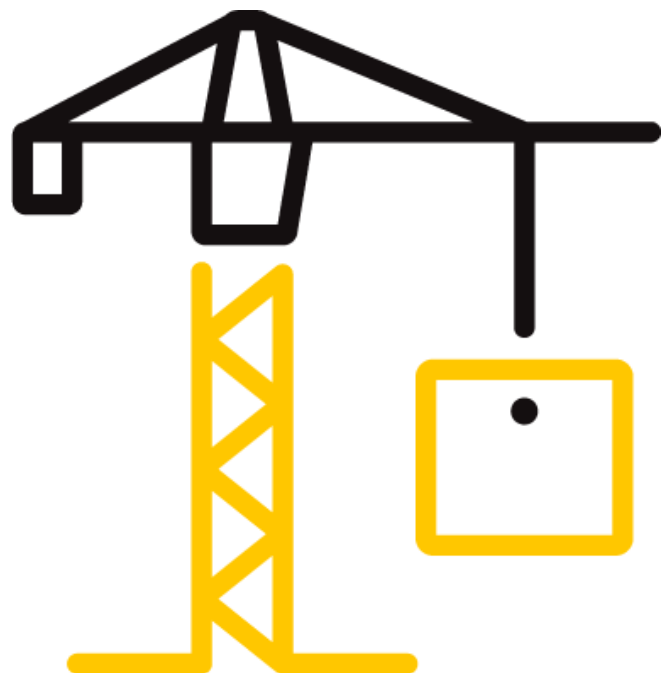
PAGES

18

DOCUMENT CONTROL NUMBER

RT-R-AMER-Test-7808 (06/05/24)

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TEST REPORT FOR SNR SOLAR LLC. DBA SNAPNRACK

Report No.: S1173.01-109-18 R1

Date: 01/21/25

Revision 1: 02/04/25

REPORT ISSUED TO

SNR SOLAR LLC. DBA SNAPNRACK

775 Fiero Lane, Suite 200

San Luis Obispo, California 93401

SECTION 1

SCOPE

Architectural Testing, Inc. (an Intertek company) dba Intertek Building & Construction (B&C) was contracted by SNR Solar LLC. dba SnapNrack to perform TAS 100(A) testing in accordance with Miami-Dade County requirements on their UltraFoot, Rafter (Specimen E). Results obtained are tested values and were secured by using the designated test method(s). Testing was conducted at the Intertek B&C test facility in York, Pennsylvania.

For INTERTEK B&C:

COMPLETED BY:	Christopher E. Sartalis	REVIEWED BY:	Tanya A. Dolby, P.E.
TITLE:	Technician – Product Testing	TITLE:	Engineering Manager – Engineering Services
SIGNATURE:		SIGNATURE:	
DATE:	02/04/25	DATE:	02/04/25

CES:mas

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SECTION 2

TEST METHOD

The specimen was evaluated in accordance with the following:

TAS 100 (A)-23, *Test Procedure for Wind and Wind Driven Rain Resistance and/or Increased Windspeed Resistance of Soffit Ventilation Strip and Continuous or Intermittent Ventilation System Installed at the Ridge Area.*

SECTION 3

MATERIAL SOURCE

Test sample materials were provided by the client from SNR Solar LLC. dba SnapNrack located at San Luis Obispo, California. Representative samples of the test specimen(s) will be retained by Intertek B&C for a minimum of ten years from the test completion date.

SECTION 4

EQUIPMENT/CALIBRATION

Wind Generator - Vane Axial Fan Y00346

Scale – 65571

Stopwatch – INT00975

Weather Station – 63316

Windstream, water supply, and water distribution calibration were performed prior to testing. Reference Intertek B&C Calibration Report No. R5185.05-109-18, dated 11/04/24, for descriptions and results.

SECTION 5

LIST OF OFFICIAL OBSERVERS

NAME	COMPANY
Tyler J. Holland	Intertek B&C
Timothy J. McGill	Intertek B&C
Tanya A. Dolby, P.E.	Intertek B&C
Christopher E. Sartalis	Intertek B&C

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TEST SPECIMEN DESCRIPTION

Manufacturer: SNR Solar LLC. dba SnapNrack

Series/Model: UltraFoot Rafter

Product Type: Rafter Mount, (Specimen E)

Roof Deck Description: An 8'0" wide by 6'0" long roof deck on a 2:12 slope was utilized. The roof deck consisted of #2 Spruce-Pine Fir normal 2x6 intermediate supports sheathed with APA 32/16 span rated 15/32" plywood sheathing. The intermediate supports were spaced 24" on center. The plywood was secured to the rafters with 8d common nails spaced 6" on center around the perimeter and 12" on center at the intermediate supports. The plywood sheathing was covered with 30# felt underlayment and three-tab shingles.

UltraFoot Description/ Installation: The solar mounts were constructed of 2" wide by 2-3/16" long by 3" high, 3/16" thick extruded aluminum. Approximately 18" down from the ridge, 3/16" pilot holes were drilled down through shingle and sheathing into the rafter. The butyl pads were adhered to the shingle over the pilot holes. The two mounts were fastened using 5/16" x 4-1/2" lag screws with EPDM backed washer through the mount and sheathing into the rafter.

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TEST RESULTS

Protocol TAS 100(A)-23, Test Procedure for Wind and Wind Driven Rain Resistance and/or Increased Windspeed Resistance of Soffit Ventilation Strip and Continuous or Intermittent Ventilation System Installed at the Ridge Area.

Test Date(s): 12/16/24

The temperature during testing was 6°C (42°F). The results are tabulated as follows:

Test Procedure: The wind speed intervals were conducted as follows:

Interval No.	Wind Speed (mph)	Time (min)	Water Spray
1	35	15	On
2	0	5	Off
3	70	15	On
4	0	5	Off
5	90	15	On
6	0	5	Off
7	110	5	On
8	0	5	Off

Test Results: The TAS 100(A) test results are as follows:

Wind Speed	Results
35 mph	0.0 oz.
70 mph	0.0 oz.
90 mph	0.0 oz.
110 mph	0.0 oz.

Result(s): Pass

Note 1: Tested at a 2:12 roof pitch.

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SECTION 8

CONCLUSION

The specimen(s) tested met the performance requirements set forth in the protocols.

This report does not constitute certification of this product nor an opinion or endorsement by this laboratory. Intertek B&C will service this report for the entire test record retention period. The test record retention period ends ten years after the test date. Test records, such as detailed drawings, datasheets, representative samples of test specimens, or other pertinent project documentation, will be retained for the entire test record retention period.

Unless differently required, Intertek reports apply the "Simple Acceptance" rule also called "Shared Risk approach," of ILAC-G8:09/2019, Guidelines on Decision Rules and Statements of Conformity.

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SECTION 9 PHOTOGRAPHS



**Photo No. 1
Top Side Before Testing**



**Photo No. 2
Underside Before Testing**

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Photo No. 3
35 MPH Top Side



Photo No. 4
35 MPH Underside

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Photo No. 5
70 MPH Top Side



Photo No. 6
70 MPH Underside

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Photo No. 7
90 MPH Top side



Photo No. 8
90 MPH Underside

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Photo No. 9
110 MPH Top Side



Photo No. 10
110 MPH Underside

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Photo No. 11
Post Test Top Side



Photo No. 12
Post Test Underside



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DRAWINGS

The test specimen drawings have been reviewed by Intertek B&C and are representative of the test specimen(s) reported herein. Test specimen construction was verified by Intertek B&C per the drawings included in this report. Any deviations are documented herein or on the drawings.

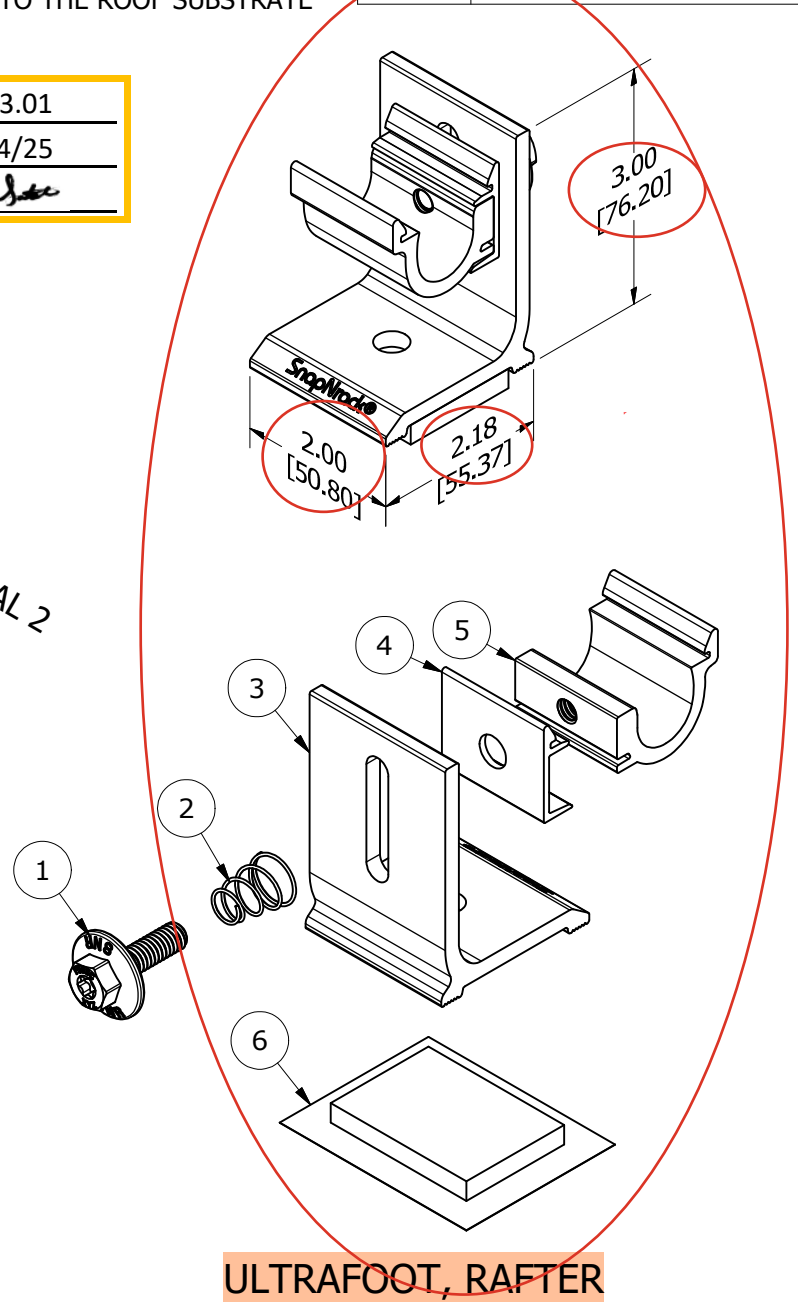
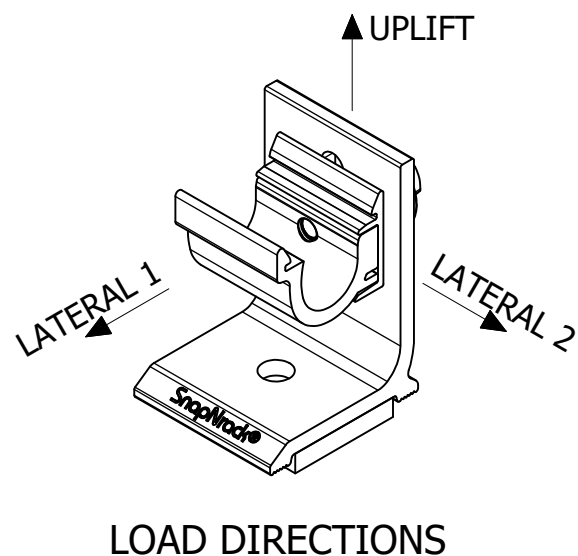
NOTES:

1. THIS SYSTEM COMPLIES WITH THE 8TH EDITION (2023) FLORIDA BUILDING CODE, INCLUDING HVHZ
2. THIS SYSTEM HAS BEEN TESTED TO THE TAS100(A) AND ASTM D7147 STANDARDS. IMPACT RESISTANCE IS NOT REQUIRED, AS IT IS NOT PART OF THE BUILDING ENVELOPE
3. INSTALLATIONS MUST FOLLOW THE SNAPRACK ULTRA RAIL SYSTEM INSTALLATION MANUAL
4. PV PANELS ARE NOT PART OF THIS APPROVAL
5. DESIGN OF THE ROOF SUBSTRATE AND STRUCTURE IS THE RESPONSIBILITY OF THE ENGINEER OF RECORD (EOR) AND IS NOT PART OF THIS APPROVAL
6. ALL ANCHORS FASTENING ATTACHMENTS TO THE ROOF SUBSTRATE MUST BE CORROSION RESISTANT

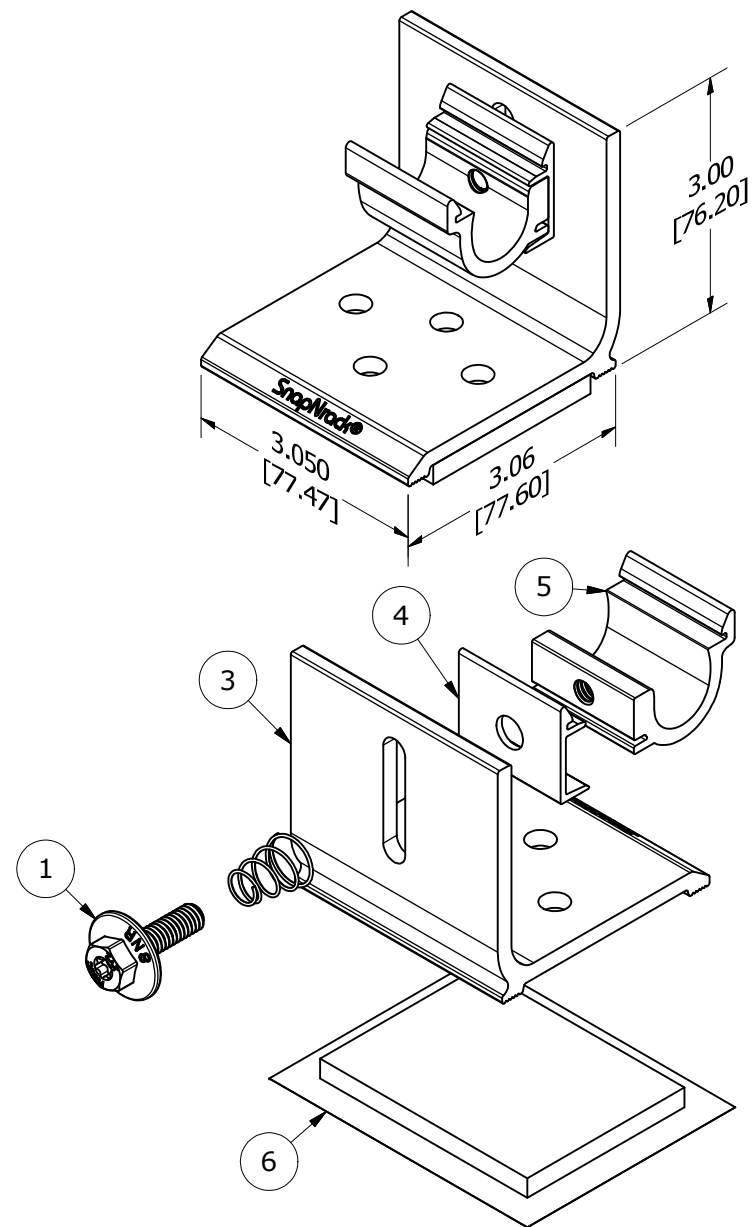
BOM: ULTRAFooter PRODUCTS				
ITEM	DESCRIPTION	MATERIAL	MIN YIELD (KSI)	MINIMUM ULTIMATE (KSI)
1	BOLT, WIDE FLANGE, 5/16"-18	STAINLESS STEEL, 300 SERIES	60	95
2	SPRING	STAINLESS STEEL, 300 SERIES	N/A	N/A
3	ULTRAFooter BASE (RAFTER, DECK, OR ANCHOR)	ALUMINUM, 6000 SERIES	34	38
4	UR FLIP CLAMP, THRU	ALUMINUM, 6000 SERIES	34	38
5	UF FLIP CLAMP, TAP	ALUMINUM, 6000 SERIES	34	38
6	SPEEDSEAL+ FLASHING SYSTEM	BUTYL RUBBER	N/A	N/A

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A	2/3/2025	RELEASED MJA

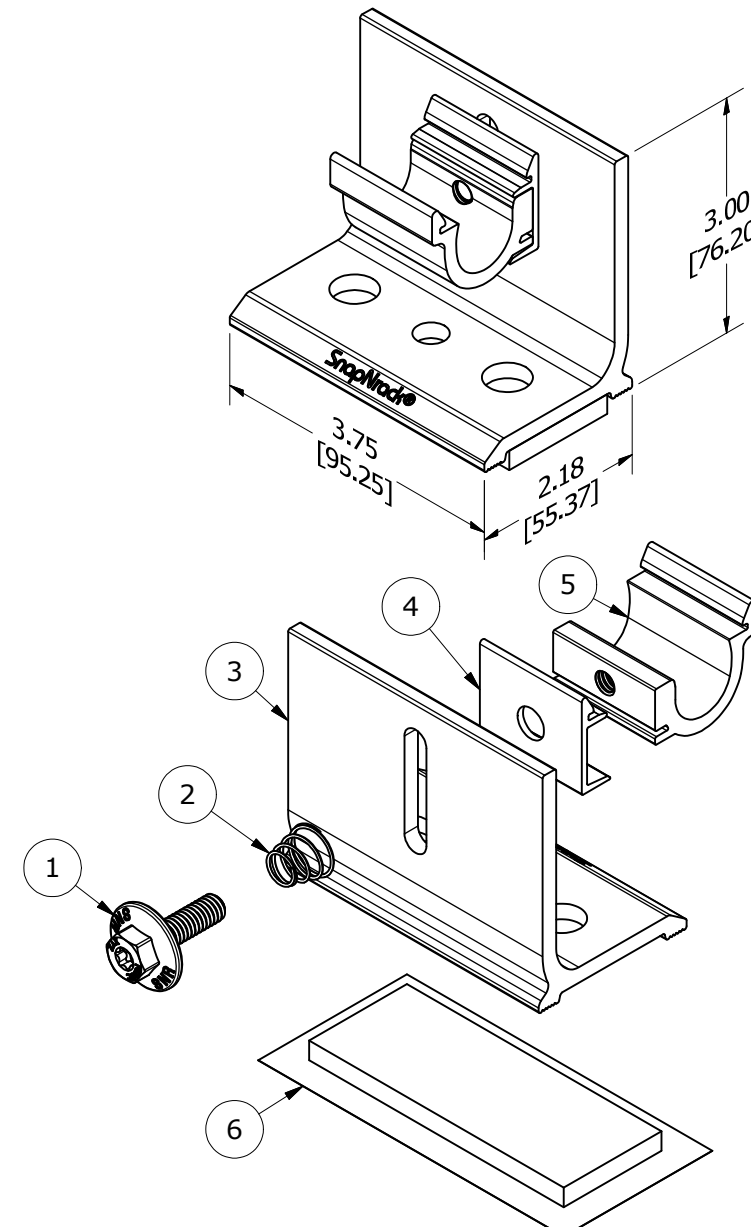
intertek Report #: S1173.01
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 Verified by: *Charles E. Jace*



ULTRAFooter, RAFTER



ULTRAFooter, DECK



ULTRAFooter, ANCHOR

PE SIGNATURE:	PE DATE:	DESCRIPTION: ULTRA RAIL PV MOUNTING SYSTEM WITH ULTRAFooter ROOF ATTACHMENTS FAMILY	DRAWING NUMBER: SNR-DC-00485	REV: A
SNR SOLAR LLC	775 FIERO LANE, SUITE 200 SAN LUIS OBISPO, CA 93401 CONTACT@SNAPRACK.COM	UNITS: IN, LB, DEG [MM, KG, DEG]	DATE: 2/3/2025	SHEET SIZE: 11 IN X 17 IN
			SCALE: NTS	SHEET NUMBER: 1 OF 5

DESCRIPTION:
SNAPNRACK, ULTRAFOOT, RAFTER

DOC NUMBER:
 SNR-DC-01436

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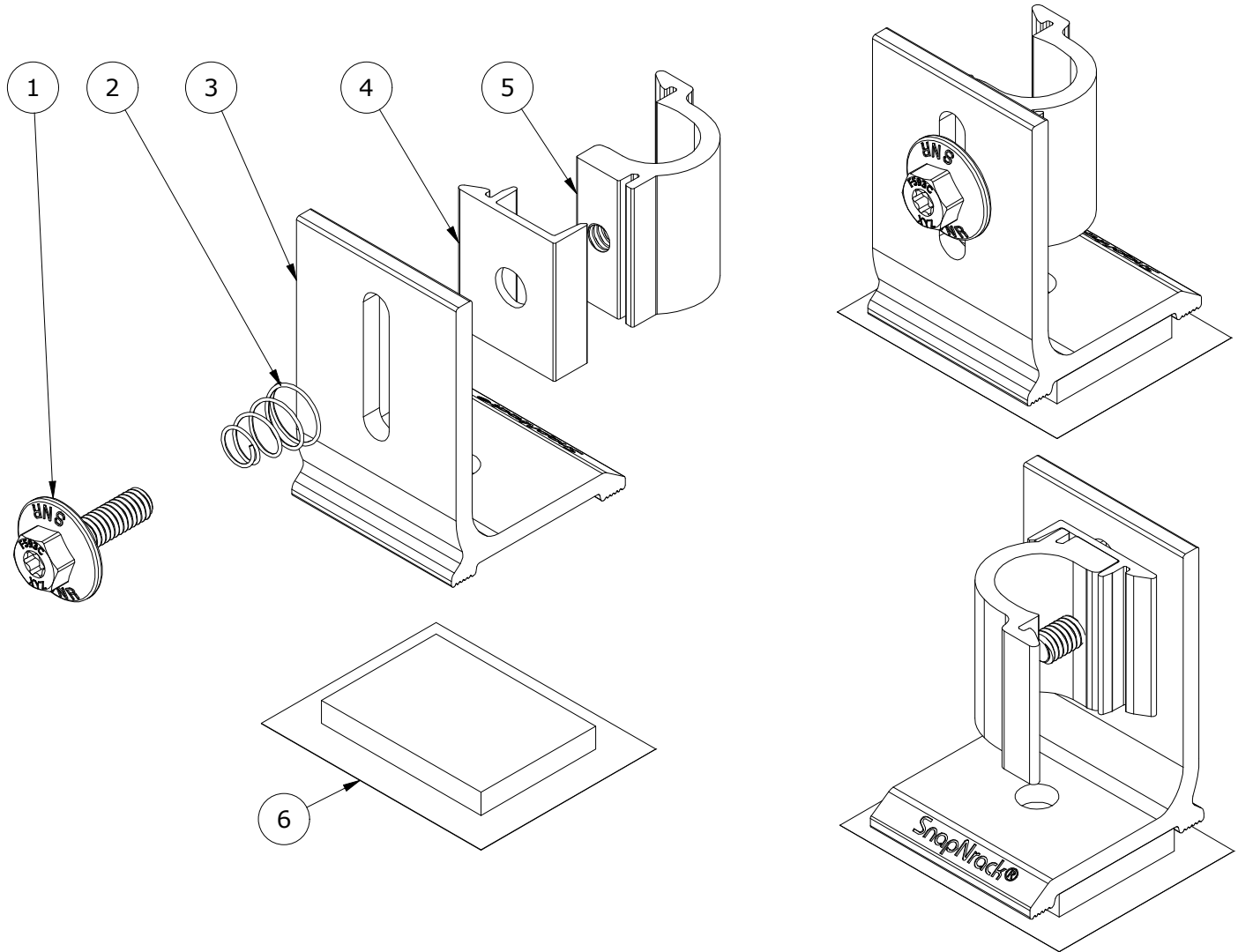
PART NUMBER(S):
 242-10056

DRAWN BY:
 H.WULFEKOETTER

REV: **A** DATE: 8/28/2024

SNR SOLAR LLC
 775 FIERO LANE, SUITE 200
 SAN LUIS OBISPO, CA 93401 USA
 EMAIL: CONTACT@SNAPNRACK.COM
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UNITS: IN, LB, DEG [MM, KG, DEG] SHEET: 1:2



PARTS LIST

ITEM	QTY	DESCRIPTION
1	1	BOLT, WIDE FLANGE, RECESSED, 5-16IN-18 X 1IN, SS
2	1	SNAPNRACK, ULTRA RAIL MOUNT SPRING, SS
3	1	SNAPNRACK, ULTRAFOOT BASE, RAFTER, BLACK
4	1	SNAPNRACK, UR FLIP CLAMP, THRU, SILVER
5	1	SNAPNRACK, FLIP CLAMP, TAP, BLACK
6	1	SNAPNRACK, BUTYL PAD, 2IN X 1.5IN X .25IN

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	Date:	02/04/25
	Verified by:	<i>Charles E. Jeter</i>

MATERIALS:	6000 SERIES ALUMINUM & 300 SERIES STAINLESS STEEL
DESIGN LOAD (LBS):	VARIABLES, REFER TO SNAPNRACK ENGINEERING
ULTIMATE LOAD (LBS):	VARIABLES, REFER TO SNAPNRACK ENGINEERING
TORQUE SPECIFICATION:	16 FT-LBS FT-LBS
CERTIFICATION:	UL 2703, FILE E359313;
WEIGHT (LBS):	.365

DESCRIPTION:
SNAPNRACK, ULTRAFOOT, RAFTER

DOC NUMBER:
 SNR-DC-01436

SnapNrack®

PART NUMBER(S):
 242-10056

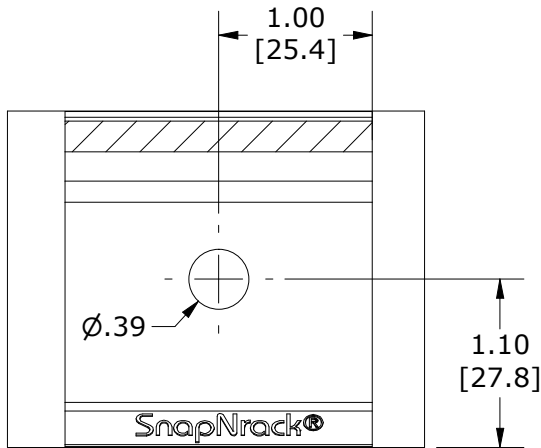
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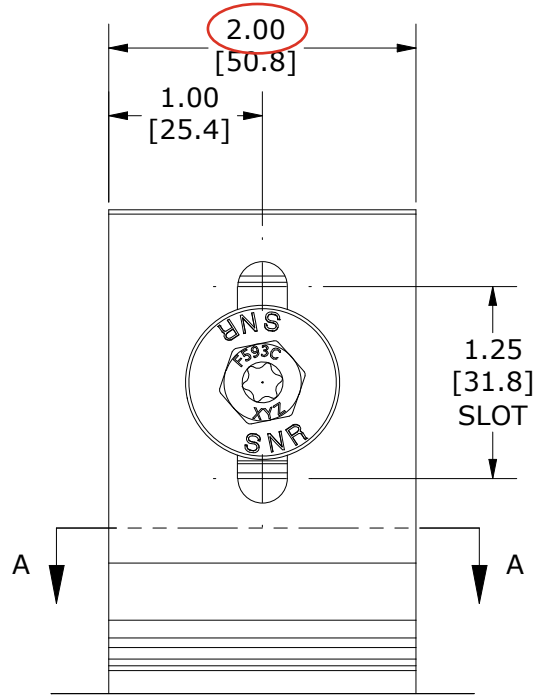
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REV: **A** DATE: 8/28/2024

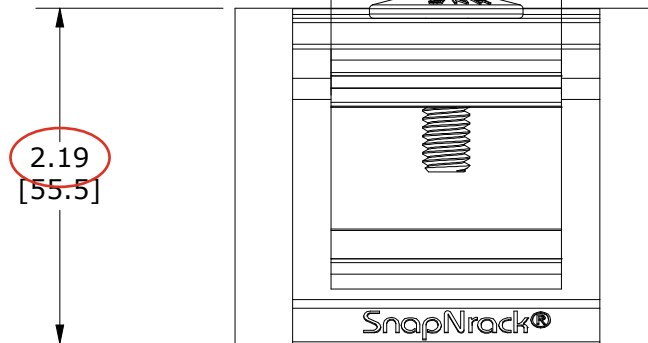
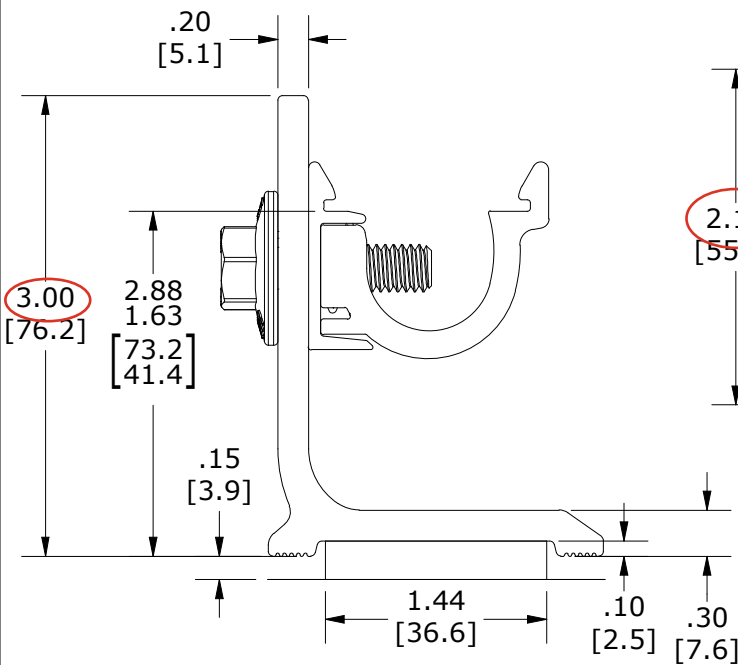
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SECTION A-A



BACK



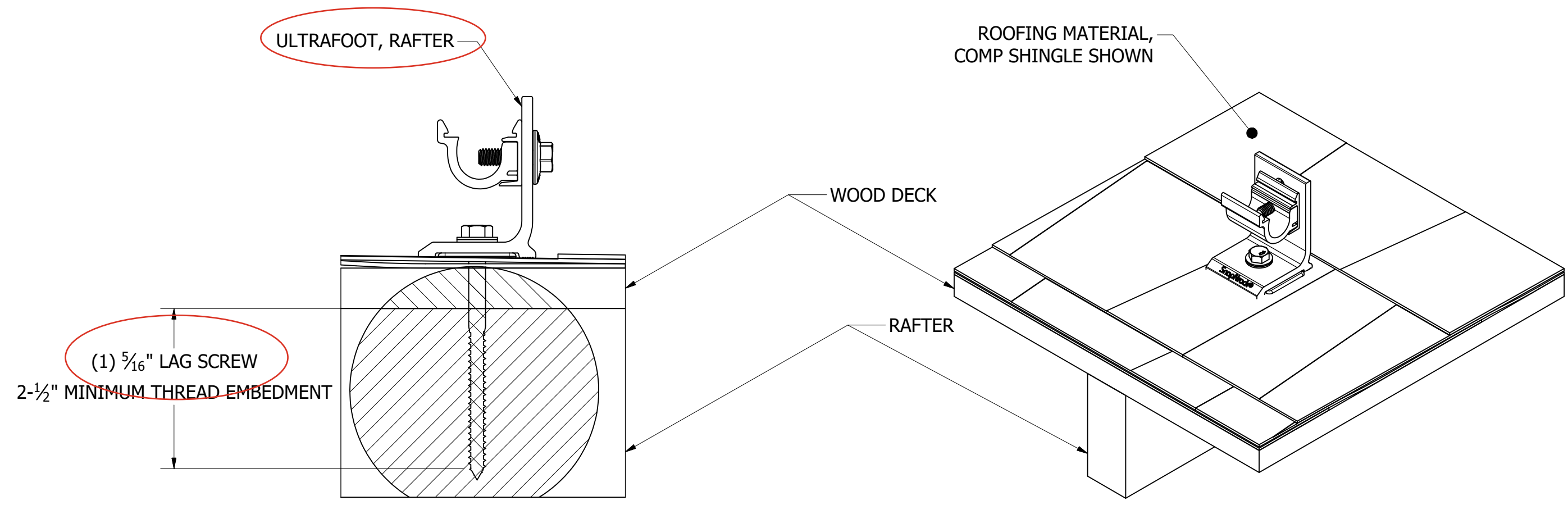
TOP

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Date: 02/04/25
Verified by: *Charles E. J...*



PE SIGNATURE:	PE DATE:	DESCRIPTION: ULTRA RAIL PV MOUNTING SYSTEM WITH ULTRAFOOT ROOF ATTACHMENTS FAMILY	DRAWING NUMBER: SNR-DC-00485	REV: A
SNR SOLAR LLC	775 FIERO LANE, SUITE 200 SAN LUIS OBISPO, CA 93401 CONTACT@SNAPNRACK.COM	UNITS: IN, LB, DEG [MM, KG, DEG]	DATE: 2/3/2025	SHEET SIZE: 11 IN X 17 IN
			SCALE: NTS	SHEET NUMBER: 3 OF 5



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SECTION 11

REVISION LOG

REVISION #	DATE	PAGES	REVISION
0	01/21/25	N/A	Original Report Issue
1	02/04/25	14-17	Revised Drawings