

UNIRAC, INC. TEST REPORT

SCOPE OF WORK

ANSI/UL 441 TESTING ON UNIRAC® L-FOOT WITH 3" FLASHING, SOLAR MOUNT

REPORT NUMBER

M6312.01-109-44

TEST DATE

08/04/21

ISSUE DATE

08/31/21

RECORD RETENTION END DATE

08/04/25

PAGES

11

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TEST REPORT FOR UNIRAC, INC.

Report No.: M6312.01-109-44

Date: 08/31/21

REPORT ISSUED TO

UNIRAC, INC.

1411 Broadway Boulevard NE

Albuquerque, New Mexico 87102-1545

SECTION 1

SCOPE

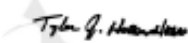
Architectural Testing, Inc. (an Intertek company) dba Intertek Building & Construction (B&C) was contracted by Unirac, Inc. to perform testing in accordance with ANSI/UL 441 on their Unirac® L-Foot with 3" Flashing, solar mount. Results obtained are tested values and were secured by using the designated test method(s). Testing was conducted at Intertek B&C test facility in York, Pennsylvania.

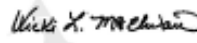
SECTION 2

SUMMARY OF TEST RESULTS

SERIES/MODEL	2:12 PITCH	12:12 PITCH
Unirac® L-Foot with 3" Flashing	PASS	PASS

For INTERTEK B&C:

COMPLETED BY:	Tyler J. Holland Team Leader— Product Testing
TITLE:	
SIGNATURE:	 <small>Digitally signed by Tyler Holland on 08/31/21</small>
DATE:	08/31/21

REVIEWED BY:	Vicki L. McElwain Supervisor – Product Testing
TITLE:	
SIGNATURE:	 <small>Digitally signed by Vicki L. McElwain on 08/31/21</small>
DATE:	08/31/21

APM:nl

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SECTION 3

TEST METHOD(S)

The specimen was evaluated in accordance with the following:

ANSI/UL441 (2010), *UL Standard for Safety for Gas Vents, Section 27: Rain Test*, Underwriters Laboratories, Inc.

SECTION 4

MATERIAL SOURCE

Test specimen was provided by the client. Representative samples of the test specimen(s) will be retained by Intertek B&C for a minimum of four years from the test completion date.

SECTION 5

EQUIPMENT

Tape Measure Verification: 63788

Weather Station: 63316

Water Pressure Gauge: INT01184

Stopwatch: INT00974

SECTION 6

LIST OF OFFICIAL OBSERVERS

NAME	COMPANY
Vicki L. McElwain	Intertek B&C
Tyler J. Holland	Intertek B&C

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SECTION 7**TEST SPECIMEN DESCRIPTION**

Product Type: Solar Mount

Series/Model: Unirac® L-Foot with 3" Flashing

Product Size(s):

	WIDTH		HEIGHT		LENGTH		THICKNESS	
	mm	in.	mm	in.	mm	in.	mm	in.
Overall mount size	51	2	71	2-13/16	48	1-7/8	7	9/32

Deck Construction: The test deck measured 3' wide by 3' high and was constructed of #2 Spruce-Pine-Fir nominal 2x6 lumber. One stud was centered on the deck for bolt attachment. Studs were attached to the top and bottom plates with #8 x 3" long drywall screws. A sheet of nominal 1/2" thick plywood was secured to the studs with #8 x 1-5/8" drywall screws. Silicone was utilized on the backside of the test panel to seal the perimeter. Felt paper underlayment was stapled onto the plywood and three-tab asphalt shingles were nailed to the test deck.

Installation of Unirac® L-Foot: The aluminum L-Foot was installed onto a 0.042" thick by 3" wide by 12" long aluminum flashing. A 7/32" hole was drilled prior to the installation of the flashing. The flashing was installed under the fourth row of shingles. The flashing utilized a U-shaped bead of silicone sealant on the underside. The L-Foot was installed through the installation hole of the flashing using a 5/16" x 4" structural hex head bolt with a flat / EPDM washer. The bolt went through the 3/8" thick rubber grommet of the L-Foot and into the stud at midspan of the test deck.



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**SECTION 8
TEST RESULTS**

The temperature during testing was 26°C (79°F). The results are tabulated as follows:

Unit 1:

TITLE OF TEST	RESULTS	ALLOWED
Water Penetration, per UL 441 One hour of water spray	Pass	No leakage

Unit 2:

TITLE OF TEST	RESULTS	ALLOWED
Water Penetration, per UL 441 One hour of water spray	Pass	No leakage

General Note: All testing was performed in accordance with the referenced standard(s). Unit 1 was tested at a 2:12 pitch. Unit 2 was tested at a 12:12 pitch.

**SECTION 9
TEST RESULTS**

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 four 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 10
PHOTOGRAPH



Photo No. 1
Unirac® L-Foot with 3" Flashing, Solar Mount



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SECTION 11

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.