

# ESDEC, INC.

# MIAMI-DADE

# TEST REPORT

**SCOPE OF WORK**

TAS 100 (A) TESTING ON ECOFASTEN JUNCTION BOX, SOLAR PHOTOVOLTAIC JUNCTION BOX

**REPORT NUMBER**

M9042.06-301-47

**TEST DATE**

09/27/21

**ISSUE DATE**

09/29/21

**RECORD RETENTION END DATE**

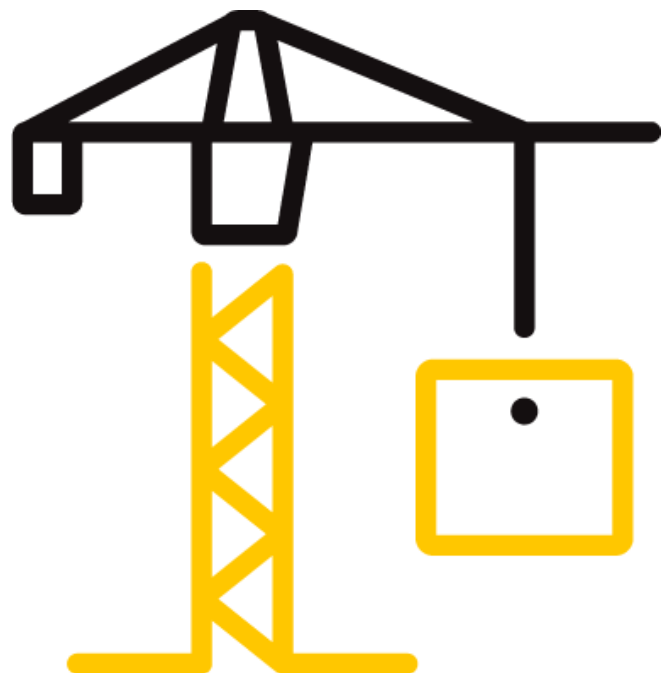
09/27/31

**PAGES**

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**DOCUMENT CONTROL NUMBER**

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RT-R-AMER-Test-2816  
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**TEST REPORT FOR ESDEC, INC.**

Report No.: M9042.06-301-47 R0

Date: 09/29/21

**REPORT ISSUED TO**

**ESDEC, INC.**

28357 Industrial Boulevard  
Hayward, California 94545

**SECTION 1**

**SCOPE**

Intertek Building & Construction (B&C) was contracted by Esdec, Inc. to perform TAS 100 (A) testing in accordance with Miami-Dade County requirements on their EcoFasten Junction Box, Solar Photovoltaic Junction Box. 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.

This report does not constitute certification of this product nor an opinion or endorsement by this laboratory.

For INTERTEK B&C:

<b>COMPLETED BY:</b>	Ricardo Cortez	<b>REVIEWED BY:</b>	Tyler Westerling, P.E.
<b>TITLE:</b>	Technician	<b>TITLE:</b>	Operations Manager
<b>SIGNATURE:</b>		<b>SIGNATURE:</b>	
<b>DATE:</b>	09/29/21	<b>DATE:</b>	09/29/21

RC:ms

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### SECTION 2

#### TEST METHOD(S)

The specimens were evaluated in accordance with the following:

**TAS 100 (A)-95**, *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

#### CALIBRATION

Windstream, water supply, and water distribution calibration were performed prior to testing.

### SECTION 4

#### MATERIAL SOURCE

Test specimens were provided by the client. Representative samples of the test specimens will be retained by Intertek B&C for a minimum of ten years from the test completion date.

### SECTION 5

#### EQUIPMENT

Vane Axial Fan (Wolf) – 65885

Spray Rack – 65885-1

Stopwatch – 64263

### SECTION 6

#### LIST OF OFFICIAL OBSERVERS

NAME	COMPANY
Yann Schwarz	Esdec Inc.
Jae Hendrickson	Esdec Inc.
Dennis Janzen	Intertek B&C
Tyler Westerling, P.E.	Intertek B&C

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### SECTION 7

#### TEST SPECIMEN DESCRIPTION

**Roof Deck Description:** An 8' 0" wide by 6' 0" long roof deck on a 2:12 slope was utilized. The roof deck did not utilize a ridge vent. The roof deck consisted of #2 Spruce-Pine-Fir nominal 2x4 rafters sheathed with 7/16" Oriented Strand Board (OSB). The rafters were spaced 24" on center. The OSB was secured to the rafters with #8 x 1-5/8" drywall screws spaced 6" on center around the perimeter and 12" on center at the intermediate supports. The OSB sheathing was covered with #30 felt paper underlayment and three-tab asphalt shingles.

**Description/Installation (EcoFasten Junction Box):** The test specimen was composed of a 12" x 9" x 0.035" thick aluminum flashing and a 9" wide by 8" long by 3" high Polymeric Junction box. The underside of the junction box has a pre-installed a 1/8" thick EPDM washer. The Junction box was secured with two #12" x 1.75" stainless steel screws with a bonded washer through the Junction box, flashing, and into the OSB sheathing of the test deck. The Junction box had 1-1/4" EMT connector and 1-1/4" EMT conduit section installed on the bottom of the enclosure that protruded through the deck. The Junction box was installed without sealant.

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### SECTION 8

#### TEST RESULTS

**Protocol TAS 100(A)-95, 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:** 09/27/21

The temperature during testing was 31°C (87°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 oz.
70 mph	0 oz.
90 mph	0 oz.
110 mph	0 oz.

**Result(s):** Pass

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

**Note 2:** Two specimens were installed onto the test deck.

**Note 3:** Test results are applicable for asphalt shingle roofs having a slope 2:12 or greater.

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### SECTION 9

#### PHOTOGRAPHS



**Photo No 1**

Top Side of the Test Deck Before Testing

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**Photo No. 2**  
Underside of the Test Deck

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**Photo No. 3**  
110 mph





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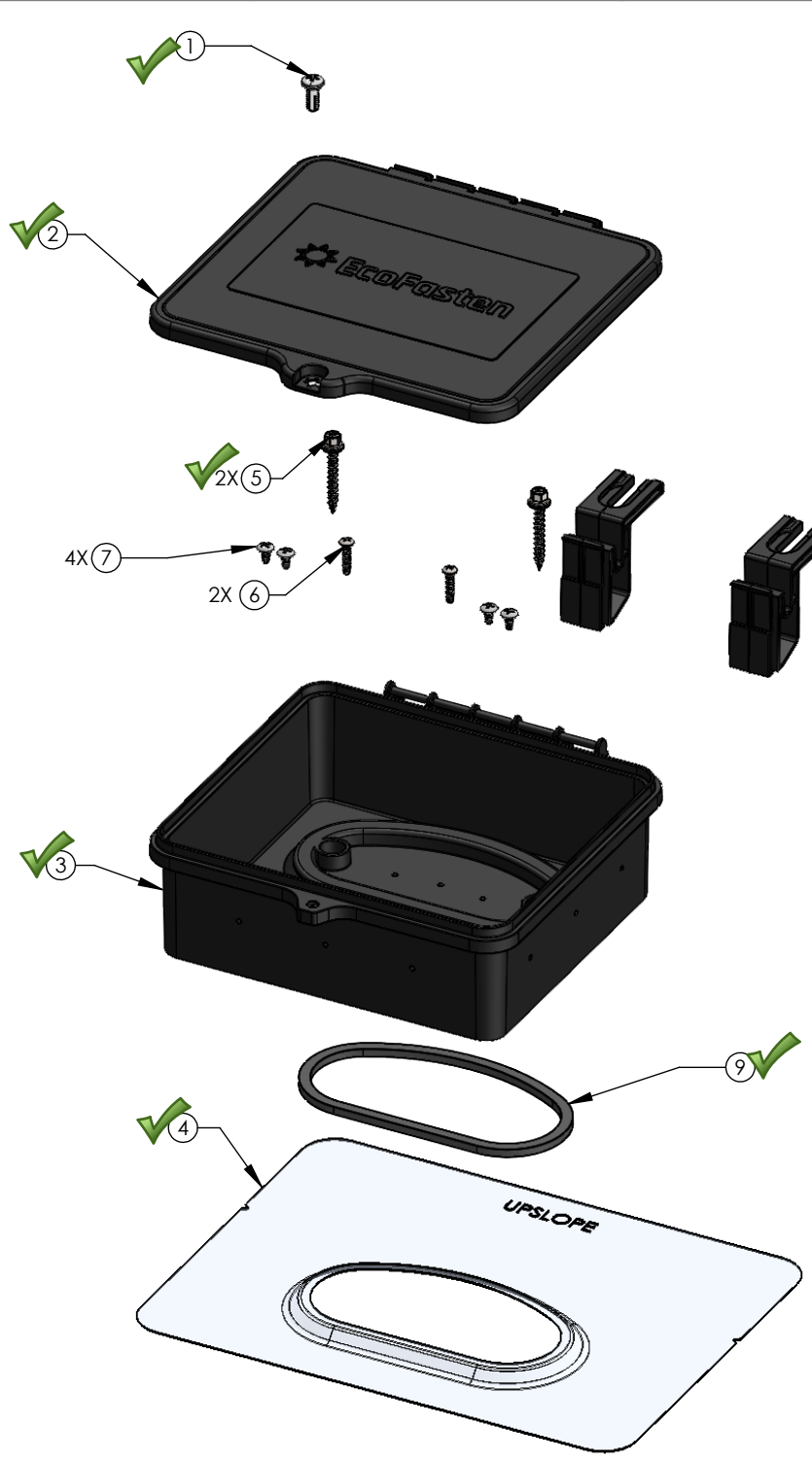
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**SECTION 10**  
**DRAWINGS**

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.



ITEM NO.	DESCRIPTION	MATERIAL
1	1/4-20 SCREW	300 SERIES STAINLESS
2	EF, LID	POLYMER
3	HOUSING	POLYMER
4	FLASHING	6000 SERIES ALUMINUM
5	DECK SCREW	300 SERIES STAINLESS
6	#8 X .75" SCREW	300 SERIES STAINLESS
7	#8-16 X 3/8" SCREW	300 SERIES STAINLESS
8	RAIL-HANGER	POLYMER
9	GASKET	EPDM FOAM

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 Verified by: *RAT05*

THIRD ANGLE PROJECTION

DO NOT SCALE DRAWING

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DRAWN	SO	09/02/2021
CHECKED	-	-
ENG APPR.	-	-
MFG APPR.	-	-
Q.A.	-	-

INTERPRET DIM AND TOLERANCE PER ASME Y14.5[M]-2009

DIMENSIONS TOLERANCES ARE IN:  
 INCHES. [MILLIMETERS]

.XX: +/- .030	.X: +/- .75
.XXX: +/- .010	.XX: +/- .25

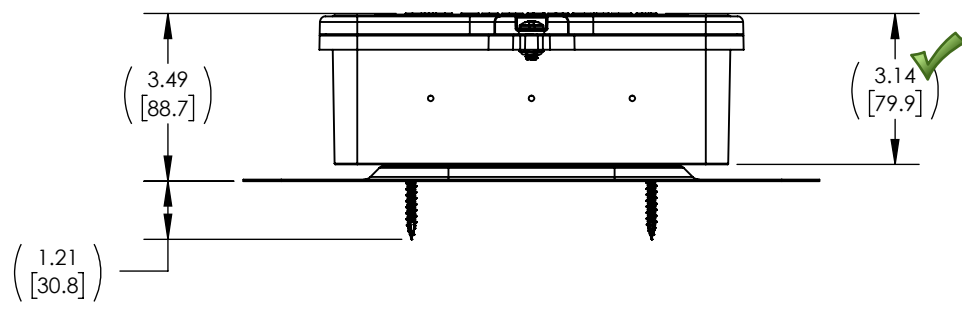
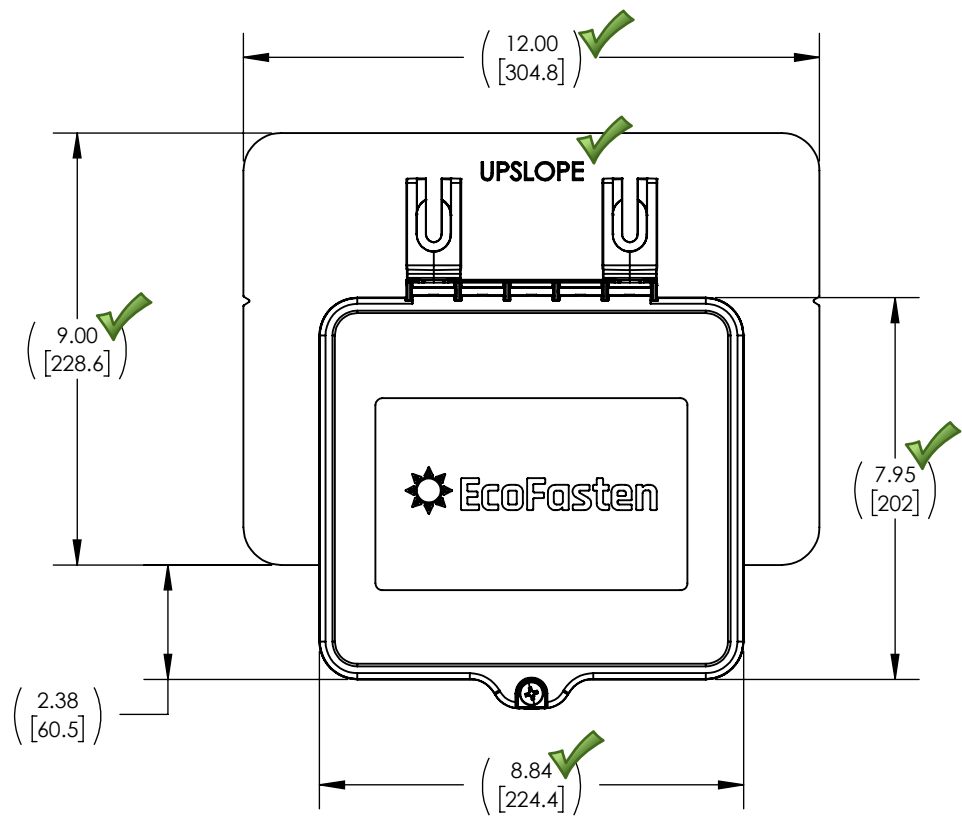
ANGLES: +/- 1°

**ESDEC**  
 INNOVATIVE MOUNTING SYSTEMS

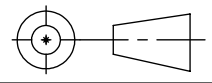
**J-BOX W/ROOF-RAIL MOUNT KIT BLK (FT)**

SIZE	DWG. NO.	REV.
<b>A</b>	4011013(FT)	<b>A</b>

SCALE: 1:4 WEIGHT: SHEET 1 OF 2




 Report #: M9042.06-301-47  
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 INNOVATIVE MOUNTING SYSTEMS  
**J-BOX W/ROOF-RAIL MOUNT KIT BLK (FT)**

SIZE <b>A</b>	DWG. NO. 4011013(FT)	REV. <b>A</b>
SCALE: 1:4		WEIGHT:
		SHEET 2 OF 2



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**SECTION 11**

**REVISION LOG**

REVISION #	DATE	PAGES	REVISION
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