

ESDEC, INC.

MIAMI-DADE

TEST REPORT

SCOPE OF WORK

TAS 100 (A) TESTING ON ECOFASTEN CLICKFIT GF1 L-FOOT, SOLAR PANEL ROOF ATTACHMENT

REPORT NUMBER

M9042.01-301-47 R0

TEST DATE

09/27/21

ISSUE DATE

09/29/21

RECORD RETENTION END DATE

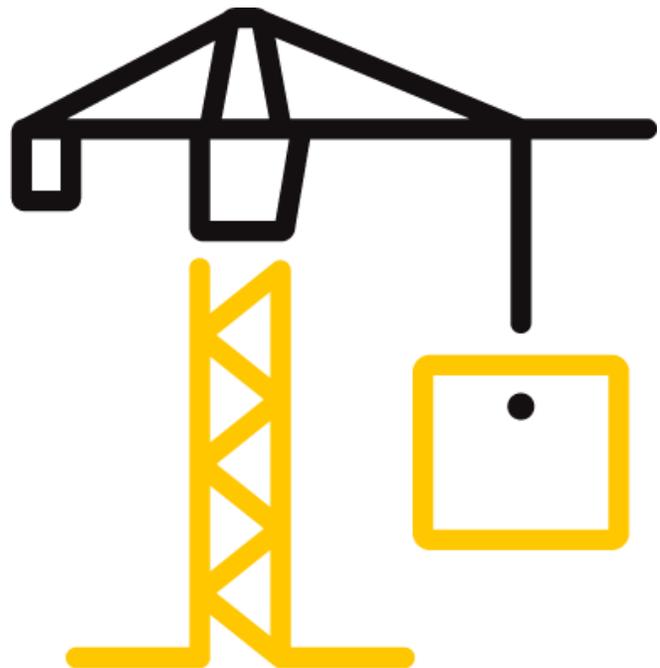
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PAGES

10

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www.intertek.com/building

TEST REPORT FOR ESDEC, INC.

Report No.: M9042.01-301-47 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 ClickFit GF1 L-Foot, Solar Panel Roof Attachment. 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 Fresno, California.

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

For INTERTEK B&C:

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

TEST REPORT FOR ESDEC, INC.

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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 ClickFit GF1 L-Foot): The test specimen was composed of an 8" x 10" x 0.035" thick aluminum flashing and a 1.57" wide by 2.76" high aluminum L-Foot Assembly. The mount was secured with one 5/16" x 4" lag bolt with a bonded washer through the L-Foot, flashing, and into the rafters of the test deck. The roof attachment 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 29°C (85°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.

Note 4: Test results are also applicable when using the longer 8" x 12" flashing aluminum or galvalume.

TEST REPORT FOR ESDEC, INC.

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SECTION 9

PHOTOGRAPHS



Photo No 1

Top Side of the Test Deck Before Testing

TEST REPORT FOR ESDEC, INC.

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Photo No. 2
Underside of the Test Deck



Photo No. 3
110 mph



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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.



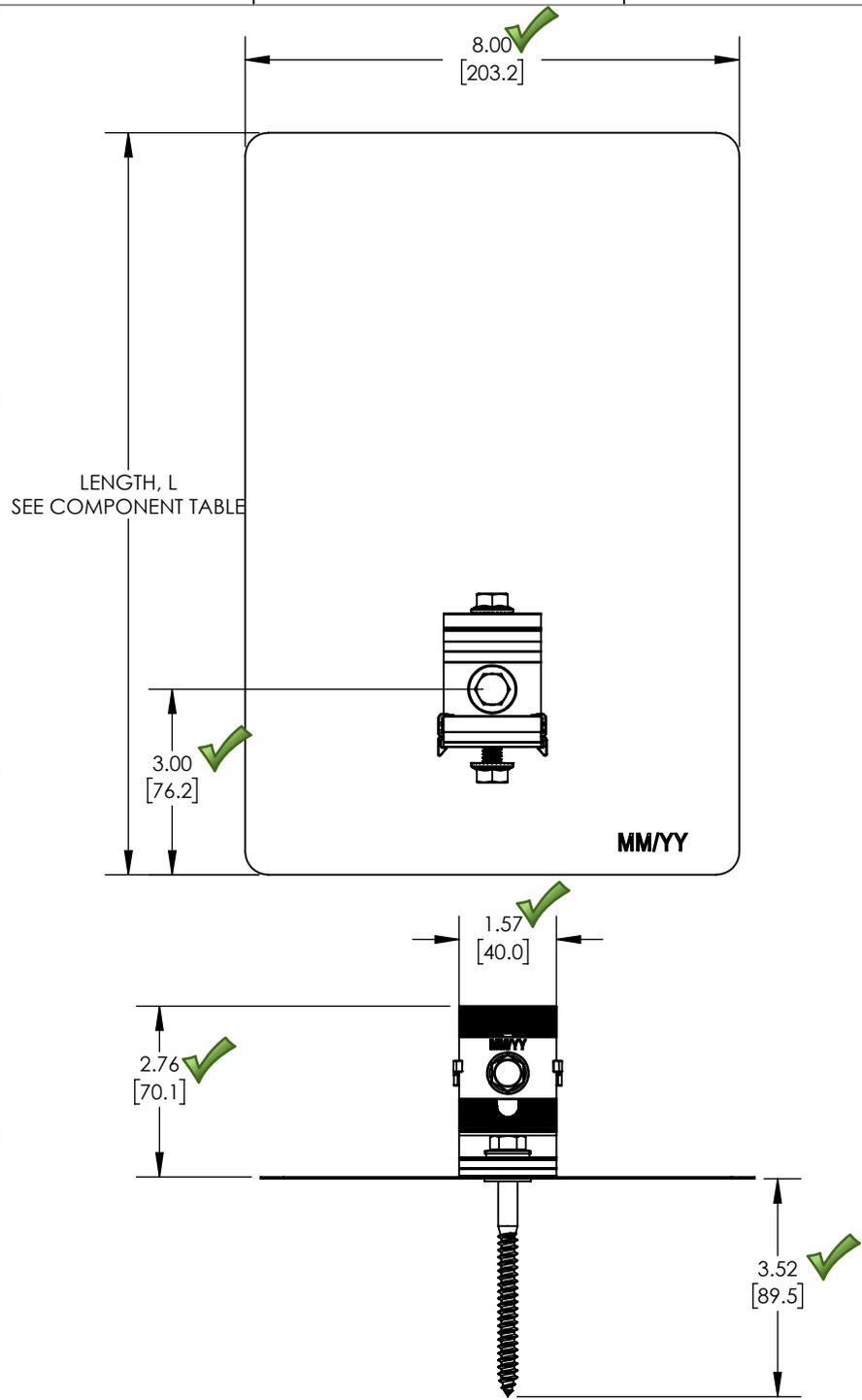
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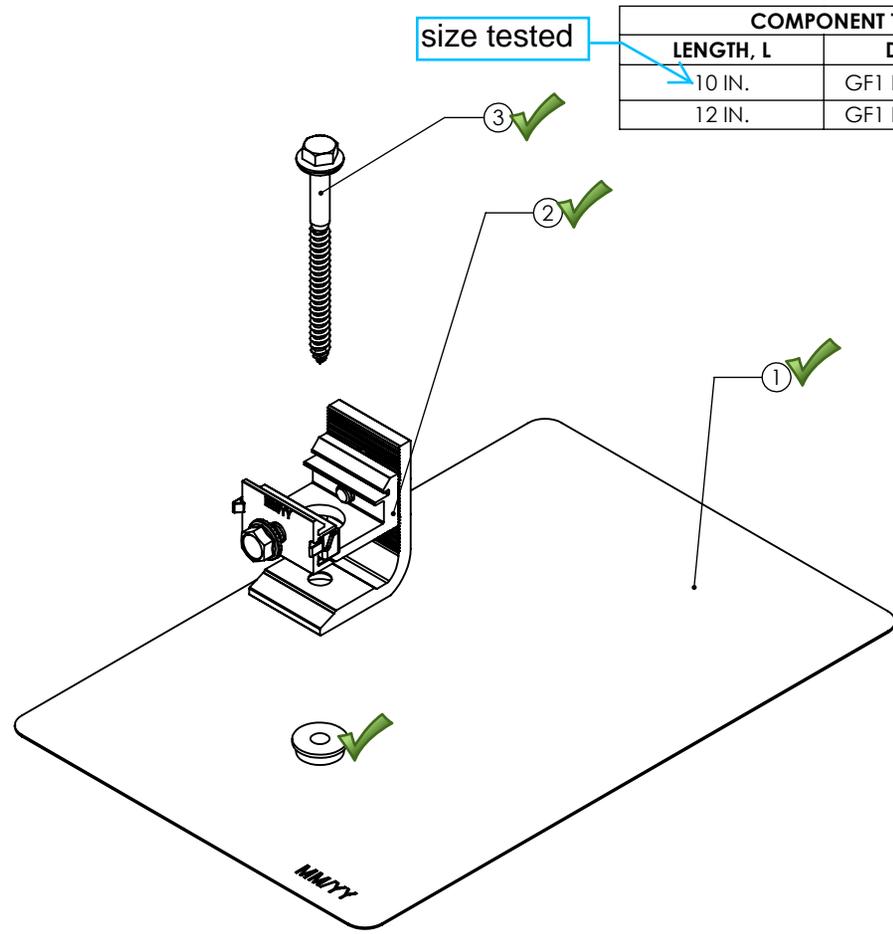
Date: 09/28/2021

Verified by: *RATG*

ITEM	DESCRIPTION
1 ✓	GF1 FLASHING, MILL OR BLACK
2 ✓	CLICKFIT L FOOT
3 ✓	LAG AND BONDED WASHER, 5/16 X 4 IN, 1/2 IN HEX HEAD

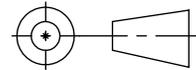


size tested



COMPONENT TABLE	
LENGTH, L	DESCRIPTION
10 IN.	GF1 FLASHING, 10 IN.
12 IN.	GF1 FLASHING, 12 IN.

THIRD ANGLE PROJECTION



DO NOT SCALE DRAWING

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DRAWN	T. RAY	2/5/2021
CHECKED	J. HENDRICKS	2/8/2021
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°		



INNOVATIVE MOUNTING SYSTEMS

ECOFASTEN CLICKFIT L FOOT

SIZE	DWG. NO.	REV.
A	800117	A
SCALE: 1:3	WEIGHT:	SHEET 1 OF 1



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SECTION 11

REVISION LOG

REVISION #	DATE	PAGES	REVISION
0	09/29/21	N/A	Original Report Issue