SUNMODO CORPORATION
MIAMI-DADE TEST REPORT

SCOPE OF WORK
TAS 100(A) TESTING ON EZ GRIP METAL, ROOF MOUNTS

REPORT NUMBER
J0393.02-109-18

TEST DATE(S)
11/20/18

ISSUE DATE
12/13/18

RECORD RETENTION END DATE
11/20/28

MIAMI-DADE COUNTY NOTIFICATION NO.
ATI 18057

LABORATORY CERTIFICATION NO.
18-0524.13

PAGES
17

DOCUMENT CONTROL NUMBER
ATI 00651 (08/21/17)
RT-R-AMER-Test-2816
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SECTION 1
SCOPE

Intertek Building & Construction (B&C) was contracted by SunModo Corporation to perform TAS 100(A) testing in accordance with Miami-Dade County requirements on their EZ Grip Metal Roof Mount. 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.
SECTION 2

TEST METHOD(S)

The specimen was 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. Reference Intertek B&C Calibration Report No. J0949.01-109-18, dated 11/28/18, for descriptions and results.

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 ten years from the test completion date.

SECTION 5

EQUIPMENT

Vane Axial Fan – Y003345

SECTION 6

LIST OF OFFICIAL OBSERVERS

<table>
<thead>
<tr>
<th>NAME</th>
<th>COMPANY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timothy J. McGill</td>
<td>Intertek B&amp;C</td>
</tr>
<tr>
<td>Joseph A. Reed, P.E.</td>
<td>Intertek B&amp;C</td>
</tr>
<tr>
<td>Kyle W. Ruth</td>
<td>Intertek B&amp;C</td>
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SECTION 7
TEST SPECIMEN DESCRIPTION

Product Type: EZ Grip Metal
Series/Model: Roof Mount

Product Size(s):

<table>
<thead>
<tr>
<th>OVERALL AREA:</th>
<th>WIDTH</th>
<th>LENGTH</th>
</tr>
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<tbody>
<tr>
<td>0.01 m² (0.1 ft²)</td>
<td>millimeters</td>
<td>millimeters</td>
</tr>
<tr>
<td></td>
<td>inches</td>
<td>inches</td>
</tr>
<tr>
<td>Overall size</td>
<td>105</td>
<td>76</td>
</tr>
<tr>
<td></td>
<td>4-1/8</td>
<td>3</td>
</tr>
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</table>

Roof Deck Description: An 8' 0" wide by 6' 0" long roof deck with 2:12 slope was utilized. The roof deck consisted of #2 Spruce-Pine-Fir nominal 2x6 rafters sheathed with 15/32" plywood. The rafters were spaced 24" on center. The plywood was secured to the rafters with 1-5/8" drywall screws spaced 6" on center around the perimeter and 12" on center at the intermediate supports. The plywood sheathing was covered with 30# felt underlayment only.

EZ Grip Metal Roof Mount Installation: The test specimens consisted of a 4-1/8" by 3" by 1" high aluminum base. Two installation holes were located on each 3" side of the base. A 1" by 3" by 1/4" thick EPDM pad was secured under the installation holes with a 1" wide strip of double sided tape. The base was centered over the rafter and secured with four 1/4" by 3" self-drilling hex head screws and a 5/8" diameter washer with EPDM gasket. The fasteners were located through the base, EPDM pad, and into the plywood sheathing. Two specimens were installed at 24" on center at the midspan of the test deck.
SECTION 8
TEST RESULTS

Protocol TAS 100(A)-95, Wind Driven Rain

Test Date(s): 11/20/18
The temperature during testing was 8°C (46°F). The results are tabulated as follows:

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

<table>
<thead>
<tr>
<th>Interval No.</th>
<th>Wind Speed (mph)</th>
<th>Time (min)</th>
<th>Water Spray</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>35</td>
<td>15</td>
<td>On</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>5</td>
<td>Off</td>
</tr>
<tr>
<td>3</td>
<td>70</td>
<td>15</td>
<td>On</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>5</td>
<td>Off</td>
</tr>
<tr>
<td>5</td>
<td>90</td>
<td>15</td>
<td>On</td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td>5</td>
<td>Off</td>
</tr>
<tr>
<td>7</td>
<td>110</td>
<td>5</td>
<td>On</td>
</tr>
<tr>
<td>8</td>
<td>0</td>
<td>5</td>
<td>Off</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Wind Speed</th>
<th>Results</th>
<th>Allowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>35 mph</td>
<td>0 oz.</td>
<td>No leakage</td>
</tr>
<tr>
<td>70 mph</td>
<td>0 oz.</td>
<td>No leakage</td>
</tr>
<tr>
<td>90 mph</td>
<td>0 oz.</td>
<td>No leakage</td>
</tr>
<tr>
<td>110 mph</td>
<td>0 oz.</td>
<td>No leakage</td>
</tr>
<tr>
<td>Total</td>
<td>0 oz.</td>
<td>No leakage</td>
</tr>
</tbody>
</table>

Results: Pass

General Note: There was no leakage at the mount locations after the test.
SECTION 9
PHOTOGRAPHS

Photo No 1
Top Side of Test Deck Before Testing

Photo No. 2
Underside of Test Deck Before Testing
TEST REPORT FOR SUNMODO CORPORATION
Report No.: J0393.02-109-18
Date: 12/13/18

Photo No. 3
35 MPH

Photo No. 4
70 MPH
TEST REPORT FOR SUNMODO CORPORATION
Report No.: J0393.02-109-18
Date: 12/13/18

Photo No. 5
90 MPH

Photo No. 6
110 MPH
TEST REPORT FOR SUNMODO CORPORATION
Report No.: J0393.02-109-18
Date: 12/13/18

Photo No. 7
Underside of Deck After Testing

Photo No. 8
Underside of Deck After Testing
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.
NOTES: UNLESS OTHERWISE SPECIFIED.

1. DIMENSIONS SHOWN ARE INCHES [MILIMETERS].
3. FREE OF OIL AND DIRT MARKS.
NOTES: UNLESS OTHERWISE SPECIFIED
1. DIMENSIONS SHOWN ARE INCHES [MILLIMETERS].
2. MATERIAL: 410 STAINLESS STEEL.
3. THE UNSPECIFIED RADII ARE .02".

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DIMENSIONS:
- 0.433 [11.00]
- 0.375 [9.53]
- 0.280 [7.11]
- 3.000 [76.20]
- 0.250 [6.35]

MATERIAL: 410 STAINLESS STEEL.

NOTES:
1. DIMENSIONS SHOWN ARE INCHES [MILLIMETERS].
2. MATERIAL: 410 STAINLESS STEEL.
3. THE UNSPECIFIED RADII ARE .02".
NOTES: UNLESS OTHERWISE SPECIFIED

1. DIMENSIONS SHOWN ARE INCHES [MILLIMETERS].

2. MATERIAL: EPDM±304

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SEALING WASHER .26 ID X .50 X .125

Material: EPDM+304

Dimensions:
- Ø0.50 [12.7]
- 0.05 [1.3]
- 0.06 [1.4]
- n 0.26 [6.6]
- n 0.47 [12.0]

Unless otherwise specified:
- Break all sharp edges 1/32 (0.8 mm) unless otherwise specified.
- Unless otherwise specified:
  - Ø0.47 [12.0] ±0.039 [1.0 mm]
  - Ø0.50 [12.7] ±0.01 [0.25 mm]
  - Ø0.47 [12.0] ±0.02 [0.50 mm]

Third Angle Projection: 11/18/2016

This drawing is confidential property of SunModo and its contents may not be disclosed without the prior written consent of SunModo Corp.
NOTES: UNLESS OTHERWISE SPECIFIED

1. DIMENSIONS SHOWN ARE INCHES [MILLIMETERS].
2. MATERIAL: ALUMINUM 6065-T5 PER ASTM B221.
FINISH: SLIVER POWDER COATING.
3. SUNMODE EXTRUSION A50224 WITH ANODIZING.

This drawing is confidential property of Sunmodo and its contents may not be disclosed without the prior written consent of Sunmodo Corp.
NOTES: UNLESS OTHERWISE SPECIFIED

1. DIMENSIONS SHOWN ARE INCHES [MILIMETERS].
2. MATERIAL: ALUMINUM 6005-T5 PER ASTM B221.
3. THE UNSPECIFIED DIMENSIONS ARE SPECIFIED BY 2D CAD FILE.
SECTION 11
REVISION LOG

<table>
<thead>
<tr>
<th>REVISION #</th>
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