

# SHEFFIELD METALS TEST REPORT

## SCOPE OF WORK

ASTM E2140 TESTING OF 0.032" ALUMINUM 1.5' MECHANICAL SEAM ROOF PANELS

## REPORT NUMBER

J8065.02-450-18 R0

## TEST DATE(S)

10/23/19

## ISSUE DATE

10/11/21

## PAGES

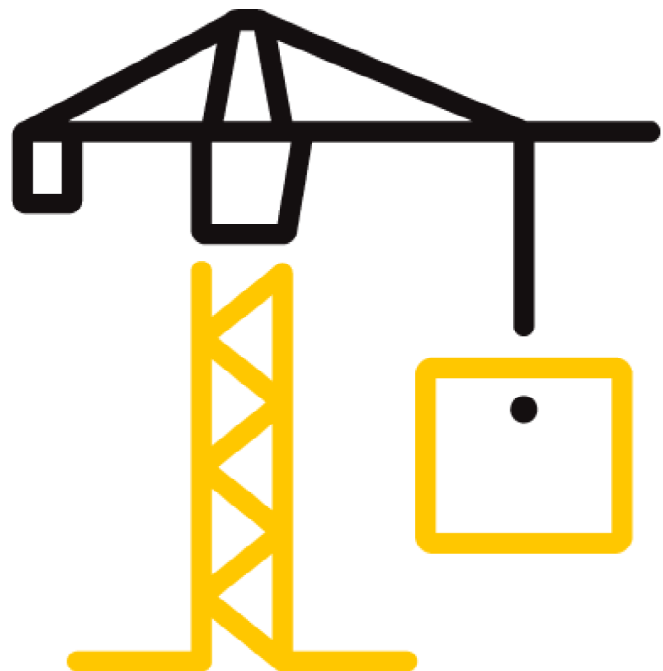
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## DOCUMENT CONTROL NUMBER

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## TEST REPORT FOR SHEFFIELD METALS

Report No.: J8065.02-450-18 R0

Date: 10/11/21

### REPORT ISSUED TO

#### SHEFFIELD METALS

5467 Evergreen Parkway  
Sheffield Village, OH 44054

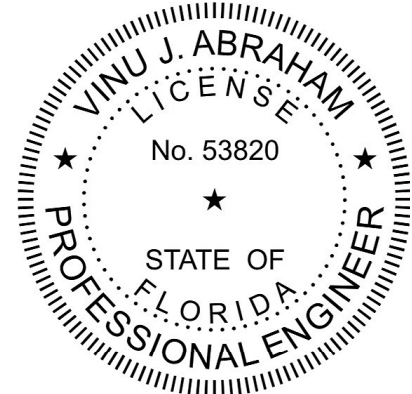
### SECTION 1

#### SCOPE


Architectural Testing, Inc. (an Intertek company), dba Intertek Building & Construction (B&C) was contracted by Sheffield Metals to perform testing in accordance with ASTM E2140-01 (2017), *Standard Test Method for Water Penetration of Metal Roof Panel Systems by Static Water Pressure Head*, on their 0.032" Aluminum 1.5" Mechanical Seam Roof Panels. 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 West Palm Beach, FL.


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

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.



For INTERTEK B&C:

<b>COMPLETED BY:</b>	Melissa Nuttall
<b>TITLE:</b>	Technician Team Leader- Product
<b>SIGNATURE:</b>	 Digitally Signed by: Melissa Nuttall
<b>DATE:</b>	10/11/21

<b>REVIEWED BY:</b>	Vinu J. Abraham, P.E.
<b>TITLE:</b>	Vice President – Products
<b>SIGNATURE:</b>	 Digitally Signed by: Vinu Abraham
<b>DATE:</b>	10/11/21

MMN:sar

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### SECTION 2

#### TEST METHOD(S)

The specimens were evaluated in accordance with the following:

**ASTM E 2140-01**, *Standard Test Method for Water Penetration of Metal Roof Panel Systems by Static Water Pressure Head.*

### SECTION 3

#### MATERIAL SOURCE/INSTALLATION

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.

The specimen was installed into a 5' x 10' 2x4 pine wood buck with joists 30" from each end. The buck was wrapped with pine 2x12s and the perimeter was completely sealed with sealant. Installation of the tested product was performed by representatives of the client.

### SECTION 4

#### LIST OF OFFICIAL OBSERVERS

NAME	COMPANY
Melissa Nuttall	Intertek B&C
Veron Wickham	Intertek B&C

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### SECTION 5

#### TEST SPECIMEN DESCRIPTION

**Product Type:** Metal Roof Panels

**Series/Model:** 1.5" Mechanical Seam

#### Product Size:

OVERALL AREA:	WIDTH		HEIGHT	
	millimeters	inches	millimeters	inches
4.6 m <sup>2</sup> (50.0 ft <sup>2</sup> )				
Overall Size	1524	60	3048	120
Panel Coverage	304	12	3048	120

#### Roof System:

COMPONENTS	DETAILS	ATTACHMENT METHOD
Clip	The 1-1/2" high x 4-1/2" long two-piece clips were constructed from 22 Ga steel bases and 24 Ga steel butterfly tabs.	The clips were secured with two #10 x 1" pancake head screws at each intermediate joist (5' on center).
1-1/2" 180° Mechanical Seam Panels	The panels were constructed from 0.032" aluminum and had a 12" coverage width. Six full and two partial width panels were tested.	The male leg of the panels were secured with clips. A 1/8" bead of Novaflex Metal Roof Sealant was applied to the first 90 degree bend closest to the vertical leg on the female side of the panels. The female leg of the panels were placed over the male leg of the panel and mechanically seamed 180°. The perimeter was secured with #10 x 1" pancake head screws spaced 4" on center.

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### SECTION 6

#### TEST RESULTS

The temperature during testing was 75°F - 84°F. The results are tabulated as follows:

TITLE OF TEST	RESULTS	ALLOWED
ASTM E 2140 Maintain 6" water pressure head for a period of 6 hours	No leakage	No leakage

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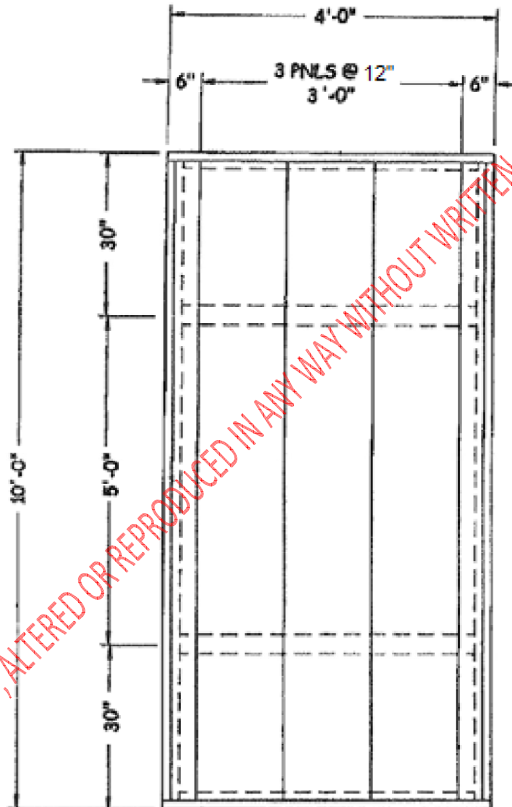
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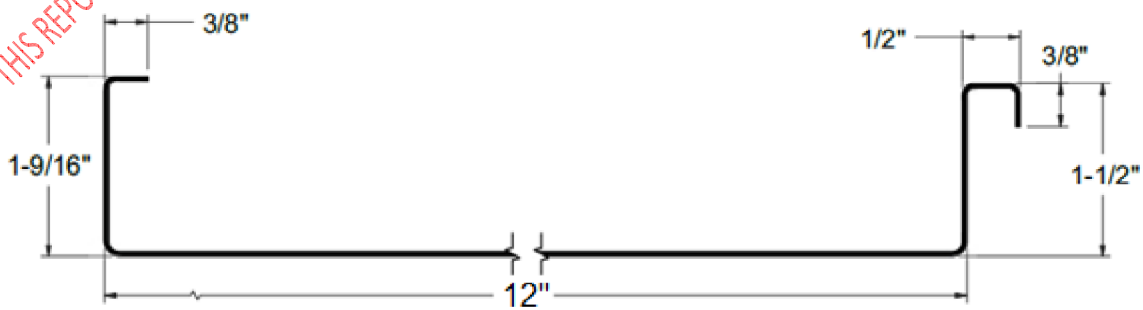
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### SECTION 7 DRAWINGS

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.



**Drawing No. 2  
Test Installation**

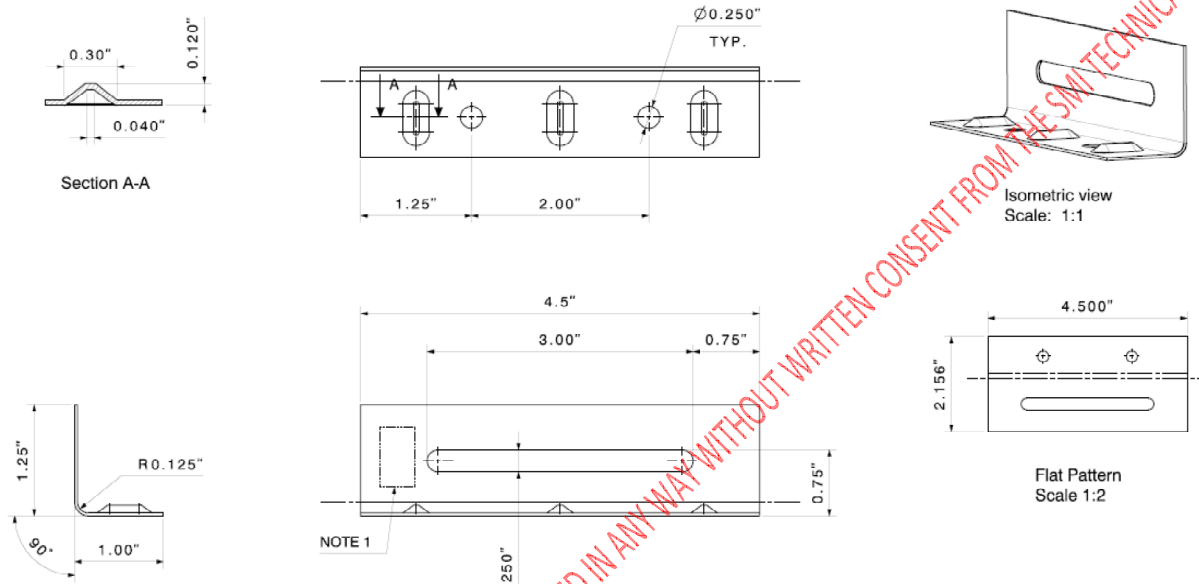


**Drawing No. 2  
Panel Profile**

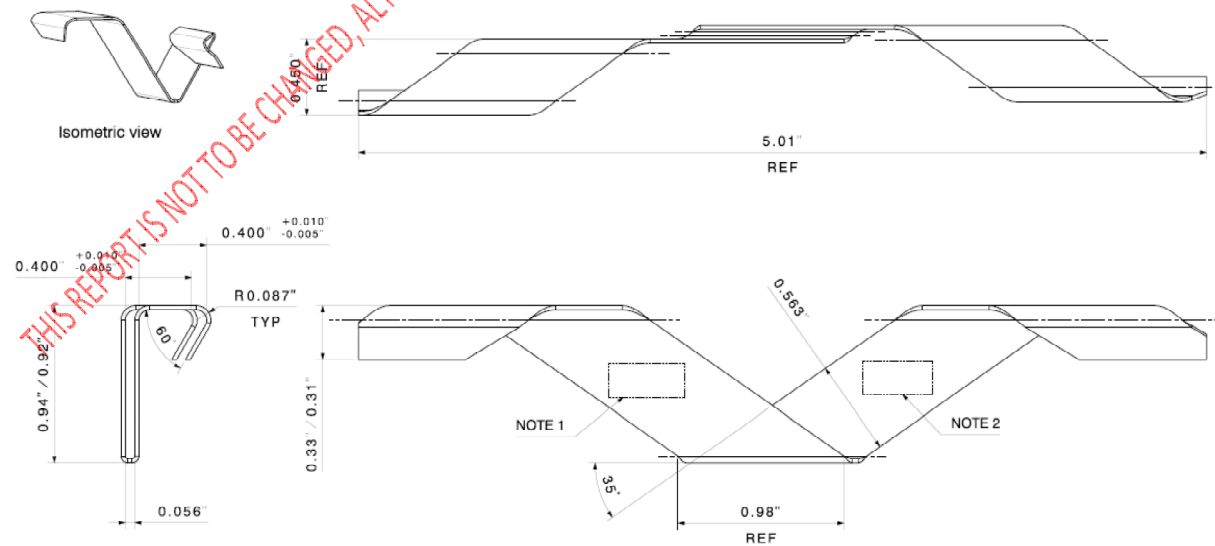
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Drawing No. 3  
Clip Base Details



Drawing No. 4  
Clip Butterfly Tab Details

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### SECTION 8

#### REVISION LOG

REVISION #	DATE	PAGES	REVISION
0	10/11/21	N/A	Original Report Issue

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