

SHEFFIELD METALS FLORIDA BUILDING CODE TEST REPORT

SCOPE OF WORK

TAS 100-23 TESTING ON SMI 24 GA 1" FF NAILSTRIP

REPORT NUMBER

R7064.01-450-18 R0

TEST DATE(S)

12/06/24

ISSUE DATE

02/06/25

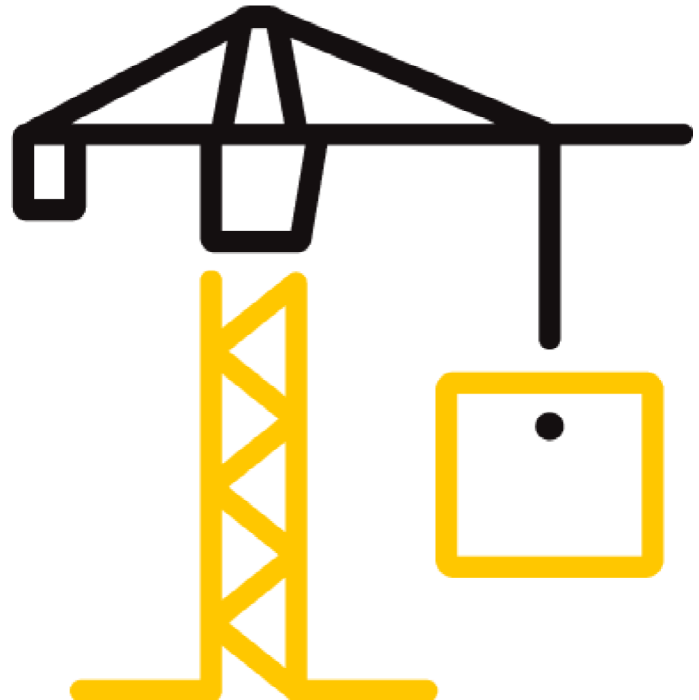
PAGES

11

DOCUMENT CONTROL NUMBER

RT-R-AMER-Test-7808 (07/12/22)

© 2019 INTERTEK



THIS REPORT IS NOT TO BE CHANGED, ALTERED OR REPRODUCED IN ANY WAY WITHOUT WRITTEN CONSENT FROM THE SMI TECHNICAL DEPT.

TEST REPORT FOR SHEFFIELD METALS

Report No.: R7064.01-450-18 R0

Date: 02/06/25

REPORT ISSUED TO

SHEFFIELD METALS

5467 Evergreen Parkway
Sheffield Village, OH 44054

SECTION 1

SCOPE

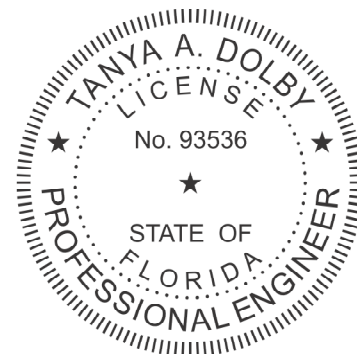
Architectural Testing, Inc. (an Intertek company), dba Intertek Building & Construction (B&C) was contracted by Sheffield Metals to perform testing in accordance with TAS 100, *Test Procedure for Wind and Wind Driven Rain Resistance of Discontinuous Roof Systems* on SMI 24 GA 1" FF Nailstrip Roof Panels. 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 West Palm Beach, FL.

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.


SECTION 2


SUMMARY OF TEST RESULTS

The specimen tested met the performance requirements set forth in the protocols.



For INTERTEK B&C:

COMPLETED BY: Melissa Nuttall, FMPC
TITLE: Senior Project Manager
SIGNATURE: 
Digitally Signed by: Melissa Nuttall
DATE: 02/06/25

REVIEWED BY: Tanya Dolby, P.E.
TITLE: Engineering Manager – Engineering Services
SIGNATURE: 
Digitally Signed by: Tanya Dolby
DATE: 02/06/25

MMN:sar

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample(s) tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

TEST REPORT FOR SHEFFIELD METALS

Report No.: R7064.01-450-18 R0

Date: 02/06/25

SECTION 3

TEST METHOD(S)

The specimen was evaluated in accordance with the following:

TAS 100-23, *Test Procedure for Wind and Wind Driven Rain Resistance of Discontinuous Roof Systems*

SECTION 4

MATERIAL SOURCE

Test sample materials were 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

LIST OF OFFICIAL OBSERVERS

NAME	COMPANY
Seth Allen	Intertek B&C

SECTION 6

TEST PROCEDURE

This test evaluates whether a discontinuous roof system provides sufficient wind driven rain resistance to allow no water infiltration through the deck sheathing during a predetermined test period. One assembly was tested per TAS 100 at the wind speed intervals indicated below. (Reference Chart No. 1 for wind speed and duration.)

Interval No.	Wind Speed (mph)	Time (min)	Water Spray
1	35	15	On
2	0	10	Off
3	70	15	On
4	0	10	Off
5	90	15	On
6	0	10	Off
7	110	5	On
8	0	10	Off

Chart No. 1
TAS 100 Wind Speed Intervals

TEST REPORT FOR SHEFFIELD METALS

Report No.: R7064.01-450-18 R0

Date: 02/06/25

SECTION 7

TEST SPECIMEN DESCRIPTION

Manufacturer: Sheffield Metals

Product Type: Metal Roof Panels

Series/Model: 1" Nailstrip

Roof Deck Description: The 2:12 slope roof system test assembly incorporated a valley, eave, and one rake condition. The plywood test deck consisted of four-ply 5/8" thick plywood sheathing installed over 2x10 perimeter supports and 2x10 intermediate supports, spaced 24" on center. The valley condition was constructed into the test deck and located at the deck's front edge.

Conditioning: Not Applicable

Roof System:

COMPONENTS	DETAILS	ATTACHMENT METHOD
30# Asphalt saturated organic felt paper	A single layer was used with a 5" overlap between adjacent sheets	The felt was secured with #10 x 1" pancake head screws with 32 Ga tin caps at each corner.
Drip edge	The 4 1/4" wide x 2 1/4" high drip edge was constructed from 24 Ga Steel.	The drip edge was secured through the top using one row of #10 x 1" pancake head screws spaced 6" on center.
Valley	The 20" wide valley was constructed from 24 Ga Steel.	The valley was secured with a offset cleat on each side constructed from 24 Ga Steel. The offset cleat was secured with #10 x 1" pancake head screws spaced 4" on center. Butyl tape was used under the offset cleat and was located under the fasteners. The end of the valley peak was notched folded and sealed with sealant.
1" Nailstrip	The panels were constructed from 24 Ga Steel and had a 12" coverage width.	The male leg of the panels were secured with #10 x 1" pancake head screws through every slot and between every slot into the metal. The female leg of the panels snap fit over the male leg

TEST REPORT FOR SHEFFIELD METALS

Report No.: R7064.01-450-18 R0

Date: 02/06/25

Roof System (Cont.):

COMPONENTS	DETAILS	ATTACHMENT METHOD
Edge Cap	The 4"W x 3 5/8"H edge cap stood 1" above the deck, had a 5/8" lip and was constructed from 24 Ga Steel.	The edge cap was used located on the whole perimeter the deck with the exception the windward side left of the valley and secured to the top of the z-channel with stainless steel pop rivets spaced 18" on center max and to the side of the deck with the same pop rivets spaced 18" on center max. There was a splice/seam on the leeward side of the deck.

THIS REPORT IS NOT TO BE CHANGED, ALTERED OR REPRODUCED IN ANY WAY WITHOUT WRITTEN CONSENT FROM THE TECHNICAL DEPT.

TEST REPORT FOR SHEFFIELD METALS

Report No.: R7064.01-450-18 R0

Date: 02/06/25

SECTION 8

TEST RESULTS

Protocol TAS 100-23, *Wind Driven Rain Resistance*

Test Date(s): 12/06/24

The temperature during testing was 78°F. The results are tabulated as follows:

WIND SPEED	OBSERVATIONS
35 mph	No water leakage
70 mph	No water leakage
90 mph	No water leakage
110 mph	No water leakage

Notes:

Reference Chart No. 1 for wind speeds and test stage durations.

Reference Section 10 for Photographs of the exterior and underside of the deck.

SECTION 9

CONCLUSION

The product tested per TAS 100-23 met the requirements of Section 1523.6.5 of the Florida Building Code – Building, 8th Edition (2023).

TEST REPORT FOR SHEFFIELD METALS

Report No.: R7064.01-450-18 R0

Date: 02/06/25

SECTION 10

PHOTOGRAPHS



Photo No. 1
70 MPH Top Side



Photo No. 2
70 MPH Underside

TEST REPORT FOR SHEFFIELD METALS

Report No.: R7064.01-450-18 R0

Date: 02/06/25



Photo No. 3
90 MPH Top side

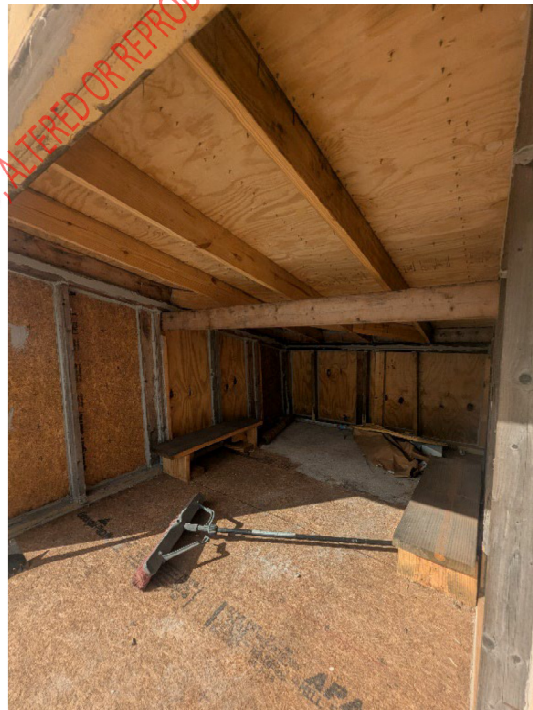


Photo No. 4
90 MPH Underside

TEST REPORT FOR SHEFFIELD METALS

Report No.: R7064.01-450-18 R0

Date: 02/06/25



Photo No. 5
110 MPH Top Side



Photo No. 6
110 MPH Underside

TEST REPORT FOR SHEFFIELD METALS

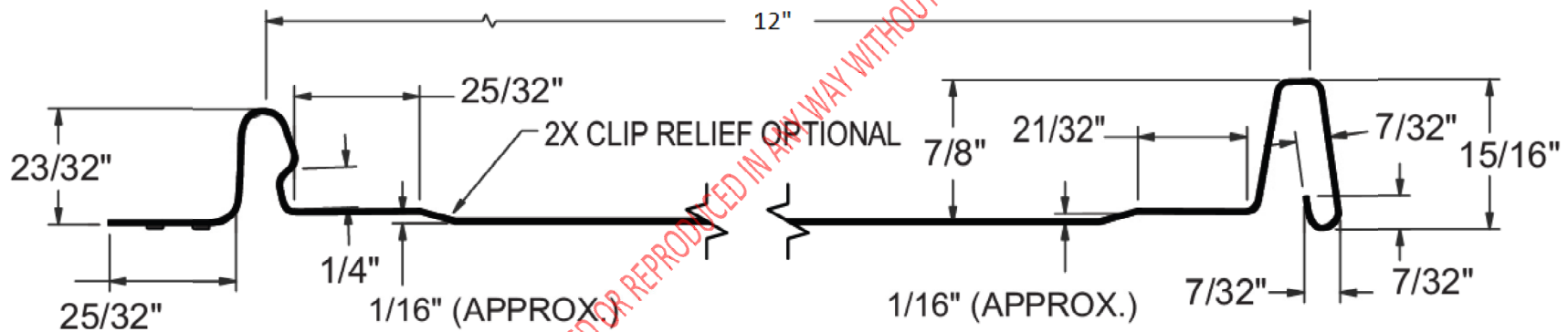
Report No.: R7064.01-450-18 R0

Date: 02/06/25

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.



Drawing No. 1
Panel Profile

TEST REPORT FOR SHEFFIELD METALS

Report No.: R7064.01-450-18 R0

Date: 02/06/25

SECTION 12

REVISION LOG

REVISION #	DATE	PAGES	REVISION
0	02/06/25	N/A	Original Report Issue

THIS REPORT IS NOT TO BE CHANGED, ALTERED OR REPRODUCED IN ANY WAY WITHOUT WRITTEN CONSENT FROM THE SMI TECHNICAL DEPT.