



PRI Construction Materials Technologies LLC

6412 Badger Drive

Tampa, FL 33610

813.621.5777

<https://www.pri-group.com/>

Laboratory Test Report

Report for: Michelle Stander
Lifetime Roofing Specialists, Inc.
3546 E Apple Rd. Cortland, NE 68331

Product Name(s): Mosaic Sicily Tile

Project No.: 2581T0004

Date(s) Tested: Dec. 07, 2023 - Jan. 25, 2024

Test Methods: ASTM E 108-11, -17

Results Summary: Meets Class A at Unlimited Slope w/one (1) layer of VersaShield Fire Resistant Roof Deck Protection and one (1) layer of ASTM D226 Type II Felt over Min. 15/32 ACX Plywood Deck

Purpose: Evaluate Class A compliance over 15/32 ACX plywood in accordance with **ASTM E108: Standard Test Methods for Fire Tests of Roof Coverings**.

Test Methods: Intermittent Flame and Burning Brand testing was conducted in accordance with **ASTM E108: Standard Test Methods for Fire Tests of Roof Covering**. Test parameters were set to evaluate Class A roof assemblies over combustible decks. All tests were conducted at a slope of 5:12.

Sampling: The following materials were received by PRI.

Product	Source	Date	Sampling
26 ga. Mosaic Sicily Tile	Client drop-off	Dec. 04, 2023	Lifetime
#10-15 x 2" Wood Grip screw	Client drop-off	Dec. 04, 2023	Lifetime
#9 x 4-1/2" Structural Wood Screw	Client drop-off	Dec. 04, 2023	Lifetime

All other materials were procured through local sources of distribution.

Calibration: Two-minute average readings taken during calibration were as follows:

Date	Air Velocity (mph)			Average Flame Temperature (°F)
	Edge	Center	Edge	
Jan. 25, 2024	11.9	11.7	11.8	N/A
Jan. 24, 2024	11.8	12.1	11.9	N/A
Dec. 07, 2023	12.1	11.8	12	N/A

2581T0004

The laboratory test results presented in this report are based on the material(s) supplied and tested. The results, and by extension any statements of conformity, opinions, or interpretations, apply the "simple acceptance" decision rule for measurement uncertainty accounting. This report is for the exclusive use of stated client. Only the client is authorized to permit copying or distribution of this report and then only in its entirety. PRI Construction Materials Technologies LLC assumes no responsibility nor makes a performance or warranty statement for this material or products and processes containing this material in connection with this report.

Product Description: Mosaic Sicily Tile 26ga stone coated steel.

#10-15 x 2" Woodgrip: #10-15 x 2" Woodgrip HiLo MP, ¼" HWH, From SFS.

Samples: Samples were prepared for testing using the following installation details and in accordance with the manufacturer's installation instructions:

Roof Cover: 26ga. steel Mosaic Grand Shingle, mechanically fastened using #10 x 2" Woodgrip screws fastened through the head lap at the vertical leg into the battens starting 1.5" from the side lap and continuing 10" o.c. along the length of the panel, five (5) fasteners per panel.

Battens: No. 2 SYP 2" x 2" wood battens installed approximately 14-5/8" o.c. parallel to the eave; Fastened using two (2) #9 x 4-1/2" Flat Head HeadLock Structural Wood Screws at each rafter intersection, and 24" o.c. between rafters.

Underlayment: One (1) layer of GAF VersaShield Fire Resistant Roof Deck Protection, mechanically attached to deck with 2" wide side laps and one (1) layer of ASTM D226 Type II felt with 4" wide side laps.

Deck: 15/32" thick, AC Plywood

Conditioning: All specimens were stored indoors at 74±4°F prior to testing.

Results: Test parameters were set to evaluate Class A assemblies over combustible decks. All tests were conducted at a test slope of 5:12.

Physical Properties	Results				Requirement
ASTM E108 Blower Air Temp = 50 - 90°F	Specimen 1	Specimen 2	Specimen 3	Specimen 4	
Class A Spread of Flame [Pass/Fail]	Pass	Pass			Pass
Class A Intermittent Flame [Pass/Fail]	Waived ¹	Waived ¹			Pass
Class A Burning Brand [Pass/Fail]	Pass	Pass	Pass	Pass	Pass

Notes: 1) Waived based on previous testing conducted under 2307T0005

Compliance Statement: Min. 26ga. steel Mosaic Sicily tile meet Class A at Unlimited Slope w/one (1) layer of VersaShield Fire Resistant Roof Deck Protection and one (1) layer of ASTM D226 felt over Min. 15/32 ACX Plywood Deck.

2581T0004

The laboratory test results presented in this report are based on the material(s) supplied and tested. The results, and by extension any statements of conformity, opinions, or interpretations, apply the "simple acceptance" decision rule for measurement uncertainty accounting. This report is for the exclusive use of stated client. Only the client is authorized to permit copying or distribution of this report and then only in its entirety. PRI Construction Materials Technologies LLC assumes no responsibility nor makes a performance or warranty statement for this material or products and processes containing this material in connection with this report.

Statement of Attestation: Testing was conducted in accordance with *ASTM E108: Standard Test Methods for Fire Tests of Roof Coverings*, Class A. The laboratory test results presented in this report are representative of the materials supplied.

Signed:



Bill Hinkle
Manager, Client Services

Date: 04/02/2024

Signed:


Zachary Priest, P.E.
Florida Registered Professional Engineer
PE No. 74021
STATE OF FLORIDA
PROFESSIONAL ENGINEER
No. 74021

Date: 05/07/2024

Report Issue History:

Issue #	Date	Pages	Revision Description (if applicable)
Original	04/02/2024	9	NA

2581T0004

The laboratory test results presented in this report are based on the material(s) supplied and tested. The results, and by extension any statements of conformity, opinions, or interpretations, apply the "simple acceptance" decision rule for measurement uncertainty accounting. This report is for the exclusive use of stated client. Only the client is authorized to permit copying or distribution of this report and then only in its entirety. PRI Construction Materials Technologies LLC assumes no responsibility nor makes a performance or warranty statement for this material or products and processes containing this material in connection with this report.

Result: Pass

Date Tested: 12/7/2023

Test Type: Spread of Flame
Class: A
Char Depth: N.A.

Deck #: 1
Deck Slope: 5:12
Max Spread: 20 in.

Plywood % MC: 8
Framing % MC: 8
50F<=T,Air<=90F: Yes

Object:	Minutes:	Time:
		Seconds:
Ignition	14	1
Test Terminated	10	0

Note: At no time during or after testing were any of the following observed: roof cover or roof deck material blowing/falling off of the test deck in the form of flaming or glowing brands or particles that continue to glow after reaching the floor, the combustible roof deck exposed, lateral spread of flame, or spread of flame beyond 6 ft. (Class A), 8 ft. (Class B), or 13 ft. (Class C).

Result: Pass

Date Tested: 12/7/2023

Test Type: Spread of Flame
Class: A
Char Depth: N.A.

Deck #: 2
Deck Slope: 5:12
Max Spread: 21 in.

Plywood % MC: 8
Framing % MC: 8
50F<=T,Air<=90F: Yes

Object:	Minutes:	Time:
		Seconds:
Ignition	13	40
Test Terminated	10	0

Note: At no time during or after testing were any of the following observed: roof cover or roof deck material blowing/falling off of the test deck in the form of flaming or glowing brands or particles that continue to glow after reaching the floor, the combustible roof deck exposed, lateral spread of flame, or spread of flame beyond 6 ft. (Class A), 8 ft. (Class B), or 13 ft. (Class C).

2581T0004

The laboratory test results presented in this report are based on the material(s) supplied and tested. The results, and by extension any statements of conformity, opinions, or interpretations, apply the "simple acceptance" decision rule for measurement uncertainty accounting. This report is for the exclusive use of stated client. Only the client is authorized to permit copying or distribution of this report and then only in its entirety. PRI Construction Materials Technologies LLC assumes no responsibility nor makes a performance or warranty statement for this material or products and processes containing this material in connection with this report.

Result: Pass

Date Tested: 01/24/2024

Test Type: Burning Brand
 Class: A
 Brand #: 3413
 Brand Weight: 2025.3

Deck #: 5
 Deck Slope: 5:12
 Char Depth: N.A.

Plywood % MC: 8
 Framing % MC: 8
 50F<T,Air<=90F: Yes

Object:	Time:	
	Minutes:	Seconds:
Smoke on Underside	2	2
Discoloration		
Underside at Plywood		
Joint	2	29
Temperature at 150°F	2	30
Temperature at 200°F	2	40
Temperature at 250°F	2	53
Temperature at 300°F	3	18
Brand 25% Consumed	3	24
Temperature at 350°F	3	42
Temperature at 400°F	4	9
Temperature at 450°F	4	40
Glow on Underside	5	14
Temperature at 500°F	5	30
Brand 50% Consumed	6	17
Temperature at 550°F	7	12
Temperature at 600°F	7	53
Discoloration of		
Plywood on Underside	8	1
Temperature at 650°F	9	2
Brand 75% Consumed	10	1
Brand 100% Consumed	17	4
Test Terminated	168	19

Note: At no time during or after testing were any of the following observed: roof cover or roof deck material blowing/falling off of the test deck in the form of flaming or glowing brands or particles that continue to glow after reaching the floor, the combustible roof deck exposed, or sustained flaming of the underside of the deck.

2581T0004

The laboratory test results presented in this report are based on the material(s) supplied and tested. The results, and by extension any statements of conformity, opinions, or interpretations, apply the "simple acceptance" decision rule for measurement uncertainty accounting. This report is for the exclusive use of stated client. Only the client is authorized to permit copying or distribution of this report and then only in its entirety. PRI Construction Materials Technologies LLC assumes no responsibility nor makes a performance or warranty statement for this material or products and processes containing this material in connection with this report.

Result: Pass

Test Type: Burning Brand
Class: A
Brand #: 3414
Brand Weight: 2035.8

Deck #: 6
Deck Slope: 5:12
Char Depth: N.A.

Date Tested: 01/24/2024

Plywood % MC: 8
Framing % MC: 8
50F<=T.Air<=90F: Yes

Object:	Time:	
	Minutes:	Seconds:
Temperature at 150°F	1	41
Temperature at 200°F	2	2
Smoke on Underside	2	16
Temperature at 250°F	2	21
Temperature at 300°F	2	39
Temperature at 350°F	3	35
Brand 25% Consumed	3	58
Temperature at 400°F	4	16
Temperature at 450°F	5	2
Glow on Underside	5	55
Temperature at 500°F	5	58
Temperature at 550°F	6	44
Brand 50% Consumed	6	46
Temperature at 600°F	7	55
Brand 75% Consumed	9	15
Glow on Underside No Longer Visible	13	29
Brand 100% Consumed	15	22
Test Terminated	24	20

Note: At no time during or after testing were any of the following observed: roof cover or roof deck material blowing/falling off of the test deck in the form of flaming or glowing brands or particles that continue to glow after reaching the floor, the combustible roof deck exposed, or sustained flaming of the underside of the deck.

2581T0004

The laboratory test results presented in this report are based on the material(s) supplied and tested. The results, and by extension any statements of conformity, opinions, or interpretations, apply the "simple acceptance" decision rule for measurement uncertainty accounting. This report is for the exclusive use of stated client. Only the client is authorized to permit copying or distribution of this report and then only in its entirety. PRI Construction Materials Technologies LLC assumes no responsibility nor makes a performance or warranty statement for this material or products and processes containing this material in connection with this report.

Result: Pass

Date Tested: 01/24/2024

Test Type: Burning Brand

Deck #: 7

Plywood % MC: 8

Class: A

Deck Slope: 5:12

Framing % MC: 8

Brand #: 3416

Char Depth: N.A.

50F<=T,Air<=90F: Yes

Brand Weight: 2022.7

Object:	Time:	
	Minutes:	Seconds:
Smoke on Underside	1	23
Temperature at 150°F	1	31
Temperature at 200°F	2	2
Discoloration		
Underside at Plywood		
Joint	2	6
Temperature at 250°F	2	22
Temperature at 300°F	2	44
Temperature at 350°F	3	15
Brand 25% Consumed	3	32
Temperature at 400°F	3	43
Discoloration of		
Plywood on Underside	3	46
Temperature at 450°F	4	31
Glow on Underside	4	39
Temperature at 500°F	5	30
Brand 50% Consumed	6	4
Temperature at 550°F	6	52
Brand 75% Consumed	9	27
Temperature at 600°F	10	13
Brand 100% Consumed	14	48
Glow on Underside	21	59
Temperature at 650°F	23	7
Glow on Underside No		
Longer Visible	36	0
Test Terminated	63	31

Note: At no time during or after testing were any of the following observed: roof cover or roof deck material blowing/falling off of the test deck in the form of flaming or glowing brands or particles that continue to glow after reaching the floor, the combustible roof deck exposed, or sustained flaming of the underside of the deck.

2581T0004

The laboratory test results presented in this report are based on the material(s) supplied and tested. The results, and by extension any statements of conformity, opinions, or interpretations, apply the "simple acceptance" decision rule for measurement uncertainty accounting. This report is for the exclusive use of stated client. Only the client is authorized to permit copying or distribution of this report and then only in its entirety. PRI Construction Materials Technologies LLC assumes no responsibility nor makes a performance or warranty statement for this material or products and processes containing this material in connection with this report.

Result: Pass

Test Type: Burning Brand

Class: A

Brand #: 3417

Brand Weight: 2016.2

Deck #: 8

Deck Slope: 5:12

Char Depth: N.A.

Date Tested: 01/24/2024

Plywood % MC: 8

Framing % MC: 8

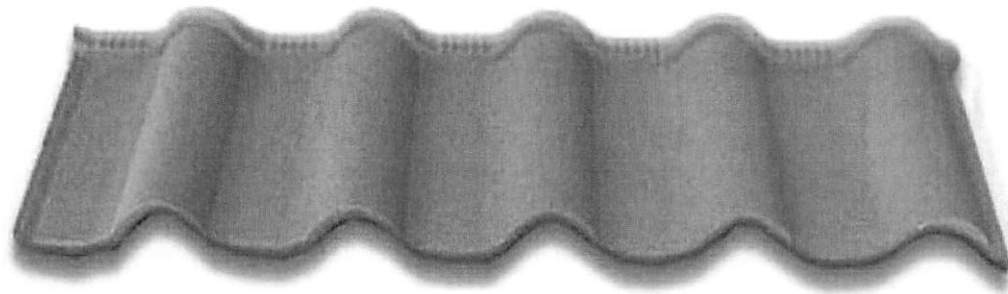
50F<=T,Air<=90F: Yes

Object:	Minutes:	Time: Seconds:REPORT
Surface Flames 2 ft. above brand	0	34
Temperature at 100°F	2	3
Smoke on Underside	2	4
Temperature at 150°F	2	4
Temperature at 200°F	2	28
Temperature at 250°F	2	31
Temperature at 300°F	3	20
Brand 25% Consumed	3	22
Temperature at 350°F	4	18
Brand 50% Consumed	4	20
Temperature at 400°F	4	22
Discoloration Underside at Plywood Joint	4	28
Glow on Underside	4	29
Temperature at 450°F	6	1
Brand 75% Consumed	6	3
Brand 100% Consumed	7	40
Temperature at 500°F	10	40
Temperature at 525°F	76	26
Temperature at 525°F	76	26
Test Terminated	76	36

Note: At no time during or after testing were any of the following observed: roof cover or roof deck material blowing/falling off of the test deck in the form of flaming or glowing brands or particles that continue to glow after reaching the floor, the combustible roof deck exposed, or sustained flaming of the underside of the deck.

2581T0004

The laboratory test results presented in this report are based on the material(s) supplied and tested. The results, and by extension any statements of conformity, opinions, or interpretations, apply the "simple acceptance" decision rule for measurement uncertainty accounting. This report is for the exclusive use of stated client. Only the client is authorized to permit copying or distribution of this report and then only in its entirety. PRI Construction Materials Technologies LLC assumes no responsibility nor makes a performance or warranty statement for this material or products and processes containing this material in connection with this report.



MOSAIC SICILY TILE		
Thickness of steel (mm)	0.45	0.0177"
Length of sheet (mm)	1340 ± 10	52.8"
Cover length (mm)	1250	49.2"
Width of sheet (mm)	420 ± 10	16.5"
Cover width (mm)	370	14.6"
Side overlap (mm)	90	3.5"
Weight of tile (kg)	3 ± 0.1	6lb 9oz
Weight of tiled roof (kg/m ²)	6.5	14lbs 5oz
Coverage per tile (m ²)	0.46	5 ft ²

END OF REPORT

2581T0004

The laboratory test results presented in this report are based on the material(s) supplied and tested. The results, and by extension any statements of conformity, opinions, or interpretations, apply the "simple acceptance" decision rule for measurement uncertainty accounting. This report is for the exclusive use of stated client. Only the client is authorized to permit copying or distribution of this report and then only in its entirety. PRI Construction Materials Technologies LLC assumes no responsibility nor makes a performance or warranty statement for this material or products and processes containing this material in connection with this report.