

PRI Construction Materials Technologies LLC

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Laboratory Test Status

Report for: Dave Swaroop

G.A.P. Roofing, Inc. 4444 Hunt Street Pryor, OK 74361

Product Name(s): G.A.P. Roofing 40# Organic Base Sheet

Project No.: 1047T0045

Date(s) Tested: June 2, 2021 – June 4, 2021
Test Method(s): ASTM E108 Burning Brand

Results Summary: See Results Table

Purpose: Burning Brand testing was completed in accordance with ASTM E108: Standard Test

Methods for Fire Tests of Roof Coverings, Class A. Testing was conducted using one

underlayment and 3 separate concrete tile roof coverings.

Test Methods: Burning Brand Testing was conducted in accordance with ASTM E108-17: Standard Test

Methods for Fire Tests of Roof Covering. Test parameters were set to evaluate Class A

assemblies. All tests were conducted at the slopes listed in the results table.

Sample Preparation: Specimens were constructed on Class A assemblies as described in the results table.

Specimens were tested upon completion of assembly.

Sampling: The following materials were received by PRI.

ProductSourceDateSamplingG.A.P. Roofing 40# Organic Base SheetShafter, CAJan. 25, 2021G.A.P. Roofing

Bel Air Concret Roof Tile

Sumterville, FL

Sept. 20, 20212

Eagle Roofing Products Florida

Malibu Concrete Roof Tile

Sumterville, FL

Sept. 20, 20212

Eagle Roofing Products Florida

Capistrano Concrete Roof Tile

Sumterville, FL

Sept. 20, 20212

Eagle Roofing Products Florida

Sept. 20, 20212

Eagle Roofing Products Florida

All other materials were procured through local sources of distribution

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Results: 40# Organic Base Sheet with various concrete tile roof coverings

Physical Properties	Test Method		Results	5		Requirement
Fire Resistance, [Class A] Assembly; Class A parameters & requirements	ASTM E108 Burning Brand	1	2	3	4	
Deck: as described System: G.A.P Roofing 40# Organic Base Sheet mechanically attached; roof covering as indicated	Eagle Roofing Products FL Bel Air Concrete Roof Tile	Pass	Pass	Pass	Pass	
Tested as received Test Air Velocity = 12±0.5mph Test Class A at 5in:12in	Eagle Roofing Products FL Malibu Concrete Roof Tile	Pass	Pass	Pass	Pass	Class A
	Eagle Roofing Products FL Capistrano Concrete Roof Tile	Pass	Pass	Pass	Pass	

Note(s) 1 – The first specimen tested with Capistrano Roof Tile failed by allowing sustained flame on the underside of the deck. Per ASTM E108, four (4) test specimens must pass consecutively to meet the requirements of the standard. Specimens 2 through 5 each met passed – yielding compliant test results for the burning brand portion of ASTM E108 with the respective roof cover.

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Test Results with Bel-Air Roof Tile:

Company Name: G.A.P Roofing

Project Number: 1047T0045 Product Name: 40# Organic Base Sheet BelAir Technician: BB
Result: Pass Date Tested: 6/2/2021

Test Type: Burning Brand Deck #: 1 Plywood % MC: 7

Class: A Deck Slope: 5:12 Framing % MC: 8
Brand #: 1069 Char Depth: N.A.

Brand Weight: 2036.1

	Time:		
Object:	Minutes:	Seconds:	
Brand 25% Consumed	3		59
Brand 75% Consumed	7		58
Test Terminated	19		58

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.

Company Name: G.A.P Roofing

Project Number: 1047T0045 Product Name: 40# Organic Base Sheet BelAir Technician: JS, BB
Result: Pass Date Tested: 6/3/2021

Test Type: Burning Brand Deck #: 2 Plywood % MC: 8
Class: A Deck Slope: 5:12 Framing % MC: 8
Brand #: 1070 Char Depth: N.A.

Brand #: 1070 Brand Weight: 2049

	Time:		
Object:	Minutes:	Seconds:	
Brand 25% Consumed	5	3	
Brand 50% Consumed	6	45	
Brand 75% Consumed	10	42	
Test Terminated	20	9	

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.

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Company Name: G.A.P Roofing

Project Number: 1047T0045 Product Name: 40# OrganicBase Sheet BelAir Technician: 8B,JS

Result: Pass Date Tested: 6/3/2021

Test Type: Burning Brand Deck #: 3 Plywood % MC: 7
Class: A Deck Slope: 5:12 Framing % MC: 8
Brand #: 1071 Char Depth: N.A.

Brand Weight: 2050

		Time:	
Object:	Minutes:	Seconds:	
Surface Flames 2 ft. above brand	1	36	
Brand 25% Consumed	4	34	
Brand 50% Consumed	6	50	
Brand 75% Consumed	8	59	
Brand 100% Consumed	29	15	
Test Terminated	29	16	

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.

Company Name: G.A.P Roofing

Project Number: 1047T0045 oduct Name: 40# Organic Base Technician: BB
Result: Pass Date Tested: ##

Test Type: Burning Brand Deck #: 4 Plywood % MC: 7
Class: A Deck Slope: 5:12 Framing % MC: 8
Brand #: 1072 Char Depth: N.A.

Brand Weight: 2049

	Time:		
Object:	Minutes:	Seconds:	
Brand 25% Consumed	3	46	
Brand 50% Consumed	7	8	
Brand 75% Consumed	8	43	
Test Terminated	18	54	

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

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Test Results with Malibu Roof Tile:

Company Name: G.A.P Roofing **Project Number:** 1047T0045

Brand Weight: 2049.5

Result: Pass

Test Type: Burning Brand Class: A Brand #: 1061 Product Name: 40# Organic Base Sheet Malibu

et Malibu Technician: JS, BB
Date Tested: 6/2/2021

 Deck #: 1
 Plywood % MC: 7

 Deck Slope: 5:12
 Framing % MC: 8

 Char Depth: N.A.

		Time:
Object:	Minutes:	Seconds:
Brand 25% Consumed	3	9
Brand 50% Consumed	5	9
Brand 75% Consumed	7	18
Asphalt Dripping on Underside	11	7
Discoloration Underside at Plywood Joint	12	59
Brand 100% Consumed	18	49
Test Terminated	19	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, or sustained flaming of the underside of the deck.

Company Name: G.A.P Roofing Project Number: 1047T0045

Result: Pass

Test Type: Burning Brand

Class: A Brand #: 1062 Brand Weight: 2052 Product Name: 40# Organic Base Sheet Malibu

Deck #: 2 Deck Slope: 5:12 Char Depth: N.A. Technician: JS, BB

Date Tested: 6/2/2021

Plywood % MC: 8 Framing % MC: 8

		Time:
Object:	Minutes:	Seconds:
Brand 50% Consumed	7	16
Brand 75% Consumed	8	29
Asphalt Dripping on Underside	11	41
Brand 100% Consumed	16	21
Test Terminated	16	40

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.

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Company Name: G.A.P Roofing Project Number: 1047T0045

lumber: 1047T0045 Product Name: 40# Organic Base Sheet Malibu Result: Pass

Deck #: 3

Technician: JS, BB

Date Tested: 6/2/2021

Test Type: Burning Brand

Class: A Deck Slope: 5:12
Brand #: 1063 Char Depth: N.A.

Plywood % MC: 8 Framing % MC: 8

Brand Weight: 2047.2

		Time:
Object:	Minutes:	Seconds:
Brand 25% Consumed	4	5
Brand 50% Consumed	6	29
Brand 75% Consumed	13	49
Discoloration Underside at Plywood Joint	15	15
Brand 100% Consumed	20	1
Test Terminated	20	10

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.

Company Name: G.A.P Roofing Project Number: 1047T0045

Product Name: 40# Organic Base Sheet Malibu

Technician: JS, BB

Date Tested: 6/2/2021

Result: Pass

 Test Type: Burning Brand
 Deck #: 4

 Class: A
 Deck Slope: 5:12

 Brand #: 1064
 Char Depth: N.A.

Plywood % MC: 8 Framing % MC: 8

Brand Weight: 2046.3

Time: Object: Minutes: Seconds: Brand 25% Consumed 37 Brand 50% Consumed 25 6 Brand 75% Consumed 7 54 Smoke on Underside 8 3 Asphalt Dripping on Underside 8 32 Brand 100% Consumed 17 23 Test Terminated

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.

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Test Results with Capistrano Roof Tile:

Company Name: G.A.P Roofing Project Number: 1047T0045

Result: Fail

Product Name: 40# Organic Base Sheet Capistrano

Time:

Technician: JS, BB Date Tested: 6/2/2021

Test Type: Burning Brand Class: A Brand #: 1065 Brand Weight: 2049.9

Deck #: 1 Deck Slope: 5:12 Char Depth: N.A. Plywood % MC: 8 Framing % MC: 8

Object: Minutes: Brand 25% Consumed 4

49 Smoke on Underside 4 58 Discoloration Underside at Plywood Joint 6 12 Brand 50% Consumed 6 15 Flames on Underside (un-sustained) 7 25 Brand 75% Consumed 10 15 Flames on Underside (sustained) 10 36 Test Terminated 47

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.

Company Name: G.A.P Roofing Project Number: 1047T0045

Result: Pass

Product Name: 40# Organic Base Sheet Capistrano

Technician: JS, BB Date Tested: 6/2/2021

Test Type: Burning Brand

Deck #: 2 Deck Slope: 5:12 Class: A Brand #: 1066 Char Depth: N.A. Plywood % MC: 8 Framing % MC: 8

Brand Weight: 2057.8

	Time:		
Object:	Minutes:	Seconds:	
Brand 25% Consumed	3	15	
Brand 50% Consumed	6	40	
Brand 75% Consumed	11	7	
Brand 100% Consumed	19	25	
Test Terminated	19	30	

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.

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Company Name: G.A.P Roofing

Project Number: 1047T0045 Product Name: 40# Organic Base Sheet Capistrano Technician: JS, BB

Result: Pass Date Tested: 6/2/2021

Test Type: Burning Brand Deck #: 3 Plywood % MC: 7
Class: A Deck Slope: 5:12 Framing % MC: 8

Brand #: 1067 Char Depth: N.A.
Brand Weight: 2049.5

Time: Object: Minutes: Seconds: Brand 25% Consumed 4 49 Brand 50% Consumed 7 10 Brand 75% Consumed 10 21 Brand 100% Consumed 18 6 Test Terminated 19 28

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.

Company Name: G.A.P Roofing

Project Number: 1047T0045 Product Name: 40# Organic Base Sheet Capistrano Technician: JS, BB
Result: Pass Date Tested: 6/2/2021

Test Type: Burning Brand Deck #: 3 Plywood % MC: 7
Class: A Deck Slope: 5:12 Framing % MC: 8

Brand #: 1067 Char Depth: N.A.
Brand Weight: 2049.5

Time: Object: Minutes: Seconds: Brand 25% Consumed Δ 49 Brand 50% Consumed 7 10 Brand 75% Consumed 10 21 Brand 100% Consumed 18 6 Test Terminated 19 28

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.

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Company Name: G.A.P Roofing Project Number: 1047T0045

Result: Pass

Product Name: 40# Organic Base Sheet Capistrano

Technician: JS Date Tested: 6/4/2021

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Test Type: Burning Brand Class: A Deck #: 5 Deck Slope: 5:12 Char Depth: N.A. Plywood % MC: 8 Framing % MC: 8

Brand #: 1073 Brand Weight: 2062.9

	Time:		
Object:	Minutes:	Seconds:	
Brand 25% Consumed	4	38	
Brand 50% Consumed	5	30	
Brand 75% Consumed	7	39	
Discoloration Underside at Plywood Joint	16	22	
Brand 100% Consumed	16	45	
Test Terminated	18	2	

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.

END OF TEST STATUS

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