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TECHNOLOGIES

Evaluation of
Country Cottage Roofing
Endureed
Artificial Thatch Roofing System
in Accordance With
Dade County Protocol TAS 100-95
TEST PROCEDURE FOR WIND AND WIND DRIVEN RAIN RESISTANCE OF DISCONTINUOUS ROOF SYSTEMS

April 25, 2003

PRI Asphalt Technologies, Inc. 6408 Badger Drive Tampa, FL 33610 Tel: 813-621-5777 Fax: 813-621-5840 e-mail mail@priasphalt.com WebSite: http://www.priasphalt.com

TEST REPORT

Dade County Building Code Compliance Office
PROTOCOL TAS 100-95

TEST PROCEDURE FOR WIND AND WIND DRIVEN RAIN RESISTANCE OF DISCONTINUOUS ROOF SYSTEMS
April 25, 2003

Client: Country Cottage Roofing, Inc.
Route 10
Box 596
Lake City, FL 32025

Metro-Dade Notification No: PRI03036
Test Date: April 8, 2003
PRI Test No: CCR-002-02-01

1.1 Description of Discontinuous Roof System:

Prepared Roof Covering

Product Name:	Endureed
Product Dimensions:	5/16 x 14 x 36 inches long
Product Type:	Artificial Thatch Roofing System
Manufacturer:	Country Cottage Roofing

Underlayment

Name:	Soprema® Colphene 1500 self-adhering modified membrane Soprema® HR/FR Granulated Colphene self-adhering modified membrane
Manufacturer:	Soprema, Inc. 800.356.3521
Type:	UL Rated, Self-Adhering Roofing Membrane

Other Materials:

Nails:	11-gauge stainless steel annular ring shank
Manufacturer:	
Edge Metal:	16 oz copper, 2 inch X 4 inch X 10'
Valley Metal:	16 oz copper, 18 inch X 10'
Sheathing:	⅝ inch thick Fire Resistant plywood

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1.2 Method of Roof Construction:

PRI Asphalt Technologies constructed the deck used for this testing as described in the following and in accordance with the requirements of TAS 100-95 and the South Florida Building Code: Section 3403.5.

Deck

The plywood deck was constructed with standard 2 X 6 framing members, spaced 24 inches apart and 19/32 (⅝) inch thick FRT (Fire resistant) rated sheathing. The sheathing was attached with 8d common nails at 6 inches on center at the edges and 12 inches on center at intermediate supports. One valley was also constructed located at the front edge of the test deck as noted in attached Figure 1 from TAS 100-95 (Appendix B).

Metal Flashing

Galvanized, 16 oz copper, 2 inch X 4 inch metal drip edge was installed at the perimeter of the deck fastened 6 inches on center with 11-gauge stainless steel annular ring shank nails. All corners were overlapped a minimum of 5 inches. The 16 oz 18 inch wide copper valley flashing was installed using hand formed clips which captured a ½ inch return on the valley flashing edges. The clips were place 12 inches on center and fastened to the deck with one 11-gauge stainless steel annular ring shank nails.

Underlayment

A 36 inch wide ply of Soprema self-adhering membrane was applied to the plywood sheathing parallel to and centered on the valley. After the valley flashing was installed Soprema granule coated self-adhering membrane was installed starting at the eave and then applying additional sheets to cover the deck with a 4 inch overlap and minimum 6 inch end laps. The sheets of Soprema granule coated self-adhering membrane covered the metal drip edge ended at the centerline of the valley.

Artificial Thatch Shingle Application

The Endureed Artificial Thatch Shingle Roofing System was applied in accordance with the instructions provided by Country Cottage, Inc. and attached to this report. The first course of the Endureed Thatch Roofing System was placed at the eave with the exposure extending 5 inches beyond the eave. The subsequent courses were applied with a 5 inch exposure. The Endureed Thatch Roofing System was fastened to the deck with (4) 11-gauge stainless steel annular ring shank nails

placed 10 5/8 inches on center through predrilled holes in the thatch shingle spine. The Endureed Thatch Roofing System shingles continued the valley centerline. Rake edges were flush with the drip edge.

1.4 Absorptive Material Description

The absorptive material used for the simulated rainfall calibration was 46 gauge organic felt.

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1.7 Wind stream, Simulated Rain Fall, and Flow Meter Calibration Data and Calculations.

See Appendix A.

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1.8 Detailed Observations.

TAS 100 DATA AND OBSERVATIONS
Country Cottage Roofing, Inc
Endureed, Artificial Thatch Roofing System
April 8, 2003

Slope: 2" in 12" **Air Temp:** 88 °F **Deck Conditioning:** Not Required

Air Velocity Condition	Simulated Rainfall Condition	Duration
35 mph Fronds lifted at eave, rake and field to 90° and flapping.	8.8 in/hr No water infiltration under deck	15 min
0 mph	Off No water infiltration under deck	10 min
70 mph Fronds lifted at eave, rake and field to 120° and flapping.	8.8 in/hr No water infiltration under deck	15 min
0 mph	Off No water infiltration under deck	10 min
90 mph Fronds lifted at eave, rake and field to 120° and flapping.	8.8 in/hr No water infiltration under deck	15 min
0 mph	Off No water infiltration under deck	10 min
110 mph Fronds lifted at eave, rake and field to 120° and flapping.	8.8 in/hr No water infiltration under deck	15 min
0 mph	Off No water infiltration under deck	10 min
END OF TEST		

Summary Observations: The fronds lifted at eave, rake and field to 120° and flapped vigorously during the test. At the end of the test the fronds had returned to their original position as much as possible considering the natural intertwining of the fronds during exposure to wind. No water infiltration on the underside of the deck was observed during or at the conclusion of the test.

1.9 Volume of water, which infiltrated the sheathing at area of ridge vent.

Not applicable in this test.

1.10 Water Infiltration Through Sheathing.

None

1.11 Shingles Which Blow Off, Tear or Blow Upward Without Reseating:

None

2.0 Result of Testing:

Pass

The sample submitted for testing complies with all the requirements of Metro-Dade Protocol TAS 100-95, **TEST PROCEDURE FOR WIND AND WIND DRIVEN RAIN RESISTANCE OF DISCONTINUOUS ROOF SYSTEMS.**

Signed: _____
Gary H Griswold
Manager, Testing Services

Date: 5/2/03

Signed: _____
Charles L. Thomas
Professional Engineer

Date: 5/2/03

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