



CONSTRUCTION MATERIALS

TECHNOLOGIES



**Performance Test Report
for
Global Innovation LLC
Bali Endureed® Roofing System
in Accordance With
Underwriters Laboratories - UL 2218
STANDARD FOR IMPACT RESISTANCE OF PREPARED ROOF
COVERING MATERIALS**

February 16, 2009



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TEST REPORT

UNDERWRITERS LABORATORIES UL 2218 STANDARD FOR IMPACT RESISTANCE OF PREPARED ROOF COVERING MATERIALS

February 16, 2009

Client: Global Innovation, LLC
496 SW Ring Court
Lake City, FL 32025

Test Date: February 16, 2009
PRI Test No: CCR-005-02-01

1.0 Description of Discontinuous Roof System:

Prepared Roof Covering

Manufacturer: Global Innovation LLC
Product Name: Endureed®, Bali Thatch
Product Type: Plastic thatch

Other Materials

Nails: 11 gauge 1.75" ring shank stainless steel nails
Sheathing: 15/32 (1/2) APA Span rated plywood

Underlayment

Manufacturer: Soprema
Product Name: Soprema Colphene HR FR GR
Product Type: Polymer modified self-adhering membrane

2.0 Method of Roof Construction:

PRI Construction Materials Technologies constructed the deck used for this testing as described in the following and in accordance with the requirements of UL 2218.

CCR-005-02-01 PRI Accreditations: IAS-ES TL-189; State of Florida TST 5878; Metro-Dade 06-1116.02: CRRC
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Deck

The three feet X three feet test deck was constructed with standard trade size 2 X 4 framing members. The framing members comprised the frame with a vertical support at midspan of the deck. The frame was covered with a single piece of 15/32 inch thick A-C Grade, exterior plywood sheathing with A side up. The sheathing was attached with 8d common nails at 6 inches on center at the edges and 12 inches on center at intermediate supports. g as described in the following and in accordance with the requirements of UL 2218.

Underlayment

The underlayment for this deck consisted of a single layer of Soprema Colphene HR FR GR self-adhering membrane applied directly to the plywood deck.

Product Application

The Global Innovation Endureed® Bali thatch was applied in accordance with the manufacturer's application instructions which included the use of six, 1.75" ring shank stainless steel nails placed in the factory drilled holes located 3.5" from each end of the batten bar or thatch binder strips, and equally spaced for the 36 inch length of the batten bar. The thatch was applied with 5 inches vertically between the batten bar or thatch binder strip.

3.0 Conditioning

Sample was constructed at laboratory conditions of 73°F and 55% relative humidity. The deck was tested at a temperature of 71°F.

4.0 Detailed Observations

UL 2218 DATA AND OBSERVATIONS Global Innovations Endureed® Bali Thatch Roofing System

Slope: 0" in 12"

Air Temp: 71°F

Class of Drop	Target Location	Visual Damage (2 Coincident Drops)	Depression depth, in
4	Field	Depression, no failure	0
4	Edge	No edge	0
4	Corner	No corners	0
4	Overlap	Depression, no failure	0
4	Field	Depression, no failure	0
4	Field	Depression, no failure	0

Note: This roofing system is not a typical roofing system and has no real edge, corner of overlap. As a result, these areas, not present in this roofing system, could not be tested.

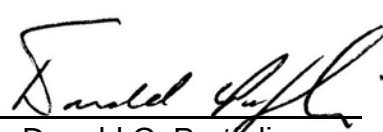
5.0 Result of Testing:

The Global Innovation Endureed® Bali thatch roofing system was tested for maximum impact resistance (Class 4: 2 inch steel ball dropped 20 feet) in accordance with Underwriters Laboratories UL 2218 Standard for Impact Resistance of Prepared Roof Covering Materials. Examination of the top and bottom of the thatch in the impact areas revealed no evidence of tearing, fracturing, cracking, splitting, rupture, crazing. Examination of the Soprema Colphene HR FR GR self-adhering membrane below the impact areas revealed no evidence of tearing, fracturing, cracking, splitting, rupture, crazing or other evidence of opening of the roof covering layer. There was some very minor scuffing of the granules.

6.0 Statement of Compliance:

The Global Innovation Endureed® Bali thatch roofing system complies with the acceptance criteria of Underwriters Laboratories UL 2218 Standard for Impact Resistance of Prepared Roof Covering Materials for a Class 4 impact resistance rating.

Signed: 
Heath Columbe
Laboratory Technician

Approved: 
Donald C. Portfolio
President

Date: February 17, 2009

Date: February 17, 2009

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Typical Appearance of Global Innovation Endureed® Bali Thatch Roofing System

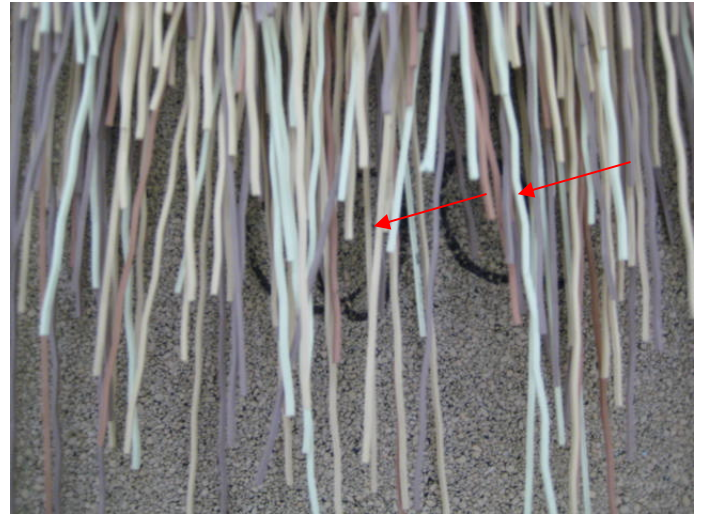
Before and After Class 4 Impact (2" Ball/20 ft. Drop) Two Coincident Drops



BEFORE



AFTER

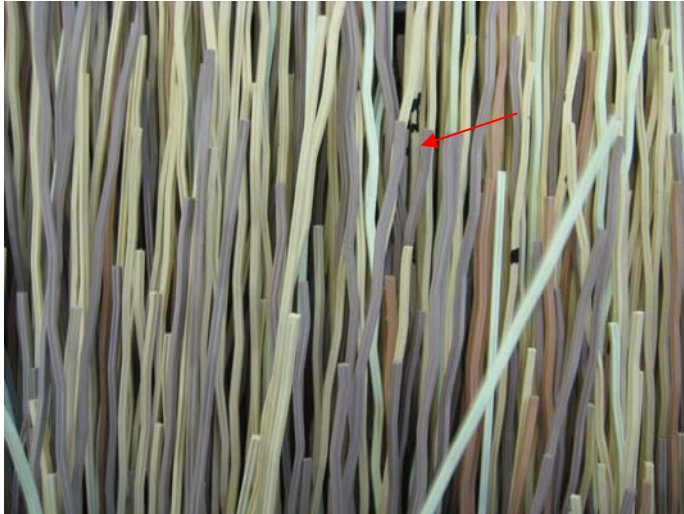


Drop Areas After 2 Coincident Drops

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Drop Areas After 2 Coincident Drops

Typical Appearance of Underlying Roofing Membrane After Class 4 Impact



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