MIAMI-DADE

BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908

NOTICE OF ACCEPTANCE (NOA)

LAPOLLA Industries, Inc.
15402 Vantage Parkway East
SUITE 322
Houston, TX 77032

SCOPE:
This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Division (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code and the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: SPRAY POLYURETHANE FOAM LPA2500 over Wood Decks

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This new NOA consists of pages 1 through 5.
The submitted documentation was reviewed by Jorge L. Acebo.

MIAMI-DADE COUNTY APPROVED

NOA No.: 08-0402.06
Expiration Date: 06/12/13
Approval Date: 06/12/08

ROOFING COMPONENT APPROVAL

Category: Roofing
Sub-Category: Spray Applied Polyurethane Roof System
Materials: Polyurethane
Deck Type Wood
Maximum Design Pressure **-105 psf**

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

Product	Dimensions	Test Specifications	Product Description
LPA2500	N/A	TAS 110	Polyurethane spray applied foam that utilizes an HFC blowing agent intended for roofing applications.
Therm-O-Flex TF 1000 Series Elastomeric Roof Coating	N/A	ASTM D6083	A premium quality, fluid applied elastomeric roof coating.
RCS-5000 Series Restoration Coatings	N/A	ASTM D6083	A premium quality, fluid applied elastomeric roof coating.
Therm-O-Prime	N/A		A single component, water soluble acrylic emulsion primer to prepare Galvanized Metal, Concrete, Asphalt Substrates and Scarified Foam for new SPF installations.

TRADE NAMES OF PRODUCTS MANUFACTURED BY OTHERS:

Product	Dimensions	Test Specifications	Product Description	Manufacturer
Any Miami-Dade County Approved Roof Coating	N/A	As Required by Miami-Dade County PCA	Roof coating for application over polyurethane spray applied foam.	Generic. (with current PCA)

EVIDENCE SUBMITTED:

Test Agency	Test Identifier	Test Name/Report	Date
PRI Construction Materials Technologies	LPII-005-02-01	TAS 110	06/12/07
PRI Asphalt Technologies	LPII- 002-02-01	ASTM D 6083/TAS 114-H	10/19/05
Underwriters Laboratories	07NK08120	UL 790	07/16/07
Underwriter Laboratories, Inc.	R14353	Fire Classification	06/26/05
Factory Mutual Research Corp.	3023796	Class 4470	10/02/05
Atlantic & Caribbean Roof Consulting, LLC	07-077	TAS 114-J	12/05/07
	07-054	TAS 114-J	10/22/07

APPROVED ASSEMBLIES:

Deck Type 1I: Wood, Insulated

Deck Description: 19/32" or greater plywood or wood plank

System Type B: Sprayed polyurethane foam covered with an Approved Miami-Dade County roof coating installed over a mechanically fastened insulation board.

Deck Attachment: In accordance with applicable Building Code, but in no case shall it be less than:
#8 Ring shank nails spaced 6" o.c. at the field of the plywood sheet and #10 Ring shank nails spaced 4" o.c. at the perimeter of the plywood sheet. The above attachment method must be in addition to existing attachment.

All General and System Limitations apply.

One layer of the following insulation.

Insulation Layer	Insulation Fasteners	Fastener Density/ft2
Securock Minimum .5" thick	#14 screw with 3" Metal Plate	1:2

Note: Insulation Panels shall be primed with LAPOLLA Therm-O-Prime according to LAPOLLA Industries, Inc. and coating manufacturers' recommendations. Primer shall be thoroughly cured prior to application of foam. Insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Surface Preparation: Metal surfaces should be primed with LAPOLLA Therm-O-Prime according to LAPOLLA Industries, Inc. and coating manufacturers' recommendations. Primer shall be thoroughly cured prior to application of foam.

All surfaces shall be free of moisture, dust, debris, oils, tars, grease or other materials that will as recommended by LAPOLLA Industries, Inc. impair adhesion of the polyurethane foam to the insulation board.

Primers shall be applied in accordance with their manufacturer's instructions. All primers must be thoroughly dry and cured prior to foam application.

Polyurethane Foam Application: The polyurethane foam shall be applied uniformly over the entire surface of the insulation at the specified thickness in compliance with the requirements set forth in Roofing Application Standard RAS 109, But in no case shall it be less than **1"**. The sprayed polyurethane foam shall be feathered at the edges to produce a smooth transition.

Protective Coating Application: Shall apply a Miami-Dade County approved roof coating with a current NOA applied in accordance with the guidelines listed in the NOA.

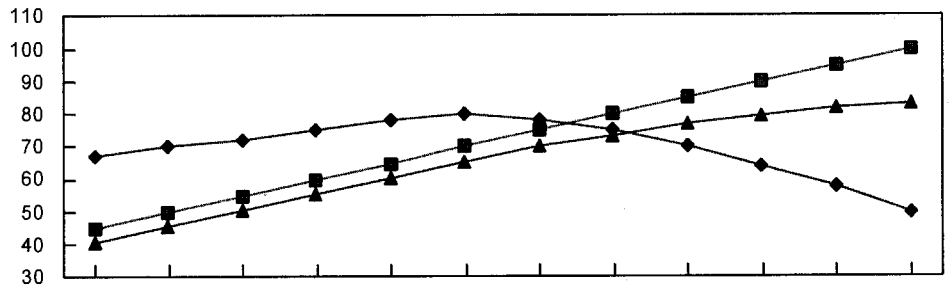
Polyurethane foam surface shall be free of moisture, dust, debris, oils, tars, grease or other materials that will as recommended by LAPOLLA Industries, Inc. impair adhesion of the protective coverings. Any damage or defects to the polyurethane foam surface shall be repaired prior to the coating application. The coating shall be applied the same day as the foam when possible. If more than 72 hours elapse prior to the application of the coatings, the polyurethane foam shall be inspected for UV degradation.

Maximum Design Pressure: -90 psf; (See General Limitation #7.)

Deck Type 1:	Wood, Non-Insulated
Deck Description:	19/32" or greater plywood or wood plank
System Type E:	Sprayed polyurethane foam covered with an Approved Miami-Dade County roof coating installed over a primed mechanically fastened Anchor Sheet.
Deck Attachment:	In accordance with applicable Building Code, but in no case shall it be less than: #8 Ring shank nails spaced 6" o.c. at the field of the plywood sheet and #10 Ring shank nails spaced 4" o.c. at the perimeter of the plywood sheet. The above attachment method must be in addition to existing attachment.
Anchor Sheet:	One ply of GAF GAFGLAS Stratavent Eliminator perforated venting base sheet, primed with LAPOLLA Therm-O-Prime and mechanically fastened to the deck as described below:
Fastening:	Attach anchor sheet using approved 1 ¼" ring shank roofing nails and tin caps spaced 7" o.c. in a 4" lap and 7" o.c. in two staggered rows in the center of the sheet.
Surface Preparation:	Metal surfaces should be primed with LAPOLLA Therm-O-Prime according to LAPOLLA Industries, Inc. and coating manufacturers' recommendations. Primer shall be thoroughly cured prior to application of foam. All surfaces shall be free of moisture, dust, debris, oils, tars, grease or other materials that will as recommended by LAPOLLA Industries, Inc. impair adhesion of the polyurethane foam to the Anchor Sheet. Primers shall be applied in accordance with their manufacturer's instructions. All primers must be thoroughly dry and cured prior to foam application.
Polyurethane Foam Application:	The polyurethane foam shall be applied uniformly over the entire surface of the anchor sheet at the specified thickness in compliance with the requirements set forth in Roofing Application Standard RAS 109, But in no case shall it be less than **1"**. The sprayed polyurethane foam shall be feathered at the edges to produce a smooth transition.
Protective Coating Application:	Shall apply a Miami-Dade County approved roof coating with a current NOA applied in accordance with the guidelines listed in the NOA. Polyurethane foam surface shall be free of moisture, dust, debris, oils, tars, grease or other materials that will as recommended by LAPOLLA Industries, Inc. impair adhesion of the protective coverings. Any damage or defects to the polyurethane foam surface shall be repaired prior to the coating application. The coating shall be applied the same day as the foam when possible. If more than 72 hours elapse prior to the application of the coatings, the polyurethane foam shall be inspected for UV degradation.
Maximum Design Pressure:	-105 psf; (See General Limitation #7.)

TABLE 1
AMBIENT HUMIDITY APPLICATION LIMITS
SPRAYED POLYURETHANE FOAM

LAPOLLA Industries, Inc.
Air Temp/ Humidity/ Dew Point Guideline



	45	67	40.5	50	70	45.5	55	72	50.5	60	75	55.5
■ Air	45	50	55	60	65	70	75	80	85	90	95	100
◆ Hu	67	70	72	75	78	80	78	75	70	64	58	50
▲ De	40.5	45.5	50.5	55.5	60.5	65.5	70	73.5	77	79.5	82	83

Dew point and relative humidity for given dry bulb temperature.

GENERAL LIMITATIONS:

1. Fire classification is not part of this acceptance, refer to a current Approved Roofing Materials Directory for fire ratings of this product
2. Spray polyurethane foam shall not be sprayed when ambient temperature is within 5 degrees of the dew point. Ambient humidity applications limits shall be as listed in Table 1 herein. Contractor shall monitor and record environmental conditions in the Job Log in compliance with RAS 109. Job Log shall be maintained at the job site and accessible to The Building Official.
3. Flashings and waterproof coverings for expansion joints shall be of compatible materials and in accordance with LAPOLLA Industries, Inc. published literature.
4. Miscellaneous materials such as adhesives, elastomeric caulking compounds, metal, vents and drains shall be a composite part of the roof system and shall be compatible with the foam and coating.
5. All standard panel sizes are acceptable for mechanical attachment. When applied in approved asphalt, panel size shall be 4' x 4' maximum.
6. Fastener spacing for insulation attachment is based on a Minimum Characteristic Force (F') value of 275 lbf., as tested in compliance with Testing Application Standard TAS 105. If the fastener value, as field-tested, are below 275 lbf. Insulation attachment shall not be acceptable.
7. Perimeter and corner areas shall comply with the enhanced uplift pressure requirements of these areas. Fastener densities shall be increased for both insulation and base sheet as calculated in compliance with Roofing Application Standard RAS 117. Calculations prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant **(When this limitation is specifically referred within this NOA, General Limitation #9 will not be applicable.)**
8. All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform with Roofing Application Standard RAS 111 and applicable wind load requirements.
9. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners). **(When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)**

END OF THIS ACCEPTANCE