



BUILDING CODE COMPLIANCE OFFICE (BCCO)

PRODUCT CONTROL DIVISION

NOTICE OF ACCEPTANCE (NOA)

BASF Polyurethane Foam Enterprises, LLC
1703 Crosspoint Ave.
Houston, TX 77054-3707

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

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: Foam Systems over Steel Deck

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 NOA renews and revises NOA No. 05-0201.02 consists of pages 1 through 7.

The submitted documentation was reviewed by Jorge L. Acebo



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Expiration Date: 01/07/13
Approval Date: 01/10/08
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ROOFING COMPONENT APPROVAL

Category: Roofing
Sub-Category: Spray Applied Polyurethane Roof System
Materials: Polyurethane
Deck Type: Steel
Maximum Design Pressure: -157.5 psf

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

<u>Product</u>	<u>Dimensions</u>	<u>Test Specifications</u>	<u>Product Description</u>
FE 348-2.5 or Elastospray 81255	2.5 lb/ft ³ density	TAS 110	Polyurethane spray applied foam that utilizes an HFC blowing agent intended for roofing applications.
FE 348-2.7 or Elastospray 81275	2.8 lb/ft ³ density	TAS 110	Polyurethane spray applied foam that utilizes an HFC blowing agent intended for roofing applications.
FE 348-2.8 or Elastospray 81285	2.8 lb/ft ³ density	TAS 110	Polyurethane spray applied foam that utilizes an HFC blowing agent intended for roofing applications.
FE 348-3.0 or Elastospray 81305	3.0 lb/ft ³ density	TAS 110	Polyurethane spray applied foam that utilizes an HFC blowing agent intended for roofing applications.

TRADE NAMES OF PRODUCTS MANUFACTURED BY OTHERS:

<u>Product</u>	<u>Dimensions</u>	<u>Test Specifications</u>	<u>Product Description</u>	<u>Manufacturer</u>
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:

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Test Name/Report</u>	<u>Date</u>
Radco	RAD-3551	TAS 110	12/15/2004
	RAD-4039	TAS 110	05/02/2007
Stork Twin City Testing	30160 04-63383.0	ASTM E 96	11/18/2004
Underwriters Laboratories Inc.	R9865	UL 790/	10/17/2003
		ASTM E 108	05/15/2007
Atlantic & Caribbean Roof Consulting, LLC	ACRC 04-005	TAS 114	11/02/2004
Factory Mutual	3016938	4470/4880	12/20/2004
	3028285	4470/4880	07/27/2007



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APPROVED ASSEMBLIES:

Deck Type 2: Steel

Deck Description: Minimum 22 ga. ASTM A 653/A653M-01 galvanized or A1008/A1008M-01a SS Grade 33 painted Steel Deck with maximum 6' spans secured to the min. 1/4" thick steel deck supports at a maximum spacing of 6" o.c. (every rib) with two Traxx/5 fasteners and washer. The washers are low carbon steel flat 3/4" OD with 0.328 diameter hole and 0.065" thick. Side laps secured with Traxx 1 fasteners at 12" o.c. (5 fasteners between each support).

System Type A(1): Sprayed polyurethane foam applied directly to steel deck and covered with an Approved Miami-Dade County roof coating.

All General and System Limitations apply.

Surface

Preparation: Metal surfaces if required; should be primed according to Foam Enterprises, Inc. and coating manufacturers' recommendations. Primer shall be thoroughly cured prior to application of foam.

For ferrous metal, remove loose rust and unsound primer from shop-primed iron and steel surfaces by scraping, wire brushing or sandblasting. Prime according to Foam Enterprises, Inc. and coating manufacturer's recommendations. For non-ferrous metals, clean and prime aluminum, copper and stainless steel surfaces as recommended by Foam Enterprises, Inc.

Primers shall be applied if required; 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 at the minimum thickness of 1 to 6" over the top of the deck flange in compliance with the requirements set forth in Roofing Application Standard RAS 109. 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 Foam Enterprises, 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:

-157.5 psf (See General Limitation # 6)



- Deck Type 2:** Steel
- Deck Description:** Minimum 22 ga. A1008/A1008M-01a SS Grade 80 painted Steel Deck with maximum 6' spans secured to the min. 1/4" thick steel deck supports with one Traxx/5 fasteners 6" o.c. (every rib). Side laps secured with Traxx 1 fasteners at 24" o.c.
- System Type A(2):** Sprayed polyurethane foam applied directly to steel deck and covered with an Approved Miami-Dade County roof coating.

All General and System Limitations apply.

Surface

Preparation: Metal surfaces if required; should be primed according to Foam Enterprises, Inc. and coating manufacturers' recommendations. Primer shall be thoroughly cured prior to application of foam.

For ferrous metal, remove loose rust and unsound primer from shop-primed iron and steel surfaces by scraping, wire brushing or sandblasting. Prime according to Foam Enterprises, Inc. and coating manufacturer's recommendations. For non-ferrous metals, clean and prime aluminum, copper and stainless steel surfaces as recommended by Foam Enterprises, Inc.

Primers shall be applied if required; 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 at the minimum thickness of 1 to 6" over the top of the deck flange in compliance with the requirements set forth in Roofing Application Standard RAS 109. 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 Foam Enterprises, 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 # 6)



- Deck Type 2:** Steel
- Deck Description:** Minimum 22 ga. FM approved painted Steel Deck secured as per approval to supports having a maximum span of 6’.
- System Type A(3):** Sprayed polyurethane foam applied directly to steel deck and covered with an Approved Miami-Dade County roof coating.

All General and System Limitations apply.

Surface

Preparation: Metal surfaces should be primed according to Foam Enterprises, Inc. and coating manufacturers’ recommendations. Primer shall be thoroughly cured prior to application of foam.

For ferrous metal, remove loose rust and unsound primer from shop-primed iron and steel surfaces by scraping, wire brushing or sandblasting. Prime according to Foam Enterprises, Inc. and coating manufacturer’s recommendations. For non-ferrous metals, clean and prime aluminum, copper and stainless steel surfaces as recommended by Foam Enterprises, Inc.

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 at the minimum thickness of 1 to 6” over the top of the deck flange in compliance with the requirements set forth in Roofing Application Standard RAS 109. 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 Foam Enterprises, 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: -45 psf (See General Limitation # 6)



- Deck Type 2:** Steel
- Deck Description:** Minimum 22 ga. ASTM A 653/A653M-01 galvanized or A1008/A1008M-01a SS Grade 33 painted Steel Deck with maximum 6' spans secured to the min. 1/4" thick steel deck supports with one Traxx/5 fasteners 6" o.c. (every rib). Side laps secured with Traxx 1 fasteners at 24" o.c.
- System Type B:** Base layer of insulation is mechanically attached to roof deck. Sprayed polyurethane foam applied directly to insulation and covered with an Approved Miami-Dade County roof coating.

All General and System Limitations apply.

Surface

Preparation: Metal surfaces if required; should be primed according to Foam Enterprises, Inc. and coating manufacturers' recommendations. Primer shall be thoroughly cured prior to application of foam.

For ferrous metal, remove loose rust and unsound primer from shop-primed iron and steel surfaces by scraping, wire brushing or sandblasting. Prime according to Foam Enterprises, Inc. and coating manufacturer's recommendations. For non-ferrous metals, clean and prime aluminum, copper and stainless steel surfaces as recommended by Foam Enterprises, Inc.

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

Insulation Layer: Minimum 1/2" thick, 4' x 4' Securock fastened to steel deck with Tru-Fast # 14 HD fasteners and Tru-Fast MP plates at a rate of 1 per 2 ft².

Polyurethane Foam Application:

The polyurethane foam shall be applied uniformly over the entire surface at a minimum thickness of 1" in compliance with the requirements set forth in Roofing Application Standard RAS 109. 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 Foam Enterprises, 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.

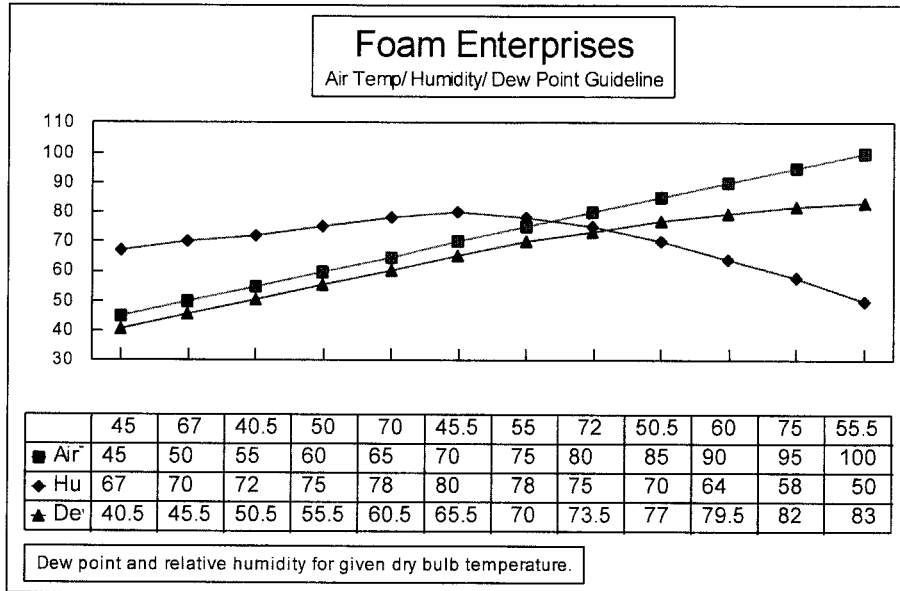
Maximum Design Pressure:

-75 psf (See General Limitation # 7)



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TABLE 1
AMBIENT HUMIDITY APPLICATION LIMITS SPRAYED POLYURETHANE FOAM



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 Foam Enterprises, 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 attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform to Roofing Application Standard RAS 111 and the wind load requirements of applicable building code.
6. 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 below will not be applicable.)**
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 #6 above will not be applicable.)**

END OF THIS ACCEPTANCE



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