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)

Kelly Company/2001 Inc.
325 Thomaston Avenue
Waterbury, CT 06702

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 High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: 2001 Inc. Single Ply C-EPDM Roof Systems over Lightweight Concrete 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 consists of pages 1 through 7.
The submitted documentation was reviewed by Frank Zuloaga, RRC

ROOFING SYSTEM APPROVAL

Category:	Roofing
Sub-Category:	Single Ply
Material:	C-EPDM
Deck Type:	Lightweight Concrete
Maximum Design Pressure	-262.5 psf
Fire Classification:	See General Limitation #1

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

Product Name	Dimensions	Test Specifications	Product Description
2001 C-EPDM	various	ASTM D 4637	Non-reinforced white on black EPDM membrane.
2001 Fleece BACK C-EPDM	Various	ASTM D4637	Non-reinforced fire retardant white on black fleece backed EPDM membrane.
2001 C-EPDM Reinforced	various	ASTM D 4637	Reinforced white on black EPDM membrane.
2001 FR Fleece BACK C-EPDM and 2001 AFX C-EPDM	Various	ASTM D 4632	Non-reinforced fire retardant fleece backed EPDM membrane
2001 FR C-EPDM	various	ASTM D 4637	Non-reinforced, fire retardant EPDM membrane.
2001 Reinforced FR C-EPDM	various	ASTM D 4637	Reinforced, fire retardant EPDM membrane.
2001 FR-Plus C-EPDM	various	ASTM D 4637	Non-reinforced, fire retardant EPDM membrane.
2001 Standard C-EPDM	various	ASTM D 4637	Non-reinforced EPDM membrane.
2001 Reinforced C- EPDM	various	ASTM D 4637	Reinforced EPDM membrane.

APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
N/A	N/A	N/A

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	N/A	N/A	N/A	N/A

EVIDENCE SUBMITTED

Test Agency	Test Identifier	Description	Date
Architectural Testing Inc.	ATI-17214	Wind Uplift Classification	03/20/96
Architectural Testing Inc.	ATI-17601-01	Wind Uplift Classification	06/29/96
Architectural Testing Inc.	ATI-17601-02	Wind Uplift Classification	07/30/96
Architectural Testing Inc.	ATI-18535	Wind Uplift Classification	10/14/96
Factory Mutual Research Corp.	J.I. 2X7A4.AM	Letter	03/07/94
Factory Mutual Research Corp.	J.I.1B7A5.AM	Wind Uplift and Fire Classification	02/23/98
Factory Mutual Research Corp.	1998 Approval Guide Building Materials	Wind Uplift and Fire Classifications	01/01/98
Factory Mutual Research Corp.	J.I. 2Z3A9.AM	Wind Uplift and Fire Classification	07/30/97
Factory Mutual Research Corp.	J.I. 4B2A1.AM	Wind Uplift Classification	06/11/97
Factory Mutual Research Corp.	J.I.3B8Q4.AM	Wind Uplift Classification	06/04/97
Factory Mutual Research Corp.	J.I. 0B4A7.AM	Wind Uplift Classification	05/29/97
Factory Mutual Research Corp.	J.I. 2B2A1.AM	Wind Uplift Classification	05/29/97
Factory Mutual Research Corp.	J.I. 2Z2A8.AM	Seam Test	05/16/97
Factory Mutual Research Corp.	J.I. 3B5A1.AM	Wind Uplift and Fire Classification	04/28/97
Factory Mutual Research Corp.	J.I.1Z2A7.AM	Fire Classification	03/20/96
Factory Mutual Research Corp.	Letter	Product Equivalent	05/05/95
Factory Mutual Research Corp.	J.I. 3Y7Q2.AM	Corrosion Test	03/14/95
Factory Mutual Research Corp.	J.I. 1Y2A1.AM	Seam Test	02/23/95
Factory Mutual Research Corp.	J.I. 2X7A4.AM	Wind Uplift Classification	02/09/95
Factory Mutual Research Corp.	J.I.3X5A2.AM	Hail Damage Testing	07/18/94
Factory Mutual Research Corp.	Letter	Wind Uplift Classification	05/07/94
Factory Mutual Research Corp.	J.I. 2D6A6.AM	Wind Uplift Classification	10/7/98
Factory Mutual Research Corp.	Letter	Wind Uplift Classification	09/15/98
Underwriters Laboratories, Inc.	96NK21757	Fire Classification	09/06/96
Underwriters Laboratories, Inc.	96NK10924	Fire Classification	10/31/96
Underwriters Laboratories, Inc.	96NK28871	Fire Classification	11/06/96
Underwriters Laboratories, Inc.	96NK33323	Fire Classification	10/24/97
Underwriters Laboratories, Inc.	Letter	Fire Classification	08/06/98
Underwriters Laboratories, Inc.	Letter	Fire Classification	09/09/98
Underwriters Laboratories, Inc.	1998Roofing Materials & Systems Directory	R8103 Fire Classification	01/01/98
Warnock Hersey	634-308500	Wind Uplift	06/04/93

APPROVED ASSEMBLIES

Membrane Type: Single Ply, Thermoset, EPDM, FleeceBacked

Deck Type 4: Lightweight Concrete, Uninsulated, over Steel Deck New Construction

Deck Description: Cellular or Aggregate Lightweight Concrete

System Type F-1: Membrane fully adhered to primed lightweight insulating concrete deck.

All General and System Limitations apply.

Note: Lightweight Insulating Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of membrane.

Vapor Retarder:	None
Membrane:	2001 Fleece Back, FR Fleece Back membrane fully adhered to the lightweight deck using Sure-Seal 90-8-30A applied to the substrate at a rate of 1 gal/60 ft.^{2}, or Sure-Seal B-500 applied to the substrate at 1 gal./sq. Or 2001 FR FleeceBack, 2001 FleeceBack 100 or 115 mil membrane fully adhered to the lightweight deck using FAST Adhesive applied to the substrate at a rate of 1 gal/sq.
Surfacing:	(Optional) A two-part surfacing consisting of EM-8 Hypalon applied to a clean membrane surface, after a two week cure at the rate of 1 gal./150 ft.^{2} and silica sand applied into the wet coating at a rate of 35 lbs./sq.
Maximum Design Pressure:	-45 psf. (See General Limitation #9)

Membrane Type: Single Ply, Thermoset, EPDM, FleeceBacked

Deck Type 4: Celcore Lightweight Insulating Concrete, over Structural Concrete Deck, New Construction

Deck Description: Celcore Lightweight Insulating Concrete (Minimum 300 psi)

System Type F-2: Membrane fully adhered to primed lightweight insulating concrete deck.

All General and System Limitations apply.

Note: Lightweight Insulating Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of membrane.

Vapor Retarder: None

Membrane: 2001 FR FleeceBACK and 2001 FleeceBACK 100 or 115 mil membrane fully adhered to the lightweight deck using FAST adhesive applied to the substrate at a rate of 1 gal./sq.

Surfacing: (Optional) A two part surfacing consisting of EM-8 Hypalon applied to a clean membrane surface, after a two week cure at the rate of 1 gal./150 ft.^{2} and silica sand applied into the wet coating at a rate of 35 lbs./sq.

Maximum Design Pressure: -262.5 psf. (See General Limitaiton #9)

Membrane Type: Single Ply, Thermoset, EPDM, FleeceBacked

Deck Type 4: Elastizell Range II Lightweight Insulating Concrete, over Structural Concrete Deck, New Construction

Deck Description: Elastizell Range II Lightweight Insulating Concrete (Minimum 300 psi)

System Type F-3: Membrane fully adhered to primed lightweight insulating concrete deck.

All General and System Limitations apply.

Note: Lightweight Insulating Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of membrane.

Vapor Retarder: None

Membrane: 2001 FR FleeceBACK and 2001 FleeceBACK 100 or 115 mil membrane fully adhered to the lightweight deck using FAST adhesive applied to the substrate at a rate of 1 gal./sq.

Surfacing: (Optional) A two part surfacing consisting of EM-8 Hypalon applied to a clean membrane surface, after a two week cure at the rate of 1 gal./150 ft.^{2} and silica sand applied into the wet coating at a rate of 35 lbs./sq.

Maximum Design Pressure: -205 psf. (See General Limitaiton #9)

LIGHTWEIGHT INSULATING CONCRETE SYSTEM LIMITATIONS:

1. If mechanical attachment to the structural deck through the lightweight insulating concrete is proposed, a field withdrawal resistance testing shall be performed to determine fastener patterns and density. All testing and fastening design shall be in compliance with Testing Application Standard TAS 105 and Roofing Application Standard RAS 137, calculations shall be signed and sealed by a Florida Registered Engineer, Architect, or Registered Roof Consultant.
2. For steel deck application where specific deck construction is not referenced: The deck shall be a minimum 22 gage attached with 5/8" puddle welds with weld washers at every flute with maximum deck spans of 5 ft. o.c.
3. For Systems where specific lightweight insulating concrete si referenced consult current lightweight insulating concrete NOA for specific deck construction and limitations. For systems where specific lightweight insulating concrete is not referenced, the minimum design mix shall be a minimum of 300 psi.

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. Insulation may be installed in multiple layers. The first layer shall be attached in compliance with Product Control Approval guidelines. All other layers shall be adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq., or mechanically attached using the fastening pattern of the top layer
3. All standard panel sizes are acceptable for mechanical attachment. When applied in approved asphalt, panel size shall be 4' x 4' maximum.
4. An overlay and/or recovery board insulation panel is required on all applications over closed cell foam insulations when the base sheet is fully mopped. If no recovery board is used the base sheet shall be applied using spot mopping with approved asphalt, 12" diameter circles, 24" o.c.; or strip mopped 8" ribbons in three rows, one at each sidelap and one down the center of the sheet allowing a continuous area of ventilation. Encircling of the strips is not acceptable. A 6" break shall be placed every 12' in each ribbon to allow cross ventilation. Asphalt application of either system shall be at a minimum rate of 12 lbs./sq. **Note: Spot attached systems shall be limited to a maximum design pressure of -45 psf.**
5. 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.
6. Fastener spacing for mechanical attachment of anchor/base sheet or membrane attachment is based on a minimum fastener resistance value in conjunction with the maximum design value listed within a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing, prepared, signed and sealed by a Florida Registered Engineer, Architect, or Registered Roof Consultant may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Testing Application Standards TAS 105 and calculations in compliance with Roofing Application Standard RAS 117.
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. **(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