



**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 Florida Building Code and the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: 2001 Inc. Single Ply C-EPDM Roof Systems 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 NOA renews NOA No. 02-0717.03 and consists of pages 1 through 9.
The submitted documentation was reviewed by Jorge L. Acebo.



**NOA No.: 06-0531.05
Expiration Date: 06/28/11
Approval Date: 09/28/06
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ROOFING SYSTEM APPROVAL

<u>Category:</u>	Roofing
<u>Sub-Category:</u>	Single Ply
<u>Material:</u>	EPDM
<u>Deck Type:</u>	Wood
<u>Maximum Design Pressure</u>	-60 psf
<u>Fire Classification:</u>	See General Limitation #1

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:
TABLE 3

<u>Product Name</u>	<u>Dimensions</u>	<u>Test Specifications</u>	<u>Product Description</u>
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	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

<u>Product Name</u>	<u>Product Description</u>	<u>Manufacturer (With Current NOA)</u>
Millox	Isocyanurate Insulation with wood fiberboard facer	Apache Products Co.
Hy Therm, Pyrox, White Line	Isocyanurate Insulation	Apache Products Co.
ACFoam Composite	Isocyanurate Insulation with perlite facer	Atlas Roofing Corp.
ACFoam II	Isocyanurate Insulation	Atlas Roofing Corp.
Polyisocyanurate HP, HP-N, HP-W	Polyisocyanurate roof insulation.	Carlisle Syntec, Inc.
Sure-Seal HP Recovery Board	High Density Wood Fiberboard.	Carlisle Syntec, Inc.



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APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
Sure-Seal EPS/Fiberboard	High Density Wood Fiberboard bonded to EPS.	Carlisle Syntec, Inc.
Carlisle Foamular 150, 250, 400, 404, 600	Extruded Polystyrene insulation	Carlisle Syntec, Inc.
Carlisle Foamular Durapink-FA Insulation	Extruded Polystyrene for white or black adhered system.	Carlisle Syntec, Inc.
Carlisle Foamular Durapink Insulation	Extruded Polystyrene for white or black mechanically fastened roof systems.	Carlisle Syntec, Inc.
Carlisle Foamular ½” Board	Extruded Polystyrene recovery board.	Carlisle Syntec, Inc.
Sure Seal EPS Insulation	Expanded Polystyrene.	Carlisle Syntec, Inc.
Styrofoam	Extruded polystyrene insulation	Dow
ISO 95+ GL, 95+ GW	Isocyanurate Insulation	Firestone
Dens Deck	Silicon treated gypsum	G-P Products
Ultra/M-II II Iso/glas	Polyisocyanurate foam insulation	Homasote Co.
E'NRG'Y 2, E'NERG'Y PSI-25	Isocyanurate Insulation	Johns Manville (with current NOA)
Fesco Foam	Isocyanurate Insulation with perlite facer	Johns Manville (with current NOA)
Wood Fiberboard	Regular wood fiber insulation	Generic
High Density Wood Fiberboard	High Density Wood Fiber insulation board.	Generic
Perlite Insulation Board	Perlite Insulation	Generic
Type X Gypsum	Gypsum Wallboard	Generic
XPS	Extruded polystyrene	Generic
Structodeck	High Density Wood Fiber insulation board.	Masonite
Multi-Max FA	Isocyanurate Insulation	Rmax, Inc. (with current NOA)
Fiber Base	Asphalt coated wood fiber insulation	Temple Inland Forest Products Corp.

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	Sure-Seal HP Fasteners	Insulation and membrane fastener	Various	Carlisle Syntec, Inc.



APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
2.	Sure-Seal Seam Fastening Plates	Metal plates used for membrane securement with Sure-Seal fasteners.	2" dia	Carlisle Syntec, Inc.
3.	Sure-Seal HP Locking Seam Plates	Metal plates with plastic inserts used for membrane securement with Sure-Seal fasteners.	2" dia	Carlisle Syntec, Inc.
4.	Sure-Seal Polymer Seam Plates	Plastic plates used for membrane securement with Sure-Seal fasteners.	2" dia	Carlisle Syntec, Inc.
5.	Dekfast Fasteners	Insulation and membrane fastener	Various	Construction Fasteners, Inc.
6.	Dekfast Hex Plate	Insulation and membrane fastener	Various	Construction Fasteners, Inc.
7.	#12 & #14 Roofgrip	Insulation and membrane fastener	Various	ITW Buildex
8.	Metal Plate	3" square Galvalume AZ50 stress plate	3" square	ITW Buildex
9.	Metal Plate	3" round Galvalume AZ50 stress plate	3" round	ITW Buildex
10.	Plastic Plate	3.2" round polyethylene stress plate	3.2" round	ITW Buildex
11.	Olympic Fasteners	Insulation and membrane fastener	Various	Olympic Mfg. Group
12.	Olympic Stainless Fasteners	Stainless steel insulation and membrane fastener	Various	Olympic Mfg. Group
13.	Olympic Standard	3" round Galvalume AZ55 stress plate	3" round	Olympic Mfg. Group
14.	Olympic	Plastic plates for fasteners.	3" round	Olympic Mfg. Group
15.	Rawl Fasteners	Insulation fastener for steel and wood decks	Various	Powers Fasteners Inc.
16.	Rawl Insulation Plate	3" round Galvalume AZ55 stress plate	3" round	Powers Fasteners Inc.
17.	Insul-Fixx Fastener	Insulation fastener for steel and wood decks	Various	SFS Stadler, Inc.
18.	HD Insul-Fixx Fastener	Insulation fastener for use in steel and concrete decks	Various	SFS Stadler, Inc.
19.	Insul-Fixx S	3" round Galvalume AZ55 stress plate	3" round	SFS Stadler, Inc.
20.	Insul-Fixx PG	3" round polyethylene stress plate	3" round	SFS Stadler, Inc.



APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
21.	Tru-Fast Fasteners	Insulation and membrane fastener	Various	The Tru-Fast Corp.
22.	Tru-Fast Ultra Stainless Fasteners	Stainless steel insulation and membrane fastener	Various	The Tru-Fast Corp.
23.	Tru-Fast MP-3	3.23" round Galvalume AZ50 steel plate	3.23" round	The Tru-Fast Corp.
24.	Tru-Fast Plastic Plate	3" round polyethylene stress plate	3" round	The Tru-Fast Corp.

EVIDENCE SUBMITTED:

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Description</u>	<u>Date</u>
Architectural Testing Inc.	ATI-17214	Wind Uplift Classification	03/20/96
Architectural Testing Inc.	ATI-17601-01, 02	Wind Uplift Classification	06/29/96 07/30/96
Architectural Testing Inc.	ATI-18535	Wind Uplift Classification	10/14/96
Factory Mutual Research Corporation	J.I. 2X7A4.AM	Letter	03/07/94
Factory Mutual Research Corporation	J.I.1B7A5.AM	Wind Uplift and Fire Classification	02/23/98
Factory Mutual Research Corporation	1998 Approval Guide	Wind Uplift and Fire Classifications	01/01/98
Factory Mutual Research Corporation	J.I. 2Z3A9.AM	Wind Uplift and Fire Classification	07/30/97
Factory Mutual Research Corporation	J.I. 4B2A1.AM	Wind Uplift Classification	06/11/97
Factory Mutual Research Corporation	J.I.3B8Q4.AM	Wind Uplift Classification	06/04/97
Factory Mutual Research Corporation	J.I. 0B4A7.AM	Wind Uplift Classification	05/29/97
Factory Mutual Research Corporation	J.I. 2B2A1.AM	Wind Uplift Classification	05/29/97
Factory Mutual Research Corporation	J.I. 2Z2A8.AM	Seam Test	05/16/97
Factory Mutual Research corporation	J.I. 3B5A1.AM	Wind Uplift and Fire Classification	04/28/97
Factory Mutual Research Corporation	J.I.1Z2A7.AM	Fire Classification	03/20/96
Factory Mutual Research Corporation	Letter	Product Equivalent	05/05/95
Factory Mutual Research Corporation	J.I. 3Y7Q2.AM	Corrosion Test	03/14/95



<u>Test Agency</u>	<u>Test Identifier</u>	<u>Description</u>	<u>Date</u>
Factory Mutual Research Corporation	J.I. 1Y2A1.AM	Seam Test	02/23/95
Factory Mutual Research Corporation	J.I. 2X7A4.AM	Wind Uplift Classification	02/09/95
Factory Mutual Research Corporation	J.I.3X5A2.AM	Hail Damage Testing	07/18/94
Factory Mutual Research Corporation	Letter	Wind Uplift Classification	05/07/94
Factory Mutual Research Corporation	J.I. 2D6A6.AM	Wind Uplift Classification	09/15/98
Underwriters Laboratories, Inc.	96NK21757	Fire Classification	10/7/98
Underwriters Laboratories, Inc.	96NK10924	Fire Classification	09/06/96
Underwriters Laboratories, Inc.	96NK28871	Fire Classification	10/31/96
Underwriters Laboratories, Inc.	96NK33323	Fire Classification	11/06/96
Underwriters Laboratories, Inc.	1998Roofing Materials & Systems Directory	R8103 Fire Classification	10/24/97
Underwriters Laboratories, Inc.	Letter	Fire Classification	01/01/98
Underwriters Laboratories, Inc.	Letter	Fire Classification	08/06/98
Warnock Hersey	634-308500	Wind Uplift	09/09/98
			06/04/93



APPROVED ASSEMBLIES

- Membrane Type:** Single Ply, Thermoset, EPDM, Reinforced, and Nonreinforced
- Deck Type 1I:** Wood, Insulated
- Deck Description:** $1\frac{9}{32}$ " or greater plywood or wood plank
- System Type C:** All layers of insulation simultaneously attached; membrane fully adhered.

All General and System Limitations apply.

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft ²
Extruded Polystyrene, Energy-Lok, ACFoam-I, Minimum 1" thick	N/A	N/A
Perlite Minimum $\frac{3}{4}$ " thick	N/A	N/A

Note: All layers shall be simultaneously fastened; see top layer below for fasteners and density. 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.

Base or Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft ²
AC FOAM II Minimum 1.5" thick	1, 11, 12 or 15	1:2 ft ²
Minimum 2" thick	18, 21 or 22	1:2 ft ²
E'NRG'Y-2, PSI-25 Minimum 1.4" thick	1, 5, 7, 11, 12 15, 17, 21 or 22	1:2 ft ²
Minimum 2" thick	1, 5, 7, 11, 12, 15, 17, 21, or 22	1:4 ft ²
HP Recovery Minimum 1" thick	1, 5, 7, 11, 12 15, 17, 21 or 22	1:2 ft ²
High Density Fiberboard Minimum $\frac{3}{4}$ " thick	5, 7, 11, 12, 15, 21 or 22	1:2.67 ft ²
WHITELINE, PYROX, AP Minimum 1.2" thick	1, 5, 7, 11, 12 15, 17, 21 or 22	1:2 ft ²
ISO 95+GL, HF, Rhoflex GL, HF Minimum 1.2" thick	5, 7 or 17	1:2 ft ²
Minimum 1.4" thick	7, 11, 12 15, 17, 21 or 22	1:3 ft ²
Multi-Max FA Minimum 1.2" thick	5, 7, 11, 12 15, 17, 21 or 22	1:2 ft ²
ACFoam Composite, Rhoflex Composite, Fesco Foam Minimum 1.5" thick	1, 5, 7, 11, 12 15, 17, 21 or 22	1:3 ft ²
Polyisocyanurate HP-W Minimum 1.5" thick	1, 11, 12 or 15	1:2 ft ²



Polyisocyanurate HP		
Minimum 1.2" thick	1, 7, 11, 12 15, 18, 21 or 22	1:2 ft ²
Minimum 1.5" thick	1	1:3.2 ft ²
Minimum 2" thick	1	1:4 ft ²
Polyisocyanurate HP-N		
Minimum 1.4" thick	1, 5, 7, 11, 12 15, 18, 21 or 22	1:2 ft ²
Minimum 2" thick	5, 7, 11, 12 15, 18, 21 or 22	1:4 ft ²
Structodeck		
Minimum ½" thick	5,11, 12 or 15	1:8 ft ²
Ultra/M-II Iso/glas		
Minimum 1.2" thick	1, 5, 7, 11, 12 15, 18, 21 or 22	1:2 ft ²
Wood Fiber		
Minimum 1" thick	1, 5, 7, 11, 12 15, 18, 21 or 22	1:2 ft ²
Fiber Base		
Minimum ½" thick	1	1:2 ft ²
Base or Top Insulation Layer	Insulation Fasteners	Fastener
	(Table 3)	Density/ft²
Required over the insulations listed in Base Layer or optional over any of the insulations listed as Base or Top Layer:		
HP Recovery (for use over all insulation. types) Fiber Base (for use over polyisocyanurate, gypsum or perlite)		
Minimum ½" thick	1	1:2 ft ²

Note: 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.

Vapor Retarders: (Optional) Any UL or FMRC approved vapor retarder applied to the roof deck or over a base layer of insulation.

Barrier: 1/4", 3/8", 1/2", or 5/8" gypsum.

Membrane: 2001 FR, FR-PLUS Reinforced, Reinforced FR, 2001 or 2001 Reinforced, 45 or 60 mil membrane fully adhered to the insulation using Sure-Seal 90-8-30A Bonding Adhesive applied to the substrate at a rate of 1 gal./60 ft.², or B-500 applied to the substrate at 1 gal./sq.
(Maximum Design Pressure –45 psf., see General Limitation #9)
 Or
 2001 FR and 2001 FleeceBACK 100 or 115 mil membrane fully adhered to the insulation using FAST Adhesive applied to the substrate at a rate of 1 gal./sq., with laps primed with 250 primer and sealed with Carlisle 3" wide SecureTape.
(Maximum Design Pressures –60 psf., see General Limitation #7)

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.



WOOD DECK SYSTEM LIMITATIONS:

1. A slip sheet is required with Ply 4 and Ply 6 when used as a mechanically fastened base or anchor sheet.

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. 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



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