



**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)**

**Kemper Systems,, Inc.  
1182 Teaneck Road  
Teaneck, NJ 07666**

**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: Kemperol Membrane System for 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 NOA consists of pages 1 through 9.

The submitted documentation was reviewed by Jorge L. Acebo



**NOA No: 05-0829.03  
Expiration Date: 02/23/11  
Approval Date: 02/23/06  
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## ROOFING ASSEMBLY APPROVAL

**Category:** Roofing  
**Sub-Category:** Liquid Applied Roof Systems  
**Deck Type:** Concrete  
**Maximum Design Pressure** -495 psf  
**Fire Classification:** See General Limitation #1

### TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Kemperol BR	10.88 gal. Workpack	Proprietary	Two-part polyester fluid applied resin.
Kemperol EP Primer	1.24 gal. Workpack	Proprietary	Two-part solvent free epoxy primer.
Kemperol Fleece	164 ft. long rolls of Various widths	Proprietary	Non-woven needled-punched polyester mat.

### APPROVED INSULATIONS:

<u>Product Name</u>	<u>Product Description</u>	<u>Manufacturer</u> <u>(With Current NOA)</u>
Dens Deck Prime	Water resistant gypsum board	G-P Gypsum Corp.
AC Foam II	Polyisocyanurate foam insulation	Atlas Energy Products
ISO 95+	Polyisocyanurate foam insulation	Firestone Building Products
Multi-Max	Polyisocyanurate foam insulation	Rmax, Inc.
Hunter	Polyisocyanurate foam insulation	Carlisle Syntec
Energy III	Polyisocyanurate foam insulation	Johns Manville
Securock	Water resistant gypsum board	USG



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**APPROVED FASTENERS:**

<u>Product Name</u>	<u>Product Description</u>	<u>Manufacturer</u> <u>(With Current NOA)</u>
Pliodeck Insulation Adhesive	Insulation Adhesive	Ashland Specialty Chemical Co
Asphalt	Type III or IV hot asphalt Bitumen adhesive	Generic
Deckfast Fasteners # 12, #14	Insulation Fastener	Construction Fasteners, Inc
Deckfast Hex Plate	Galvalume hex stress plate (2 7/8" x 3 1/4")	Construction Fasteners, Inc
Olympic Fastener #12 & #14	Insulation Fastener	Olympic Manufacturing Group, Inc.
Olympic Standard Plate	3" round Galvalume AZ50 steel stress plate	Olympic Manufacturing Group, Inc.
OlyBond 500	Insulation Adhesive	Olympic Manufacturing Group, Inc.
Weather-Tite One Step Adhesive	Insulation Adhesive	Millennium Adhesive Products Inc

**EVIDENCE SUBMITTED:**

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Test Specification</u>	<u>Date</u>
Atlantic & Caribbean Roof Consulting, LLC	05-007	TAS 114	05/19/05
Factory Mutual	3009502	FM 4470	12/21/00
	OD646.AM	FM 4470	06/14/01
	3015444	FM 4450	07/11/03
	3023458		10/20/05
Underwriters Laboratories Inc	98NK26412	UL 790	02/09/99
PRI Asphalt Technologies	IRT-014-02-01	ASTM D 638	10/17/03



**APPROVED APPLICATIONS:**

- Deck Type 3:** Concrete Decks, Non-Insulated
- Deck Description:** 2500 psi structural concrete or concrete plank
- System Type F1:** Kemper system applied directly to substrate.

**All General and System Limitations apply.**

- Substrate Preparation:** All surfaces must be dry, smooth, free of depressions, voids and protrusions, and clean and free of any non-compatible curing compounds, foam release agents and other surface contaminants. Substrate shall be smooth, free of voids, spalled areas, laitance, honeycombs, and sharp protrusions.
- Primer:** Kemperol EP Primer shall be applied to prepared concrete deck at a minimum rate of 0.7gal/100 ft<sup>2</sup> with kiln dried silica sand (.4 - .8 mm) broadcast immediately into the wet primer at the rate of 30-lbs/100 ft<sup>2</sup>.
- Membrane:** Apply Kemperol BR Resin: Mix Part A (with Catalyst) and Part B in 1:1 ratio and roller or brush apply to primed surface at a minimum rate of 4.5 gal/ ft<sup>2</sup>. Embed the fleece directly into the resin and use a roller to saturate the fleece from the bottom up, adding resin to the top to saturate dry spots. Additionally, add the topcoat of resin at a rate of up to 2-gal/100 ft<sup>2</sup> to complete fleece saturation before the resin cures. Roll excess resin toward any unsaturated fleece. Minimum membrane thickness of 70 dry mils.
- Surfacing:** Apply kiln dried silica sand (.4 - .8mm) broadcast immediately into the wet resin at the rate of 30lbs/100 ft<sup>2</sup> to the roof surface.
- Maximum Design Pressure:** -495 psf (See General limitation #9)



**Deck Type 3:** Concrete Decks, Insulated

**Deck Description:** 2500 psi structural concrete or concrete plank

**System Type A1:** Insulation adhered with Ashland Chemical Pliodeck Adhesive.

**All General and System Limitations apply.**

**Substrate Preparation:** All surfaces must be dry, smooth, free of depressions, voids and protrusions, and clean and free of any non-compatible curing compounds, foam release agents and other surface contaminants. Substrate shall be smooth, free of voids, spalled areas, laitance, honeycombs, and sharp protrusions.

**ONE OF THE FOLLOWING INSULATIONS**

<u>Insulation</u>	<u>Insulation Fastener</u>	<u>Fastener Density</u>
Dens Deck Prime Minimum ¼” thick	N/A	N/A
Securock Minimum ¼” thick	N/A	N/A

**Note: Insulation shall be adhered with Ashland Chemical Pliodeck Adhesive applied In 3/8”- 1/2” beads at 6” on center or other approved adhesive as per manufacturer’s specifications.**

**Primer:** Kemperol Primer shall be applied to insulation at a minimum rate of 0.6 gal/100 ft<sup>2</sup>

**Membrane:** Apply Kemperol BR Resin: Mix Part A (with Catalyst) and Part B in 1:1 ratio and roller or brush apply to primed surface at a minimum rate of 4.5 gal/ ft<sup>2</sup>. Embed the fleece directly into the resin and use a roller to saturate the fleece from the bottom up, adding resin to the top to saturate dry spots. Additionally, add the topcoat of resin at a rate of up to 2 gal/100 ft<sup>2</sup> to complete fleece saturation before the resin cures. Roll excess resin toward any unsaturated fleece. Minimum membrane thickness of 70 dry mils

**Surfacing:** Apply kiln dried silica sand (.4 - .8mm) broadcast immediately into the wet resin at the rate of 30lbs/100 ft<sup>2</sup> to the roof surface.

**Maximum Design Pressure:** -302.5 psf. (General Limitation #9)



**Deck Type 3:** Concrete Decks, Insulated

**Deck Description:** 2500 psi structural concrete or concrete plank

**System Type C1:** Insulation layer mechanically fastened.

**All General and System Limitations apply.**

**Substrate Preparation:** All surfaces must be dry, smooth, free of depressions, voids and protrusions, and clean and free of any non-compatible curing compounds, foam release agents and other surface contaminants. Substrate shall be smooth, free of voids, spalled areas, laitance, honeycombs, and sharp protrusions.

<u>Insulation Base Layer</u>	<u>Fastener Density ft<sup>2</sup></u>	<u>Fastener Type</u>
Any approved polyisocyanurate Insulation. Minimum 1½" Thick	N/A	N/A

**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.**

<u>Insulation Top Layer</u>	<u>Fastener Density ft<sup>2</sup></u>	<u>Fastener Type</u>
<b>Dens-Deck Prime</b> Minimum: ¼" x 4' x 4'	1: 2 ft <sup>2</sup>	Any approved # 14 fasteners with Stress Plate
<b>Securock</b> Minimum: ¼" x 4' x 4'	1: 2 ft <sup>2</sup>	Any approved # 14 fasteners with Stress Plate

**Primer:** Kemperol Primer shall be applied to insulation at a minimum rate of 0.6 gal/100 ft<sup>2</sup>

**Membrane:** Apply Kemperol BR Resin: Mix Part A (with Catalyst) and Part B in 1:1 ratio and roller or brush apply to primed surface at a minimum rate of 4.5 gal/ ft<sup>2</sup>. Embed the fleecce directly into the resin and use a roller to saturate the fleecce from the bottom up, adding resin to the top to saturate dry spots. Additionally, add the topcoat of resin at a rate of up to 2 gal/100 ft<sup>2</sup> to complete fleecce saturation before the resin cures. Roll excess resin toward any unsaturated fleecce. Minimum membrane thickness of 70 dry mils

**Surfacing:** Apply kiln dried silica sand (.4 - .8mm) broadcast immediately into the wet resin at the rate of 30lbs/100 ft<sup>2</sup> to the roof surface.

**Maximum Design Pressure:** -60 psf. (See General Limitations#7)



**Deck Type 3:** Concrete Decks, Insulated

**Deck Description:** 2500 psi structural concrete or concrete plank

**System Type A2:** Insulation adhered with Ashland Chemical Pliodeck Adhesive.

**All General and System Limitations apply.**

**Substrate Preparation:** All surfaces must be dry, smooth, free of depressions, voids and protrusions, and clean and free of any non-compatible curing compounds, foam release agents and other surface contaminants. Substrate shall be smooth, free of voids, spalled areas, laitance, honeycombs, and sharp protrusions.

<u>Insulation Base Layer</u>	<u>Fastener Density ft<sup>2</sup></u>	<u>Fastener Type</u>
Any approved polyisocyanurate Insulation. Minimum 1½” Thick	N/A	N/A
<u>Insulation Top Layer</u>	<u>Fastener Density ft<sup>2</sup></u>	<u>Fastener Type</u>
<b>Dens-Deck Prime</b> Minimum: ½” x 4’ x 4’	N/A	N/A
<b>Securock</b> Minimum: ½” x 4’ x 4’	N/A	N/A

**Note: Both layers of insulation shall be adhered with Ashland Chemical Pliodeck adhesive applied in 3/8”- 1/2” beads at 6” on center or other approved adhesive as per manufacturer’s specifications.**

**Primer:** Kemperol Primer shall be applied to insulation at a minimum rate of 0.6 gal/100 ft<sup>2</sup>

**Membrane:** Apply Kemperol BR Resin: Mix Part A (with Catalyst) and Part B in 1:1 ratio and roller or brush apply to primed surface at a minimum rate of 4.5 gal/ ft<sup>2</sup>. Embed the fleece directly into the resin and use a roller to saturate the fleece from the bottom up, adding resin to the top to saturate dry spots. Additionally, add the topcoat of resin at a rate of up to 2 gal/100 ft<sup>2</sup> to complete fleece saturation before the resin cures. Roll excess resin toward any unsaturated fleece. Minimum membrane thickness of 70 dry mils

**Surfacing:** Apply kiln dried silica sand (.4 - .8mm) broadcast immediately into the wet resin at the rate of 30lbs/100 ft<sup>2</sup> to the roof surface.

**Maximum Design Pressure:** -217.5 psf. (See General Limitations # 9)



**Deck Type 3:** Concrete Decks, Insulated

**Deck Description:** 2500 psi structural concrete or concrete plank

**System Type A3:** Insulation adhered with approved Asphalt.

**All General and System Limitations apply.**

**Substrate Preparation:** All surfaces must be dry, smooth, free of depressions, voids and protrusions, and clean and free of any non-compatible curing compounds, foam release agents and other surface contaminants. Substrate shall be smooth, free of voids, spalled areas, laitance, honeycombs, and sharp protrusions.

<u>Insulation Base Layer</u>	<u>Fastener Density ft<sup>2</sup></u>	<u>Fastener Type</u>
Any approved polyisocyanurate Insulation. Minimum 2" Thick	N/A	N/A
<u>Insulation Top Layer</u>	<u>Fastener Density ft<sup>2</sup></u>	<u>Fastener Type</u>
<b>Dens-Deck Prime</b> Minimum: ¼" x 4' x 4'	N/A	N/A
<b>Securock</b> Minimum: ¼" x 4' x 4'	N/A	N/A

**Note: All layers of insulation are to be set in a solid mopping of any approved mopping type III or IV asphalt within the EVT range and at a rate of 20-40 lbs / 100 sf.**

**Primer:** Kemperol Primer shall be applied to insulation at a minimum rate of 0.6 gal/100 ft<sup>2</sup>

**Membrane:** Apply Kemperol BR Resin: Mix Part A (with Catalyst) and Part B in 1:1 ratio and roller or brush apply to primed surface at a minimum rate of 4.5 gal/ ft<sup>2</sup>. Embed the fleece directly into the resin and use a roller to saturate the fleece from the bottom up, adding resin to the top to saturate dry spots. Additionally, add the topcoat of resin at a rate of up to 2 gal/100 ft<sup>2</sup> to complete fleece saturation before the resin cures. Roll excess resin toward any unsaturated fleece. Minimum membrane thickness of 70 dry mils

**Surfacing:** Apply kiln dried silica sand (.4 - .8mm) broadcast immediately into the wet resin at the rate of 30lbs/100 ft<sup>2</sup> to the roof surface.

**Maximum Design Pressure:** -302.5 psf. (See General Limitations#9)



## 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 Professional Engineer, Registered 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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