

#### DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER) BOARD AND CODE ADMINISTRATION DIVISION NOTICE OF ACCEPTANCE (NOA)

Commercial Innovations, Inc. 9105 Way Ave. Cleveland, OH 44105-2197

### SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER - Product Control Section 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 Section (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. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section 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 including the High Velocity Hurricane Zone of the Florida Building Code.

### **DESCRIPTION:** Commercial Innovations Modified Bitumen Roof System over Concrete 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 revises NOA No. 12-1003.09 and consists of pages 1 through 7. The submitted documentation was reviewed by Jorge L. Acebo.



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## **ROOFING SYSTEM APPROVAL**

Category:	Roofing
Sub-Category:	Modified Bitumen
Material:	SBS/SIS/SEBS
Deck Type:	Concrete
Maximum Design Pressure:	-270 psf.

# TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

		TABLE 1	
		Test	Product
<u>Product</u>	<u>Dimensions</u>	<b>Specification</b>	Description
Viking AOB	36" x 72'	ASTM D2626	Asphalt coated organic base sheet.
Viking AG IV	36" x 180'	ASTM D2178, Type IV	Asphalt impregnated glass felt
Viking AB II	36" x 108'	ASTM D4601, Type II	Asphalt coated fiberglass base sheet.
Viking TG IV	36" x 180'	ASTM D4990, Type I	Coal Tar impregnated glass felt
Viking TG VI	36" x 180'	ASTM D4990, Type I	Coal Tar impregnated glass felt
Viking Poly Shield	40" x 324'	ASTM D5726	Polyester felt
Millennium One Step Foamable Adhesive	1.5 liters	Proprietary	Polyurethane two component high rise insulation adhesive
Viking CTP	70 lb. keg	Proprietary	Polymer modified coal tar pitch.
Viking Sun Shield Fibered	5, 55 gallon	ASTM D2824, Type III	High solids, aluminized roof coating.
Viking TB Mastic	5 gallon	Proprietary	Trowel grade, tar based roofing mastic for use in repair and patching.
Viking AB Mastic	5 gallon	ASTM D4586	Trowel grade, asphalt based roofing mastic for use in repair and patching against leaks in built-up asphalt roofs.

### **APPROVED INSULATIONS:**

### TABLE 2

Product Name	<b>Product Description</b>	Manufacturer (With Current NOA)
ACFoam-II	Polyisocyanurate foam insulation	Atlas Roofing Corporation
Structodek High Density Fiberboard Roof Insulation	High Density wood fiber insulation board	Blue Ridge Fiberboard, Inc.



### **APPROVED FASTENERS:**

APPROVEI	D FASTENERS:					
<b>F</b> (			TABLE 3			
Fastener Number	Product Name		Product Description	Dimensions	Manufac	
			Description		(With Curre	· · · · ·
1. N/	/A	N/A		N/A	N/A	
Evidence	SUBMITTED:					
	Test Agency		<u>Test Identifier</u>	Desc	<u>ription</u>	Date
Dynatech Eng	gineering Corporation	on	#4530.05.95-1	ТА	TAS 114	
	al Research Corpor		IVOA7.AM	FM	4470	02/21/95
2	Ĩ		1B4A7.AM	FM	4470	12/15/97
			4B4A9.AM	FM	4470	12/31/97
			0Y5A6.AM	FM	4470	09/08/97
			3D3A5.AM	FM	4470	09/15/98
			3004392	FM	4470	09/21/99
			0D9A0.AM	FM	4470	05/02/00
			3004907	FM	4470	05/16/00
			3009117	FM	4470	12/21/00
			3010113	FM	4470	11/18/02
			3019046	FM	4470	03/04/05
			3021718	FM	4470	04/11/05
			3023724	FM	4470	07/05/06
			3032165		4470	04/22/08
			3032163	FM	4470	07/21/08
			3032647		4470	07/28/08
			3033444		4470	08/28/08
			3014751		4470	08/27/03
Momentum T	echnologies, Inc.		EX22B7A		1 D6162	04/11/07
			TX21G5A		1 D5147	04/25/06
			DX14C7A		1 D6163	03/16/07
			EX11L5A		1 D5147	03/19/07
			RX18C8A-R		6162/D6163	03/28/08
PRI Asphalt	Technologies, Inc.		GRD-03-02-01		1 D5147	01/07/98
			GRD-05-02-01		1 D5147	12/18/97
~			GRD-06-02-01		1 D5147	01/09/98
	tion Materials		GRD-054-02-01		1 D2626	11/17/11
Technologies	, LLC		GRD-051-02-01		1 D2178	10/28/11
			GRD-052-02-01		1 D2178	10/28/11
Trinity   ERD			4533.05.98-1-R1		114 (J)	09/09/11
			4544.11.06		S 114	11/02/06
			G15080.10.09		114 (D)	10/14/09
			C8500SC.11.07-R		ASTM D6862	08/07/09
			G32950.06.10		1 D4601	06/11/10
			G32700.09.11-1		1 D4601	09/16/11
			G39620.07.12		1 D4990	07/02/12
			G37200.10.12-1-R	ASTM D	5163/D4798	12/05/12



## **EVIDENCE SUBMITTED: (CONTINUED)**

<b>Test Agency</b>	<b>Test Identifier</b>	<b>Description</b>	Date
Trinity   ERD	G37200.10.12-2-R1	ASTM D6162/D4798	12/05/12
	G37200.10.12-3-R1	ASTM D6162/D4798	12/05/12
	G37200.10.12-4-R1	ASTM D6162	12/05/12
	G37200.10.12-5-R1	ASTM D6162	12/05/12
	G37200.10.12-6-R1	ASTM D6162/D4798	12/05/12
	G37200.10.12-7-R1	ASTM D6162	12/05/12
	G37200.10.12-9-R1	ASTM D6162/D4798	12/05/12
	G37200.10.12-10-R1	ASTM D6163/D4798	12/05/12
	G37200.10.12-11-R1	ASTM D6163/D4798	12/05/12
	G37200.10.12-12-R1	ASTM D6163/D4798	12/05/12
	G37200.10.12-13-R1	ASTM D6162	12/05/12
	G39630.07.12	Physical Properties	07/12/12
Atlantic & Caribbean Roof	ACRC 08-029	TAS 114-95	04/24/08
Consulting, LLC	ACRC 08-026	TAS 114-95	04/22/08



### **APPROVED ASSEMBLIES:**

Membrane Type:	SBS/SIS/SEBS
Deck Type 3I:	Concrete Decks, Insulated
Deck Description:	2500 psi structural concrete or concrete plank
System Type A:	One or more layers of insulation adhered with approved asphalt or adhesive.

#### All General and System Limitations apply.

**Deck Primer:** Deck is primed with ASTM D 41 primer.

One or more layers of any of the following insulations.

<b>Base Insulation Layer (Optional):</b>	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
ACFoam-II		
Minimum 1.5" thick	N/A	N/A
Top Insulation Layer:	Insulation Fasteners (Table 3)	Fastener Density/ft <sup>2</sup>
Structodek High Density Fiberboard		·
Minimum 0.5" thick	N/A	N/A

Note: Concrete deck shall be primed with ASTM D 41 asphalt primer and allowed to dry prior to application of insulation. All insulation shall be adhered to the deck in full mopping of approved asphalt within the EVT range and at a rate of 20-40 lbs./100 ft2, or in  $\frac{1}{2}$ " –  $\frac{3}{4}$ " wide beads of Millennium One Step Foamable Adhesive spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as base layer only shall be used only as base layers with a second layer of approved top layer insulation installed as the final membrane substrate.

System 1:	Base/Ply Sheet:	Three to five plies Viking TG IV, Viking TG VI or Viking Poly Shield adhered in full mopping of Viking CTP or approved Type I or Type III Coal Tar Pitch at a rate of 30 lbs./sq.		
System 2:	Base/Ply Sheet:	One ply Viking AB II, adhered in full mopping of approved asphalt at a rate of 25 lbs./sq.		
	Cap She	et: Two to four plies Viking TG IV, Viking TG VI or Viking Poly Shield adhered in full mopping of Viking CTP or approved Type I or Type III Coal Tar Pitch at a rate of 30 lbs./sq.		
Surfacing:		00 lb./sq. gravel or 300 lb./sq. slag in a flood coat of approved mopping asphalt at n application rate of 60 lb./sq. or in Viking CTP flood coat at 70 lb./sq.		
Maximum Pressure:	Design -	82.5 psf. (no base insulation, coverboard in Millennium One Step Foamable Adhesive) (See General Limitation #9)		
	-	-127.5 psf. (base insulation in Millennium One Step Foamable Adhesive, coverboard in asphalt) (See General Limitation #9)		
	-:	270 psf. (roof cover in coal tar or hot asphalt) (See General Limitation #9)		



Membrane	Type:	SBS/SIS/SEBS
Deck Type	<b>Deck Type 3I:</b> Concrete Decks	
Deck Descr	iption:	2500 psi structural concrete or concrete plank
System Typ	be F:	Base sheet adhered with approved asphalt or adhesive.
All General	l and Sys	tem Limitations apply.
Deck Prime	er:	Deck is primed with ASTM D 41 primer.
System 1:	Base/Pl Sheet:	y Three to five plies Viking TG IV, Viking TG VI or Viking Poly Shield adhered in full mopping of Viking CTP or approved Type I or Type III Coal Tar Pitch at a rate of 30 lbs./sq.
System 2:	Base/Pl Sheet:	y One ply Viking AB II, adhered in full mopping of approved asphalt at a rate of 25 lbs./sq.
	Cap Sheet:	Two to four plies Viking TG IV, Viking TG VI or Viking Poly Shield adhered in full mopping of Viking CTP or approved Type I or Type III Coal Tar Pitch at a rate of 30 lbs./sq.
Surfacing:		400 lb./sq. gravel or 300 lb./sq. slag in a flood coat of approved mopping asphalt at an application rate of 60 lb./sq. or in Viking CTP flood coat at 70 lb./sq.
Maximum Pressure:	0	-270 psf. (See General Limitation #9)



## **CONCRETE DECK 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 equivalent or enhanced fastener patterns and density. All testing and fastening design shall be in compliance with Testing Application Standard TAS 105 and Roofing Application Standard RAS 117; calculations shall be signed and sealed by a Florida Registered Engineer, Architect, or Registered Roof Consultant.

## **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.)
- 10. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 9N-3 of the Florida Administrative Code.

## END OF THIS ACCEPTANCE



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