

Kingspan Insulation, LLC 2100 RiverEdge Parkway, Suite 175 Atlanta, GA. 30328

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: GreenGuard[®] Roofing Insulation Boards

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.

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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. 21-0324.05 and consists of pages 1 through 6. The submitted documentation was reviewed by Jorge L. Acebo.



NOA No.: 22-1012.05 Expiration Date: 01/31/28 Approval Date: 05/25/23 Page 1 of 6

ROOFING COMPONENT APPROVAL

Category:	Roofing
Sub-Category:	Roofing Insulation
<u>Material:</u>	XPS

SCOPE:

This approves **GreenGuard[®] Roofing Insulation Boards**, as manufactured by Kingspan Insulation, LLC as described in this Notice of Acceptance. These products have been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone of the Florida Building Code.

TYPICAL PHYSICAL PROPERTIES:

Kingspan [®] GreenGuard [®] Insulation Board (CM_DC)					
Property	Test	Typical Results			
Density	ASTM D 1622	2.3 lb./ft ³			
Compressive Strength	ASTM D 1621	63.1 psi at 10% Deformation			
Flexural Strength	ASTM C 203	76.0 psi			
R-Value per inch	ASTM C 578	$5.19 (^{\circ}F \cdot ft^2 \cdot hr)/BTU$			
Water Absorption	ASTM C 272	Less than 1% by volume			
Moisture Vapor Transmission	ASTM E 96	Less than 1 perm			
Dimensional Stability					
Length		Less than 1%			
Width	ASTM D 2120	Less than 1%			
Thickness		Less than 1%			
Surface Burning Characteristics (4" Foam Core Max) ASTM E 84		Flame spread: 15 Smoke Developed: 140			
(1 Touri Core Maxi)		Smone Developea. 110			

3/8-inch Kingspan [®] GreenGuard [®] Roofing Recovery Boards (PB6/PB38, PB6W, PB6 PLUS, PB6HD, Duro-Guard XPS)				
<u>Property</u>	Test	Typical Results		
Density	ASTM D 1622	4.42 lb/ft ³		
Compressive Strength	ASTM D 1621	27.65 psi at 10% Deformation		
Flexural Strength	ASTM C 203	104.05 psi		
R-Value per inch	ASTM C 518	$1.4 (^{\circ}F \cdot ft^2 \cdot hr)/BTU$		
Water Absorption	ASTM C 272	Less than 0.30% by volume		
Moisture Vapor Transmission	ASTM E 96	Less than 1 perm		
Dimensional Stability	ASTM D 2126			
Length		Less than 1%		
Width		Less than 1%		
Thickness		Less than 2%		
Surface Burning Characteristics	ASTM E 84	Flame spread: 10		
		Smoke Developed: 45-140		

Note: The physical properties listed above are presented at typical average values as determined by accepted ASTM test methods and are subject to normal manufacturing variation. Numerical ratings as determined by ASTM Test Method E-84 are not intended to reflect hazards presented by this or any other material under actual fire conditions.



TYPICAL PHYSICAL PROPERTIES: (CONTINUED)

Kingspan [®] GreenGuard [®] LG XPS Insulation Board					
<u>Property</u>	Test	Typical Results			
Density	ASTM D 1622	1.87 lb./ft^3			
Compressive Strength	ASTM D 1621	52 psi at 10% Deformation			
Flexural Strength	ASTM C 203	117 psi			
R-Value per inch	ASTM C 578	5.2 (°F· ft^2 ·hr)/BTU			
Water Absorption	ASTM C 272	Less than 1% by volume			
Moisture Vapor Transmission	ASTM E 96	Less than 1 perm			
Dimensional Stability					
Length	A STM D 2126	Less than 1%			
Width	ASTM D 2120	Less than 1%			
Thickness		Less than 1%			
Surface Burning Characteristics		Flame spread: 15			
(4" Foam Core Max.)	ASIME 84	Smoke Developed: 140			

Note: The physical properties listed above are presented at typical average values as determined by accepted ASTM test methods and are subject to normal manufacturing variation. Numerical ratings as determined by ASTM Test Method E-84 are not intended to reflect hazards presented by this or any other material under actual fire conditions.

MANUFACTURING LOCATION:

1. Winchester, VA.

EVIDENCE SUBMITTED

Test Agency	Test Identifier	Test Specification	Date
R & D Services, Inc.	RD-21027-R2	ASTM C578	02/23/21
	RD-21029-R1	ASTM C578	02/24/21
UL LLC	09NK07533	UL 723 / ASTM E84	08/11/09
	09CA46361	UL 723 / ASTM E84	02/09/10
	11NK03820	UL 723 / ASTM E84	03/04/11
	4788129675	UL 723 / ASTM E84	12/14/17
	4788168031	UL 723 / ASTM E84	12/19/17
	4789672997	UL 723 / ASTM E84	10/26/20
Intertek	102908144MID-003R2	ASTM C578	06/06/18
	102908144MID-004R3	ASTM C578	06/06/18
	102908144MID-005R2	ASTM C578	06/06/18



PRODUCT DESCRIPTION:

Trade name:	Kingspa	n [®] Greei	nGuard®	XPS and	l GreenG	Guard® L	G XPS I	nsulatior	ı Board C	M
Type:	Square Edge									
Thickness:	1-in	ch	1-1/2-	-inch	2-ii	nch	3-inch		4-inch	
Board Size, Ft.	2x8	4x8	2x8	4x8	2x8	4x8	2x8	4x8	2x8	4x8
Core:	Extruded	Polystyr	rene (Typ	e IV and	Type VI)					
Facers:	None				•••					
Decks:	Concrete	, Steel, C	Cementitio	ous Wood	Fiber, W	ood, and	Gypsum	l		
Trade name:	Kingspa	n [®] Gree	nGuard®	XPS and	l GreenG	Guard® L	G XPS I	nsulatior	ı Board C	сM
Type:	Square E	dge								
Thickness:		1-1/2-incl	h		2-ir	nch		3-inch		
Board Size, Ft.	2x8		4x8	2	x8	4x8	3	2x8	2	4x8
Core:	Extruded	Polystyr	rene (Typ	e VII)						
Facers:	None			, ,						
Decks:	Concrete	, Steel, C	Cementitic	ous Wood	Fiber, W	ood, and	Gypsum	L		
Trade name:	Kingspa	n [®] Gree	nGuard®	XPS and	l GreenG	Guard® L	G XPS I	nsulatior	ı Board D)C
Type:	Drainage	Board								
Thickness:		2-inch			3-inch			4-inch		
Board Size, Ft.		4x8			4x8			4x8		
Core:	Extruded	Polystyr	ene (Typ	e IV and	Type VI)		•			
Facers:	None									
Decks:	Concrete, Steel, Cementitious Wood Fiber, Wood, and Gypsum									
Trade name:	Kingspa	n [®] Gree	nGuard®	XPS and	l GreenG	Guard® L	G XPS I	nsulatior	ı Board D	C
Type:	Drainage Board									
Thickness:		1-1/2-incl	1-½-inch 2-inch				3-inch			
Board Size, Ft.	2x8		4x8	2	x8	4x8	}	2x8	2	4x8
Core:	Extruded Polystyrene (Type VII)									
Facers:	None	5 5	V J I	,						
Decks:	Concrete	, Steel, C	Cementitic	ous Wood	Fiber, W	ood, and	Gypsum	L		
Trade name:	Kingspan	®Green	Guard [®]]	Roofing I	Recovery	Board F	PB6/PB3	8 or Durc	o-Guard 2	XPS
Thickness:	3/8-inch (9.5 mm)		0	·					
Board Size(s)	4' x 50' (1.2 x 15.2	2 m)							
Core:	Extruded	Polystyre	ene							
Facers:	Clear, nor	n-perfora	ted plasti	c on both	sides.					
Decks:	Wood, Steel, Concrete, Cementitious Wood Fiber, and Gypsum									
Special Attachment	Multilayer systems shall comply with established guidelines listed in RAS 117 for specific									
Application:	system approval and specific roof assembly listed in NOA approval.									



Trade name:

Thickness: Board Size(s) Core: Facers: Decks: Special Attachment Application:

Trade name:

Thickness: Board Size(s) Core: Facers: Decks: Special Attachment Application:

Trade name:

Thickness: Board Size(s) Core: Facers:

Decks: Special Attachment Application:

Kingspan[®] GreenGuard[®] Roofing Recovery Board PB6W

3/8-inch (9.5 mm)
4' x 50' (1.2 x 15.2 m)
Extruded Polystyrene
White, non-perforated plastic on both sides.
Wood, Steel, Concrete, Cementitious Wood Fiber, and Gypsum
Multilayer systems shall comply with established guidelines listed in RAS 117 for specific system approval and specific roof assembly listed in NOA approval.

Kingspan[®] GreenGuard[®] Roofing Recovery Board PB6 PLUS

3/8-inch (9.5 mm)
4' x 50' (1.2 x 15.2 m)
Extruded Polystyrene
White, non-perforated plastic on both sides.
Wood, Steel, Concrete, Cementitious Wood Fiber, and Gypsum
Multilayer systems shall comply with established guidelines listed in RAS 117 for specific system approval and specific roof assembly listed in NOA approval.

Kingspan[®] GreenGuard[®] Roofing Recovery Board PB6HD

3/8-inch (9.5 mm)
4' x 50' (1.2 x 15.2 m)
Extruded Polystyrene
Clear, non-perforated plastic on both sides with an additional white, non-perforated facer on top side.
Wood, Steel, Concrete, Cementitious Wood Fiber, and Gypsum
Multilayer systems shall comply with established guidelines listed in RAS 117 for specific system approval and specific roof assembly listed in NOA approval.



LIMITATIONS:

- 1. Fire classification is not a part of this Notice of Acceptance
- 2. Roof assemblies are approved under specific roof cover's Product Control Notice of Acceptance.
- 3. Kingspan[®] GreenGuard[®] Roofing Insulation Boards may be used with any approved roof covering listing a specific Kingspan[®] GreenGuard[®] Roofing Insulation Boards as a component part of a roof assembly Notice of Acceptance. If a Kingspan[®] GreenGuard[®] Roofing Insulation Boards is not listed, a request may be made to the local building inspector or the Miami Dade Building Code Compliance Office for approval provided that appropriate documentation is provided.
- 4. The products listed herein are components of roof assemblies and are approved for use with roof assemblies that list the products listed herein as part of their roof assemblies Notice of Acceptance. See roof system Notice of Acceptance (NOA) for application rates and uses.
- 5. All products listed herein shall have an unannounced follow-up quality control program from an approved listing agency. Follow up test results shall be made available to Miami-Dade County Product Control upon request.
- 6. Change in materials, use, or manufacture of any products listed herein shall be cause for termination of this Notice of Acceptance.
- 7. Per RAS 117 Kingspan[®] GreenGuard[®] Roofing Insulation Boards shall only be installed by mechanical attachment.
- 8. Kingspan[®] GreenGuard[®] Roofing Insulation Boards shall not come in contact with hot asphalt/adhesive.
- 9. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule **61G20-3** of the Florida Administrative Code.
- 10. All approved products listed herein shall be labeled and shall bear the imprint or identifiable marking of the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved" or the Miami-Dade County Product Control Seal as shown below.



END OF THIS ACCEPTANCE

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