

DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER) BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599
www.miamidade.gov/economy

MIAMI-DADE COUNTY

Miami Echo Inc. 2755 NW 63rd Ct. Fort Lauderdale, FL 33309

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: Echo Block Roof Edge, Gutter and Coping Cap Termination Systems.

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 and revises NOA No. 24-0422.19 and consists of pages 1 through 20.

The submitted documentation was reviewed by Jorge L. Acebo.

05/30/24



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ROOFING COMPONENT APPROVAL

Category: Roofing

Sub-Category: Roofing Fasteners

Materials: Cementitious Rubber, Steel

SCOPE:

This approves roofing components "Echo Block Roof Edge, Gutter and Coping Cap termination system" as described in this Notice of Acceptance. Designed to comply with the Florida Building Code and the High Velocity Hurricane Zone of the Florida Building Code for the locations where the pressure requirements, as determined by applicable building code do not exceed the design pressure values listed herein.

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

Product Name	Dimensions	<u>Test</u> Specification	<u>Product</u> Description
Echo Block	Min. Length: 2' Min. Width: 2' Min. Thickness: 2"	Proprietary	Cementitious recycled shredded tire insulation block, which includes an 8,000 PSI structural Grout surface.
Echo Block Nailer	Min. Length: 2' Min. Width: 6" Min Thickness: 2"	Proprietary	Cementitious recycled shredded tire insulation block, which includes an 8,000 PSI structural Grout surface.
Echo Flow	Min. Length: 2' Min. Width: 6" Min. Thickness: 2"	Proprietary	Cementitious recycled shredded tire permeable top layer roof insulation block and fill.
Echo Block (Coping) – 8"	Min. Length: 2' Min. Width: 8" Min. Thickness: 3"	Proprietary	Cementitious recycled shredded tire insulation block, which includes an 8,000 PSI structural Grout surface.
Echo Block (Coping) – 10"	Min. Length: 2' Min. Width: 10" Min. Thickness: 3"	Proprietary	Cementitious recycled shredded tire insulation block, which includes an 8,000 PSI structural Grout surface.
Echo Block (Coping) – 12"	Min. Length: 2' Min. Width: 12" Min. Thickness: 3"	Proprietary	Cementitious recycled shredded tire insulation block, which includes an 8,000 PSI structural Grout surface.
Echo Block (Coping) – 14"	Min. Length: 2' Min. Width: 14" Min. Thickness: 3"	Proprietary	Cementitious recycled shredded tire insulation block, which includes an 8,000 PSI structural Grout surface.
Echo Block (Coping) – 16"	Min. Length: 2' Min. Width: 16" Min. Thickness: 3"	Proprietary	Cementitious recycled shredded tire insulation block, which includes an 8,000 PSI structural Grout surface.
Echo Block (Coping) – 18"	Min. Length: 2' Min. Width: 18" Min. Thickness: 3"	Proprietary	Cementitious recycled shredded tire insulation block, which includes an 8,000 PSI structural Grout surface.
Echo Block (Coping) – 20"	Min. Length: 2' Min. Width: 20" Min. Thickness: 3"	Proprietary	Cementitious recycled shredded tire insulation block, which includes an 8,000 PSI structural Grout surface.
Echo Block (Coping) – 22"	Min. Length: 2' Min. Width: 22" Min. Thickness: 3"	Proprietary	Cementitious recycled shredded tire insulation block, which includes an 8,000 PSI structural Grout surface.



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TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

Product Name	Dimensions	<u>Test</u> Specification	<u>Product</u> <u>Description</u>
Echo Block (Coping) – 24"	Min. Length: 2' Min. Width: 24" Min. Thickness: 3"	Proprietary	Cementitious recycled shredded tire insulation block, which includes an 8,000 PSI structural Grout surface.

MANUFACTURING LOCATION:

1. Fort Lauderdale, FL.

TRADE NAMES OF PRODUCTS MANUFACTURED BY OTHERS:

		Test	Product	
Product	Dimensions	Specification	Description	<u>Manufacturer</u>
.050 Aluminum Coping Cap	Max. 6" Outside Face Max. 5½" Inside Face Min Width: 16" Max Width: 24" Max. Length: 10' Thickness: .050 Grade 3105	TAS 111 (C)	Decorative Aluminum Coping Cap with ICP adhesive Polyset AH-160.	Generic
.040 Aluminum Coping Cap	Max. 6" Outside Face Max. 5½" Inside Face Min. Width: 8" Max. Width: 14" Max. Length: 10' Thickness: .040 Grade 3105	TAS 111 (C)	Decorative Aluminum Coping Cap with ICP adhesive Polyset AH-160.	Generic
24 Gauge Galvanized Standard Drip Edge	Max. 5½" Outside Face Length: 10' Thickness: 0.0276" Grade 40 Steel	TAS 111 (B)	Standard Metal Drip Edge. With individual 9" o.c. clip only.	Generic
24 Gauge Galvanized Standard Gravel Stop	Max. 5½" Outside Face Length: 10' Thickness: 0.0276" Grade 40 Steel	TAS 111 (B)	Standard Metal Gravel Stop/with individual clip 9" o.c. only.	Generic
22 Gauge Stainless Gutter	Max. 6" Gutter Width. Thickness: 0.0300 Steel Grade 304	TAS 111 (C)	Standard Stainless-Steel Gutter.	Generic
20 Gauge Galvanized 2" wide Individual Clips 9" o.c.	Width: 2" Length: 6"	Proprietary	Individual clip for drip edge/gravel stop spaced 9" o.c.	Generic



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TRADE NAMES OF PRODUCTS MANUFACTURED BY OTHERS: (CONTINUED)

		Test	Product	
Product	Dimensions	Specification	Description	Manufacturer
24 Gauge Stainless Drip Edge/ Gutter	Max 3½" Face Thickness: 0.02400 Steel Grade: 304	TAS 111 (C)	Stainless Steel Drip Edge use with continuous cleat on gutter.	Generic
20 Gauge Galvanized Continuous Cleat/ Gutter	Max. 3½" Outside Face Length: 10' Thickness: 0.0396" Grade 40 Steel	TAS 111 (B)	Continuous Galvanized Steel cleat.	Generic
22 Gauge Stainless Fascia	Thickness: 0.0300 Steel Grade 304	TAS 111 (C)	Stainless steel Fascia metal.	Generic
Gutter Bracket	1/8" x 1" Stainless Steel	TAS 111 (C)	Stainless Steel gutter bracket.	Generic
OMG HeadLok SP Fastener	#14 1% or 3½" Length, #3 Phillips head.	TAS 114 (E)	Large head, standard thread, pinch point screw with CR-10 coating.	OMG, Inc.
ICP Adhesives Polyset AH-160	Various	Proprietary	A two-component polyurethane foam adhesive.	ICP Adhesives and Sealants, Inc.
S.S Ring Shank Nail	2" x 0.090"	Proprietary	Stainless Steel Ring Shank Nail.	Generic



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EVIDENCE SUBMITTED:

Test Agency	Test Identifier	Test Name/Report	Date
PRI Construction Materials	Physical Properties	DKTT-002-02-01.1	05/14/18
Technologies, LLC	Physical Properties	DKTT-008-02-01.1	05/14/18
	Physical Properties	SHTI-002-02-01	06/19/18
	Physical Properties	SHTI-004-02-01.1	04/11/19
	Physical Properties	SHTI-003-02-01	06/19/18
	Physical Properties	SHTI-006-02-01.1	05/16/19
	Physical Properties	SHTI-005-02-01.1v	05/16/19
	TAS 111(B)	1957T0002	11/25/19
	TAS 111(B)	SHTI-001-02-01.1	05/31/17
	TAS 111(B)	1957T0006	02/09/21
	TAS 111(C)	1957T0003	11/06/20
	TAS 111(C)	1957T0005	02/10/21
UL LLC	UL 790	R38782	08/03/22
	Waterflow Rate	Project 4787705846	12/22/16
Quest Engineering Services	ASTM C495	J-16044.005	08/09/16
	ASTM C495	J-16044.006	08/09/16
	ASTM C495	J-19087.001	03/08/19
Atlantic & Caribbean Roof	TAS 105	ACRC# 15-0096	05/10/17
Consulting, LLC	TAS 105	ACRC# 15-0096	06/01/18
	TAS 114-D	ACRC# 18-001	02/27/18
	TAS 114-D	ACRC# 18-002	02/27/18
	TAS 114-D	ACRC# 18-003	05/21/18
	TAS 114-D	ACRC# 18-005	07/13/18
	TAS 114-D	ACRC# 18-010	08/07/18
	TAS 114-D	ACRC# 18-011 R1	05/22/19
	TAS 114-D	ACRC# 18-012	08/07/18
	TAS 114-D	ACRC# 16 010	06/02/16
	TAS 114-D	ACRC# 19-018	12/09/19
	TAS 114-D	ACRC# 19-019	12/11/19
	TAS 114-D	ACRC# 19-020	12/11/19
	TAS 114-D	ACRC# 21-004	02/05/21
American Test Lab of South Florida	TAS 111-C	R0703.01-20	7/10/20
SCS Global Services	Recycled Content	SCS-RC-04309	03/31/17
	Recycled Content	SCS-RC-04428	03/03/17
	Recycled Content	SCS-RC-04454	04/25/17
	Recycled Content	SCS-RC-04430	04/01/19
	Recycled Content	SCS-RC-04429	04/01/19



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INSTALLATION:

1- Gauge 24 Galvanized or Stainless-Steel Standard Drip Edge or Gravel Stop using a 20 Gauge Galvanized Cleats fastened into Echo Block or Echo Block Nailer.

Maximum length 10'. Maximum face height 5.5". Grade 40, 20 gauge 2" wide by 1-1/2" high galvanized steel cleats with a Grade 40 are adhered to Echo Flow or deck with ICP Adhesive Polyset AH-160 spaced 9" o.c., 24-gauge galvanized steel continuous drip edge/gravel stop installed with 2" x 0.090 SS length ring shank nails staggered 6" on center into Echo Block or Echo Block Nailer (per attached drawing). Echo Block, Echo Flow Nailer is to be installed onto concrete, steel, or wood deck (per the attached drawing) using 1-1/2" continuous beads of ICP Adhesives Polyset AH-160 spaced 6" o.c. The AH-160 is to be applied to the bottom of the blocks, then flipped over and set onto the deck.

Echo Block Nailer/ Maximum combined height 10"

(Optional) Base Layers: Echo Flow having minimum width of 6" and minimum thickness of 2".

(Optional) Mid Layers: Echo Flow having minimum width of 6" and minimum thickness of 2".

Echo Block having minimum width of 6" and minimum thickness of 2".

Maximum Design Pressure: -300 psf. (horizontal and vertical)

2- (Optional) Gutter/ Fascia

22 Gauge, Stainless steel gutter using 1/8" x 1" Stainless steel bars and 22 Gauge top brackets, fastened and foam attached to Echo Block or Echo Block Nailer.

Maximum length 10'. Maximum face height 6". A Grade 40, 20-gauge continuous galvanized steel cleat with a Grade 40 installed with OMG Headlock SP #14 1-5/8" length fasteners at 9" on center into Echo Block or Echo Block Nailer along vertical face, 1-1/2" above kick (per attached drawing). A 22-gauge stainless steel fascia metal is set in continuous 1-1/2" beads of ICP Adhesives Polyset AH-160 spaced 6" on center (per attached drawing). A 1" x 1/8" Stainless Steel flat-bar gutter hanger spaced 30" on center is attached to the facia metal and Echo Block or Echo Block Nailer with (2) 3-1/2" OMG Headlock SP fasteners. In addition, a 1"x3" 22-gauge stainless steel support strap is attached 1" from the bottom over the flat-bar with (2) 3-1/2" OMG Headlock SP fasteners into the fascia metal and Echo Block or Echo Block Nailer (per attached drawing). A 1-1/2" ribbon of ICP Adhesives Polyset AH-160 is applied 6" on center on the back of the Min. 22-gauge gutter (6" max) which is then pressed onto the fascia metal and simultaneously secured to the hanger with a hex-bolt and locknut at gutter face. 22 gauge (fully hemmed) 1-1/2" wide internal gutter straps are installed 30" on center in alternate spacing between hangers with a #64 stainless steel pop rivet installed at the internal face of the gutter and external top of gutter (per attached drawing). A 20-gauge galvanized cleat is attached to the Echo Block or Echo Block Nailer with a 3-1/2" OMG Headlock SP fastener 9" on center along the vertical face 1" from top edge. A Min. 24-gauge stainless steel drip edge is installed over the galvanized cleat with 2" x 0.090 SS length ring shank nails staggered 6" on center along top flange and 1" from edge. Echo Block, Echo Flow Nailer is to be installed onto concrete, steel, or wood deck (per the attached drawing) using 1-1/2" continuous beads of ICP Adhesives Polyset AH-160 spaced 6" o.c. The AH-160 is to be applied to the bottom of the blocks, then flipped over and set onto the deck.

Echo Block Nailer/ Maximum combined height 10"

(Optional) Base Layers: Echo Flow having minimum width of 6" and minimum thickness of 2". (Optional) Mid Layers: Echo Flow having minimum width of 6" and minimum thickness of 2". Top Layer: Echo Block having minimum width of 6" and minimum thickness of 2".

Maximum Design Pressure: -300 psf. (horizontal and vertical)



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INSTALLATION: (Continued)

3.1- Aluminum .050 Coping Cap and Blocking using ICP AH-160 foam adhesive at 6" On center.

(16" to 24" Max Width)

Or

3.2- Aluminum .040 Coping Cap and Blocking using ICP AH-160 foam adhesive at 6" On center. (8" to 14" Max Width)

Maximum length 10'. Maximum face height 6". ICP AH-160 Foam adhesive is applied 6" o.c. starting from the vertical face on the .040 or .050 Aluminum Coping Cap. The coping cap is then installed over Echo Block (coping) and firmly pressed into place for the foam adhesive to cure. Echo Block (Coping) is to be installed on top of wood, metal, or concrete walls (per the attached drawings) using 1-1/2" continuous beads of ICP AH-160 adhesive spaced 6" o.c. The AH-160 is to be applied to the bottom of Echo Block (coping) then flipped over and set onto the top of the concrete, steel, or wood wall. Miami Dade NOA approved Urethane caulk shall be used in between every Echo Block (coping) joint for temporary waterproofing protection.

Echo Block (Coping)

(Optional) Base Layers: Echo Flow minimum thickness 2" (Maximum 6" face height combined)

Top Layer: Echo Block (Coping) Minimum Thickness 3"

Maximum Design Pressure:

(8"-14" Wide Coping): -300 psf. – (TOP FACE) -707 psf. (ROOF FACE) -722 psf. (FRONT FACE)

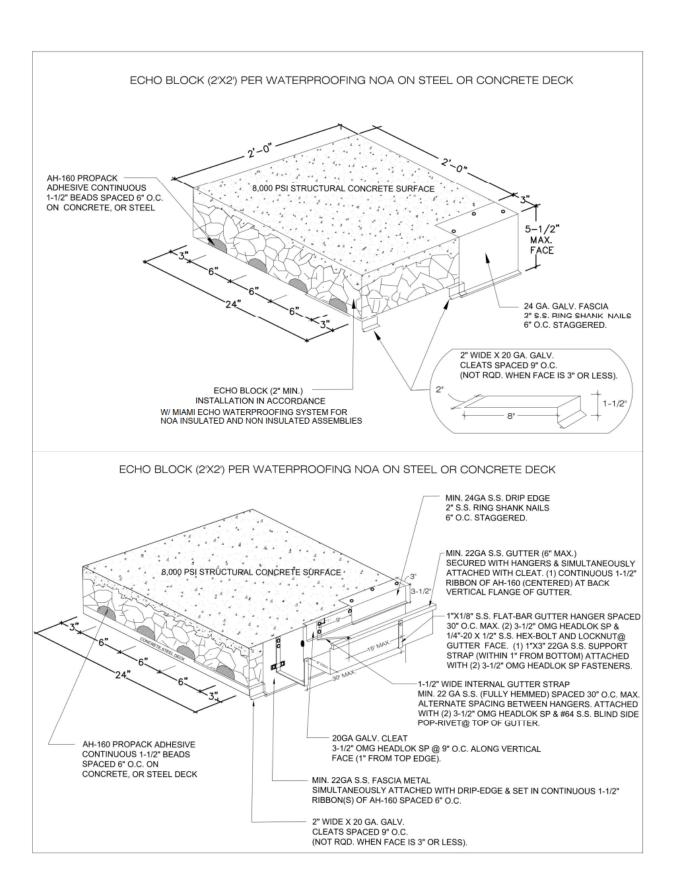
Maximum Design Pressure:

(16"-24" Wide Coping Cap): -249 psf. – (TOP FACE) -707 psf. (ROOF FACE) -722 psf. (FRONT FACE)



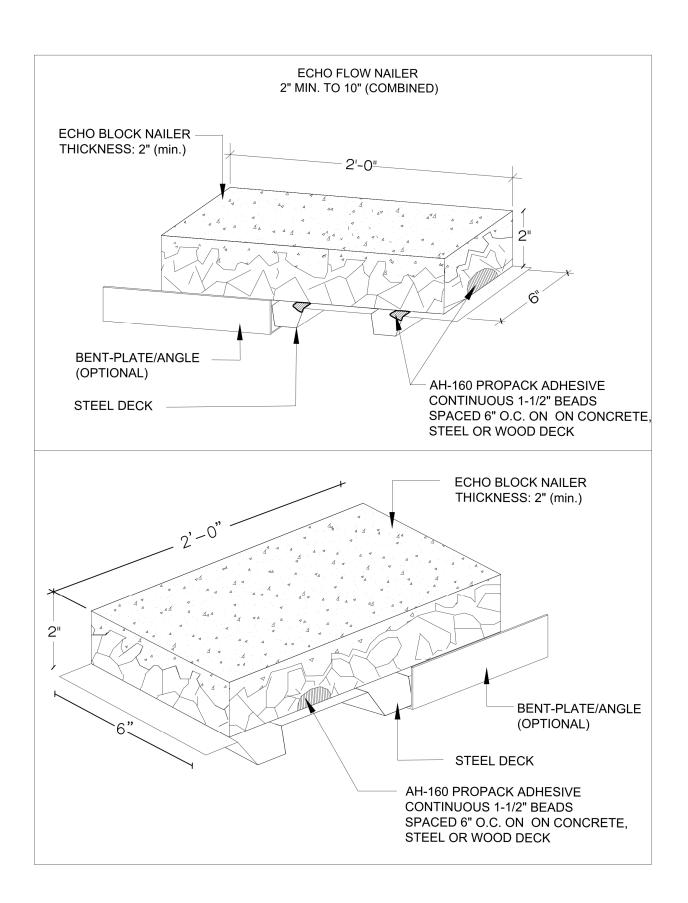
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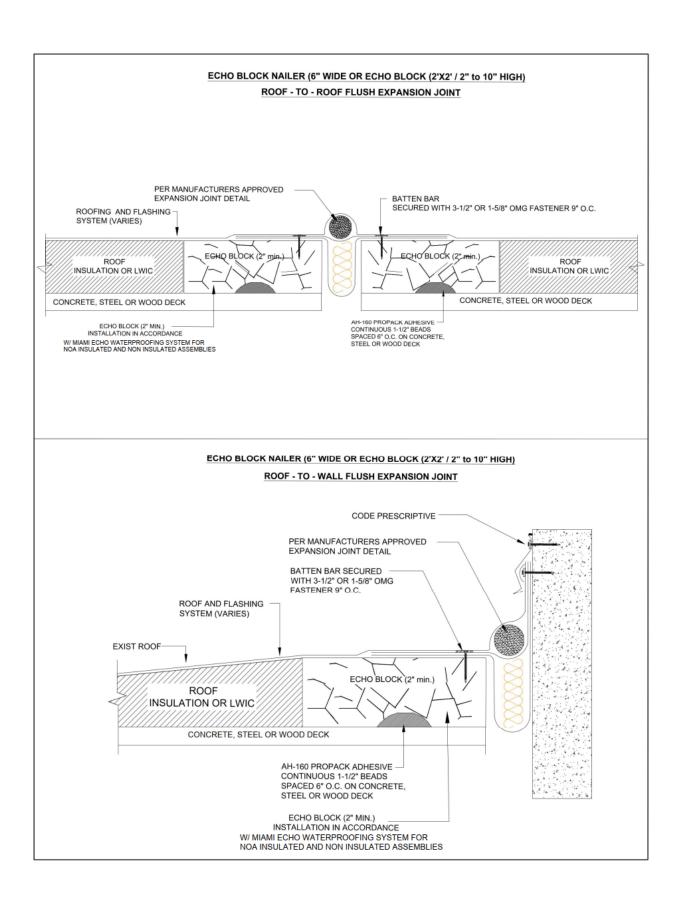


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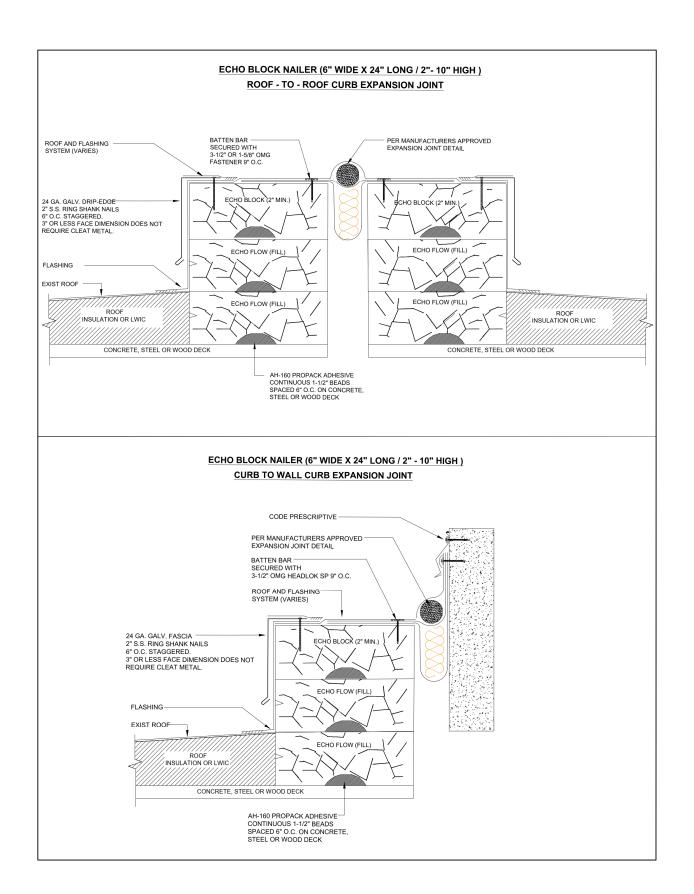


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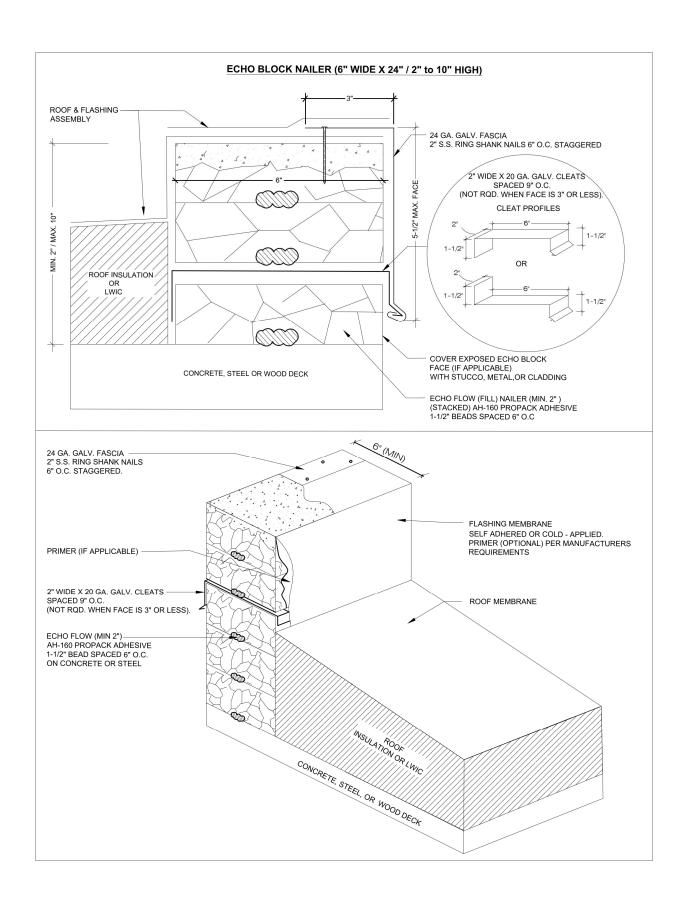


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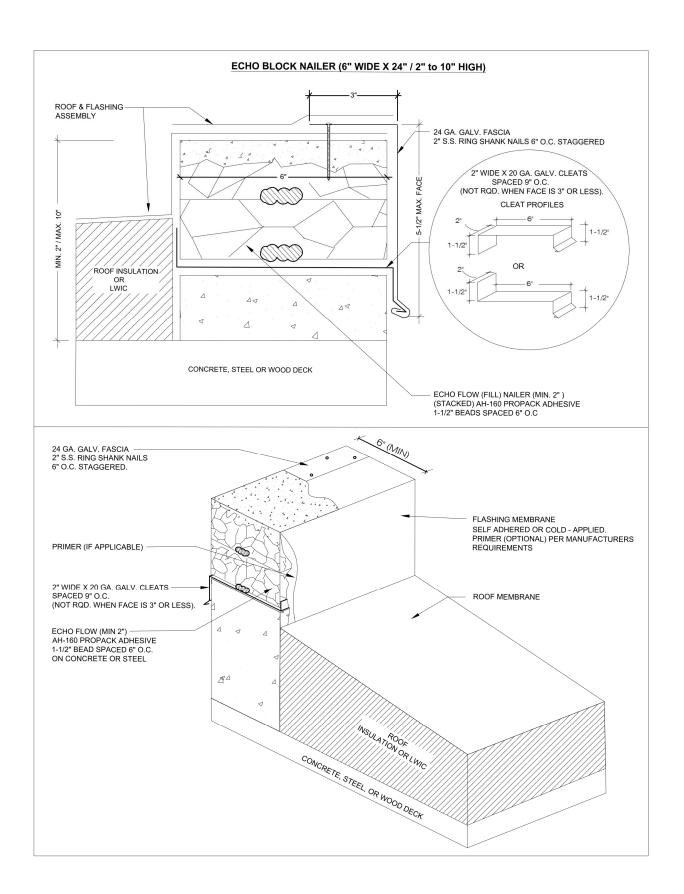


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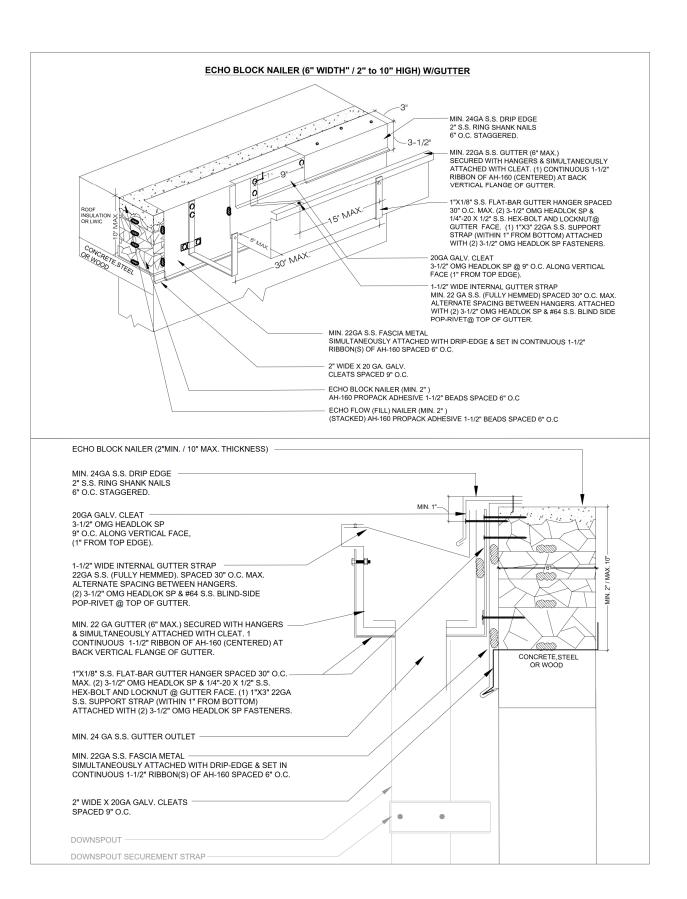


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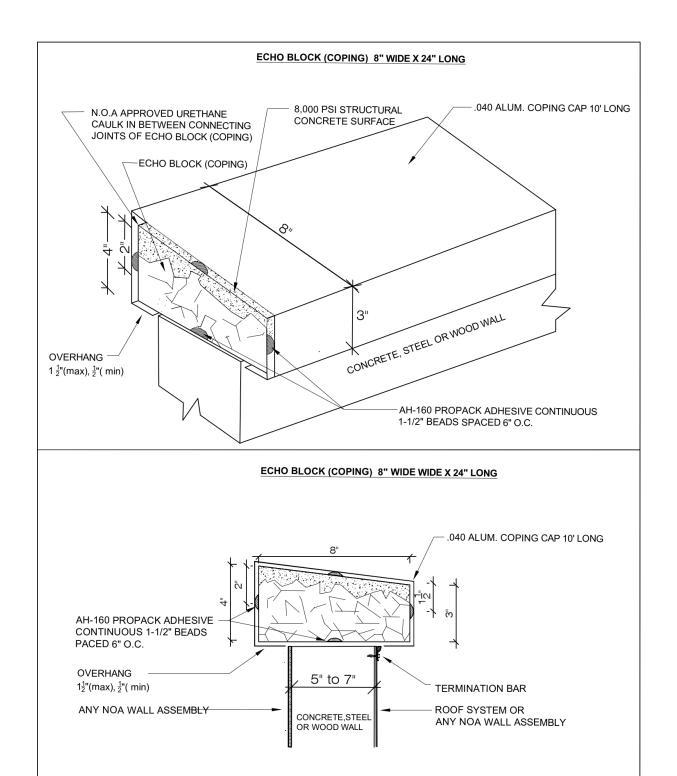


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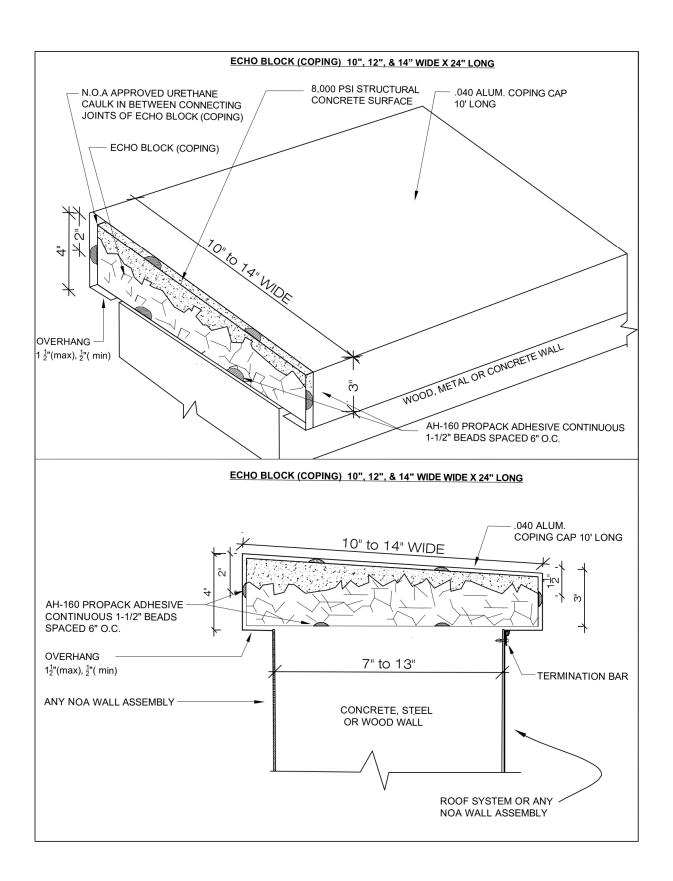


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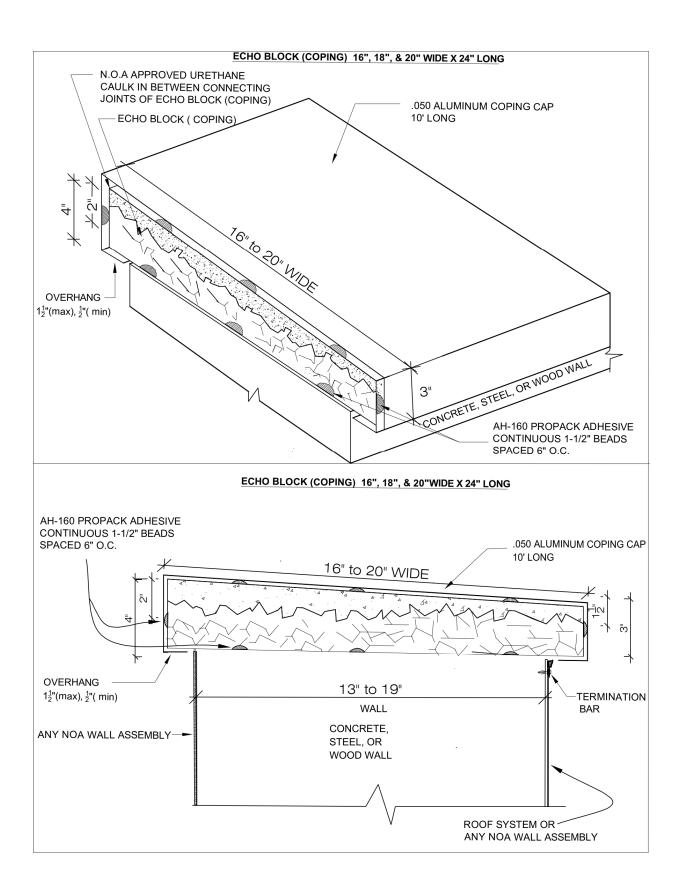


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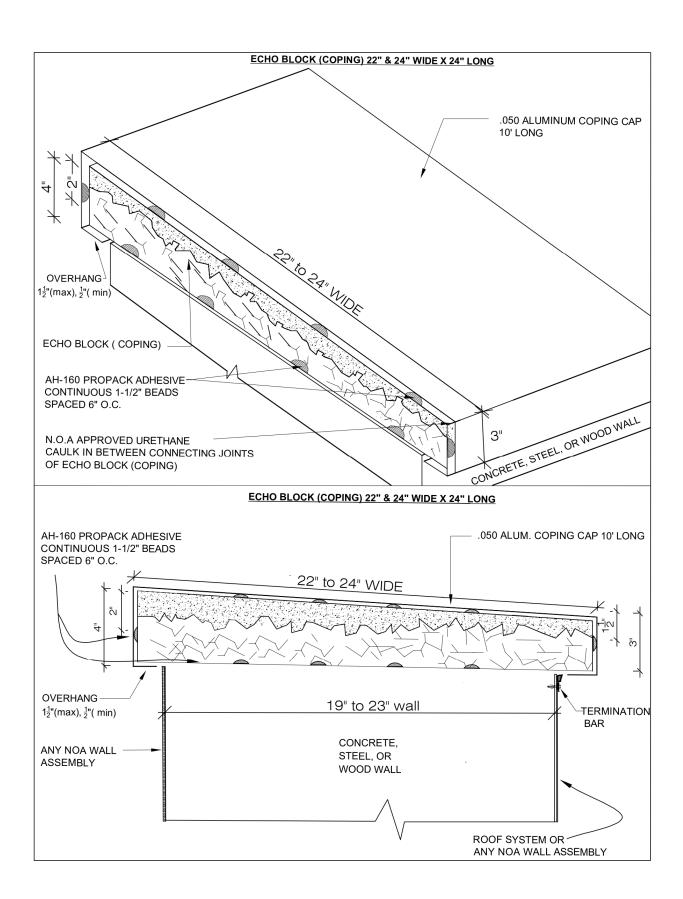


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LIMITATIONS:

- 1. All products listed herein shall be installed in accordance with the requirements set forth in RAS 111.
- 2. Dimensions shall be as outlined in Detail Drawings herein.
- 3. Fasteners shall be Stainless Steel 2" x 0.090" length Ring Shank Nails.
- 4. No exposed fasteners shall be permitted.
- 5. All fasteners shall be of compatible materials.
- 6. The maximum design pressures listed herein are applicable to all areas of the roof. Neither Extrapolation or Rational analysis shall be permitted
- 7. Fasteners shall provide a minimum pull out resistance of 285 lbf (109 kg) into the substrate being fastened into. When tested in accordance with TAS 105.
- 8. 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.
- 9. All approved products listed herein shall be labeled and shall bear the imprint or identifiable marking of the manufacturer's name or logo and following statement: "Miami-Dade County Product Control Approved" or the Miami-Dade County Product Control Seal as shown below.

MIAMI DADE COUNTY

END OF THIS ACCEPTANCE



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GREEN SUSTAINABLE ATTRIBUTES

SCOPE: This document is solely for the purpose of the listing of Sustainable Attributes of construction materials. The supporting documentation has been submitted by the NOA holder to Miami-Dade County Product Control.

SOLAR REFLECTANCE AND THERMAL EMMITANCE							
Component Name	Initial Reflectance	Aged Reflectance	Initial Emmitance	Aged Emmitance	Solar Reflectance Index (SRI)		
N/A		/					
N/A	/						

ROOF SYSTEM THERMAL RESISTANCE					
R-Value	Insulation / Thickness	Products:			
4.266	3.25 inches	Echo Flow			
2.388	3.89 inches	Echo Block			

LOW VOC COMPONENTS								
Component Name		(Content		Emission			
ICP Adhesive Polyset AH	I-160		4 g/L					
Echo Block		No VC	C per MSDS					
Echo Flow		No VC	C per MSDS					

RECYCLED CONTENT / BIO-BASED MATERIAL / RAPIDLY RENEWABLE MATERIAL						
		% Recycled Content % Able to be % of Bio-based % of Rapidly				
Component Name		when Manu	<u>factured</u>	Recycled at Disposal	<u>Material</u>	Renewable Material
Echo Block		87		100		
Echo Flow		93		100		

SYSTEM LIFE CYCLE	
<u>Years</u>	Assemblies:
40	Echo Block Nailer assembly and Echo Block per Miami Echo Inc. waterproofing system NOA

REGIONALLY MANUFACTURED COMPONENTS					
Component Name	Manufacturing Location				
Echo Block	Miami Echo Inc., 2755 NW 63rd Ct., Fort Lauderdale, FL 33309				
Echo Flow	Miami Echo Inc., 2755 NW 63rd Ct., Fort Lauderdale, FL 33309				

U-FACTOR (THERMAL TRANSMITTANCE) BTU/HR-FT ² - ⁰ F						
Component Name	<u>U-Value</u>	Component Name	<u>U-Value</u>			
Echo Block	.420					
Echo Flow	.234	100 miles				

C-FACTOR (THERMAL CONDUCTANCE) BTU/HR-FT ² - ⁰ F			
Component Name	<u>U-Value</u>	<u>Component Name</u>	<u>U-Value</u>
Echo Block	1.634		
Echo Flow	.809		



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