



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

NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY
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

Unirac, Inc.
1411 Broadway Blvd. NE
Albuquerque, NM 87102

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.

DESCRIPTION: NXT Stronghold Butyl Aluminum-Stainless Steel Solar Mounts

APPROVAL DOCUMENT: Drawing No. **M-D NOA NXT**, titled "NXT Stronghold Butyl Attachment", sheets 1 through 5 of 5, prepared by Unirac, Inc, dated 04/05/2023, with revision D dated 08/22/2023, signed and sealed by Saddam Ahmad, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: None

LABELING: Each box shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved or MDCPCA", 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 # **23-0314.06** consists of this page 1, evidence page E-1, as well as approval document mentioned above.

The submitted documentation was reviewed by **Carlos M. Utrera, P.E.**



NOA No: 23-1010.11
Expiration Date: July 13, 2028
Approval Date: November 16, 2023
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. Evidence submitted under NOA # 23-0314.06 and new

A. DRAWINGS

1. Drawing No. **M-D NOA NXT**, titled “NXT Stronghold Butyl Attachment”, sheets 1 through 5 of 5, prepared by Unirac, Inc, dated 04/05/2023, with revision D dated 08/22/2023, signed and sealed by Saddam Ahmad, P.E.

B. TESTS “Submitted under NOA # 23-0314.06”

1. Test report on Uplift and Shear Allowable Loads of the NXT Stronghold Butyl Solar Mount per ASTM D7147-11, prepared by Intertek, Test Report No. **P8089.01-119-18 R0**, dated 03/29/2023, signed and sealed by Tanya A. Dolby, P.E.
2. Test report on Wind Driven Rain Resistance of the NXT Stronghold Butyl Solar Mount per TAS 100(A)-95, prepared by Intertek, Test Report No. **P8558.01-119-18**, dated 03/15/2023, signed and sealed by Tanya A. Dolby, P.E.

C. CALCULATIONS “Submitted under NOA # 23-0314.06”

1. Drawing anchor calculations, prepared by Saddam Ahmad, dated 06/19/2023, signed and sealed by Saddam Ahmad, P.E.

D. MATERIAL CERTIFICATIONS

1. None.

E. QUALITY ASSURANCE

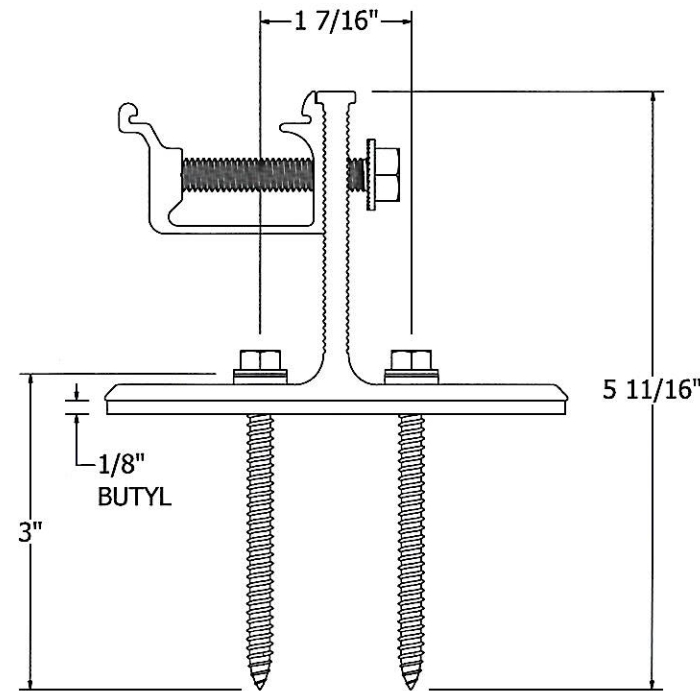
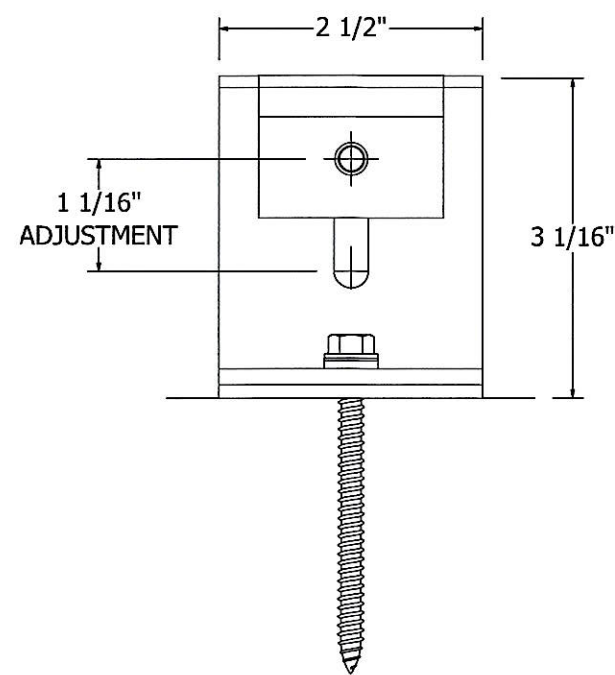
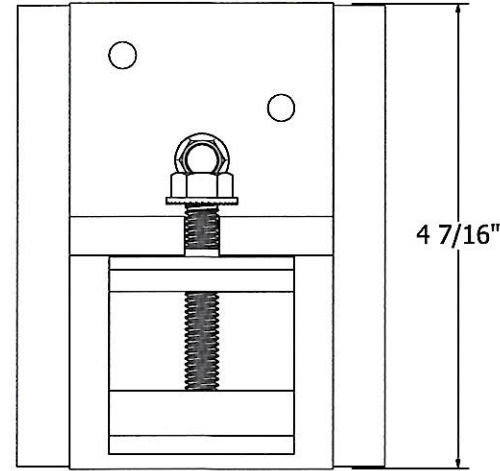
1. Miami-Dade Department of Regulatory and Economic Resources (RER).

F. STATEMENTS “Submitted under NOA # 23-0314.06”

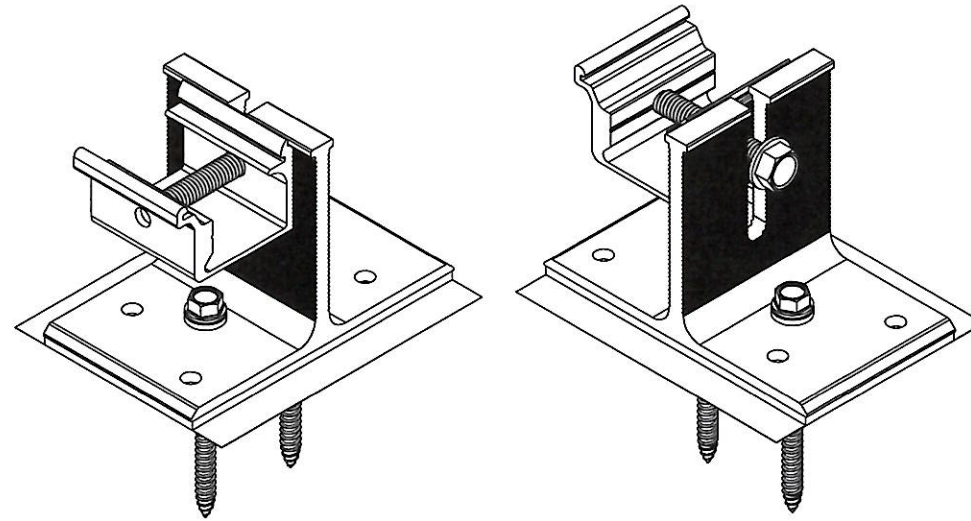
1. Statement letter of code conformance to the 7th edition (2020) of the FBC and of no financial interest, issued by Engineering Alliance, Inc., dated 07/03/2023, signed and sealed by Saddam Ahmad, P.E.



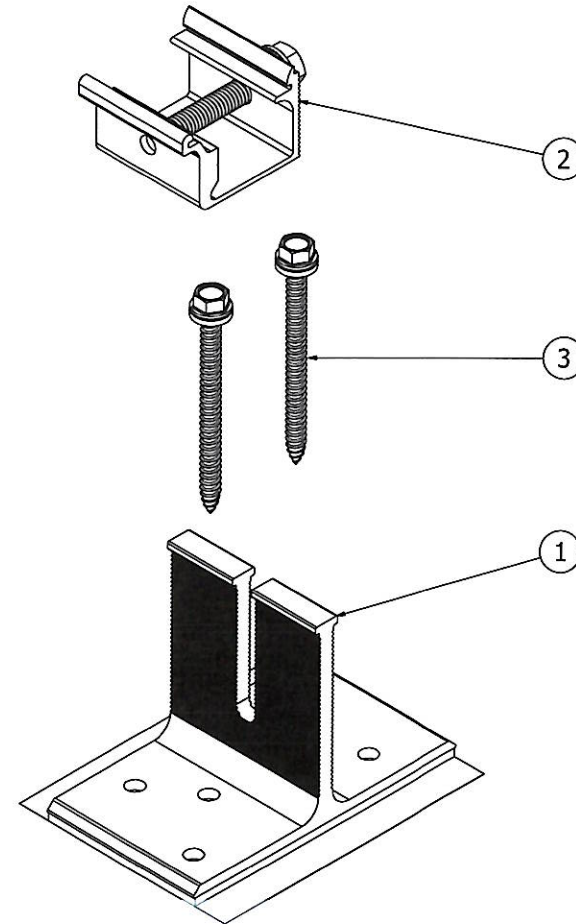
Carlos M. Utrera, P.E.
Product Control Examiner
NOA No: 23-1010.11
Expiration Date: July 13, 2028
Approval Date: November 16, 2023




STRONGHOLD BUTYL ATTACHMENT



BUTYL ATTACHMENT ASSEMBLY



PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 23-1010.11
Expiration Date 07/13/2028
By 
Miami-Dade Product Control



REVISIONS		CHK
REV	DATE	DESCRIPTION
A	4/05/23	INITIAL RELEASE
B	5/08/23	REVISED
C	6/13/23	REMOVED SHEETS 6 THRU 10
D	8/22/23	SHBUTYLD2, M2 WAS SBUTYLD1, M1

FOR
MIAMI-DADE
COUNTY

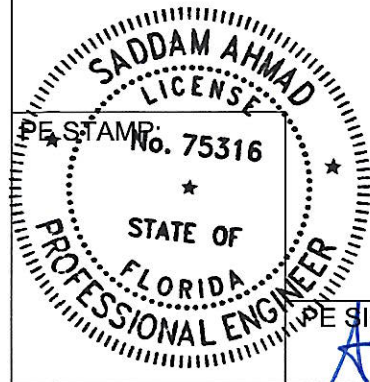
PROJECT
MIAMI-DADE CO.
NOA

PROJECT ADDRESS

TITLE
NXT
STRONGHOLD
BUTYL
ATTACHMENT

DWG NO.
M-D NOA NXT
SHEET 1 OF 5

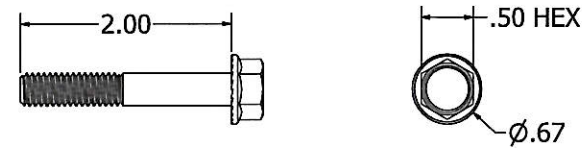
ASSEMBLY NUMBER - NAME	ITEM #	DESCRIPTION	MATERIAL	MINIMUM YIELD (KSI)	MINIMUM ULTIMATE (KSI)
SHBUTYLD2 SHBUTYLM2	1	DTD BUTYL ATT ASSEMBLY	CAST ALUMINUM A380	23	47
	2	RAIL CLAMP ASSEMBLY	18/8 STAINLESS STEEL	N/A	85
	3	HWHD EPDM ASSEMBLY, 3.0"	300 SERIES STAINLESS STEEL	N/A	70



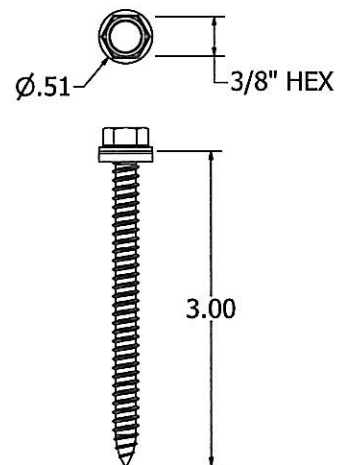
PE SIGNATURE: 

PE DATE:

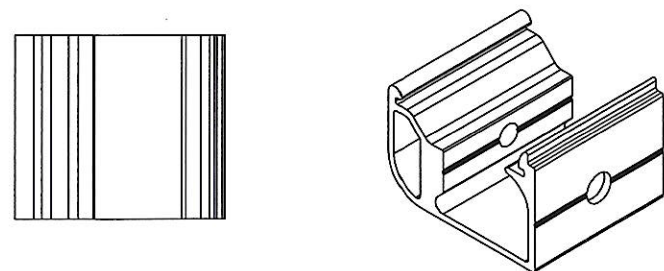
8/24/23



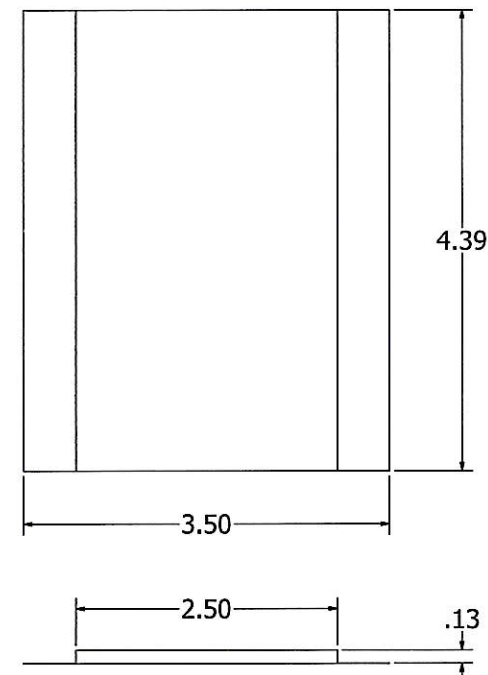
ITEM 4
HEX SERR FLG .31-18 X 2.0 IN SS



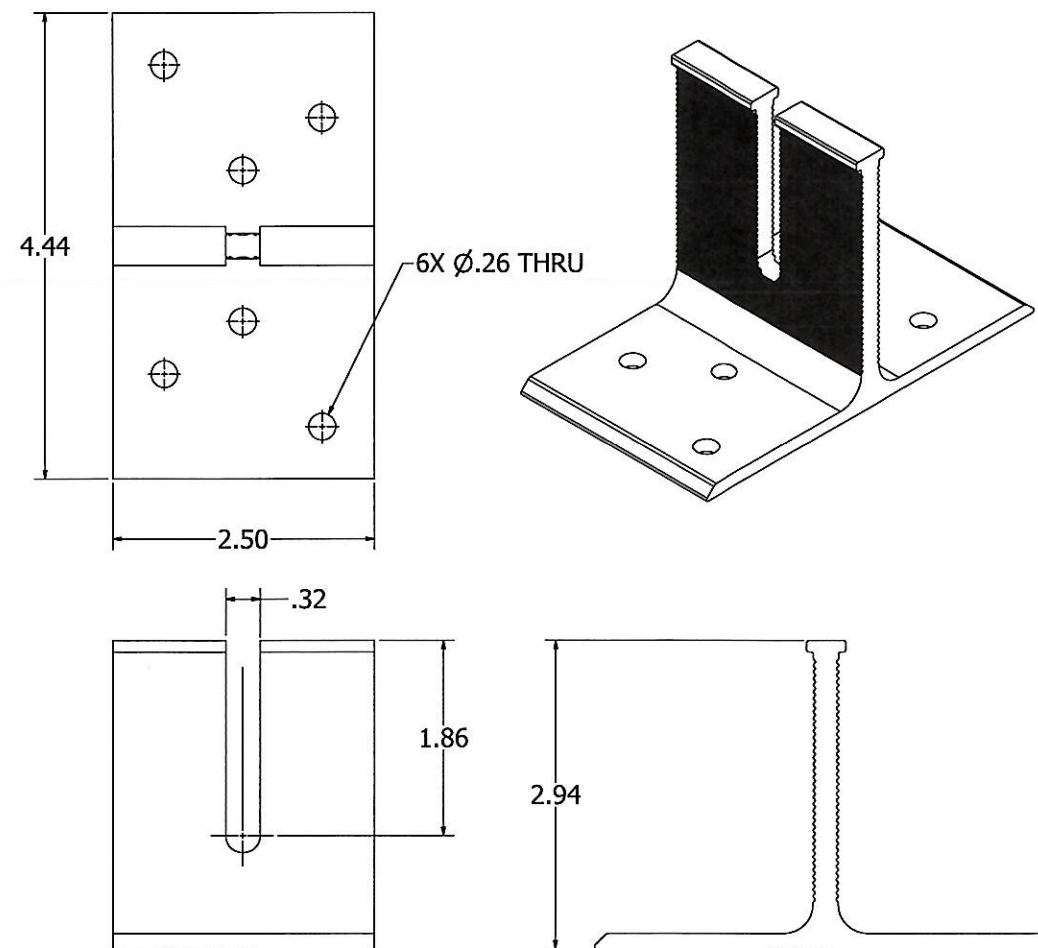
ITEM 5
HEX HD EPDM ASSEMBLY, 3.0"



ITEM 3
RAIL CLAMP

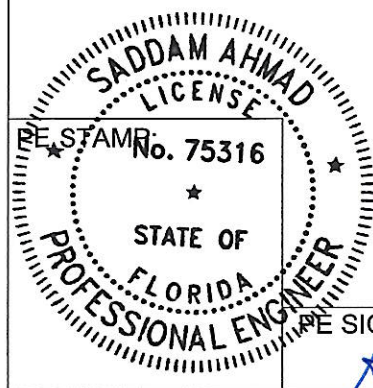


ITEM 2
BUTYL MASTIC TAPE



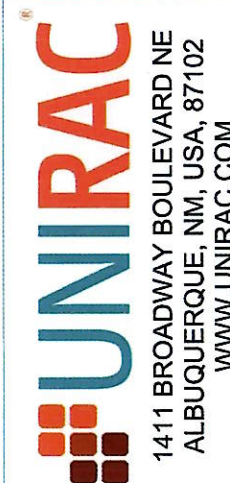
ITEM 1
DTD BUTYL ATTACHMENT

ASSEMBLY NUMBER - NAME	ITEM #	DESCRIPTION	MATERIAL	MINIMUM YIELD (KSI)	MINIMUM ULTIMATE (KSI)
SHBUTYLM2; SHBUTYLD2;	1	DTD BUTYL ATTACHMENT	EXTRUDED ALUMINUM PER ASTM B221-08; 6005A-T61 OR 6061-T6	35	38
	2	BUTYL MASTIC TAPE	BUTYL MASTIC TAPE	NA	NA
	3	RAIL CLAMP	EXTRUDED ALUMINUM PER ASTM B221-08; 6005A-T61 OR 6061-T6	35	38
	4	BLT, SER FLN FT HEX SS, .31-18 X 2 IN	SS304	NA	85
	5	HEX HEAD EPDM ASSEMBLY, 2.5"	304 SS OR OTHER 18-8 SS AS APPROVED BY UNIRAC	NA	NA



PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 23-1010.11
Expiration Date 07/13/2028
By *[Signature]*
Miami-Dade Product Control

PE SIGNATURE: *[Signature]*
PE DATE: 8/24/23



REVISIONS	CHK	REV	DATE	DESCRIPTION
		A	4/05/23	INITIAL RELEASE
		B	5/08/23	REVISED
		C	6/13/23	REMOVED SHEETS 6 THRU 10
		D	8/22/23	SHBUTYLD2, M2 WAS SBUTYLD1, M1

FOR
MIAMI-DADE
COUNTY

PROJECT
MIAMI-DADE CO.
NOA

PROJECT ADDRESS

TITLE
NXT
STRONGHOLD
BUTYL
ATTACHMENT

DWG NO.
M-D NOA NXT
SHEET 2 OF 5

LAG SCREW WITHDRAWAL AND LATERAL LOADS FROM NDS

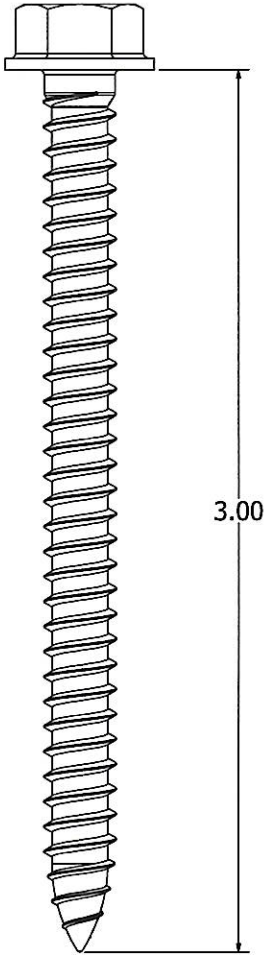
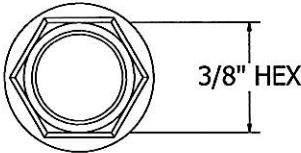
LOAD DURATION FACTOR (CD) = 1.6
WET SERVICE FACTOR (CM) = 1
TEMPERATURE FACTORS (CT) = 1.0
GROUP ACTION FACTOR (CG) = .97
GEOMETRY FACTOR (CA) =1
END GRAIN FACTOR (Ceg) = 1
DIAPHRAGM FACTOR (Cdi) = 1
TOE-NAIL FACTOR (Ctn) = 1
NUMBER OF FASTENER = 2

WITHDRAWAL LOADS

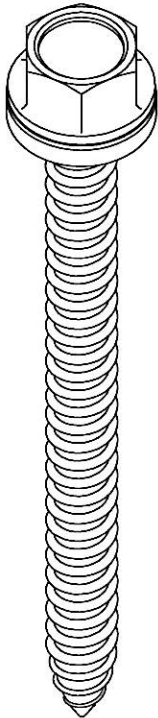
WITHDRAWAL DESIGN VALUE (W) = 208 LBS. PER INCH (FROM NDS TABLE 12.2B)
WITHDRAWAL LOADS W'=208X1X1.6X1X0.97X1X1.5X2 =968.44 LBS.

LATERAL LOADS

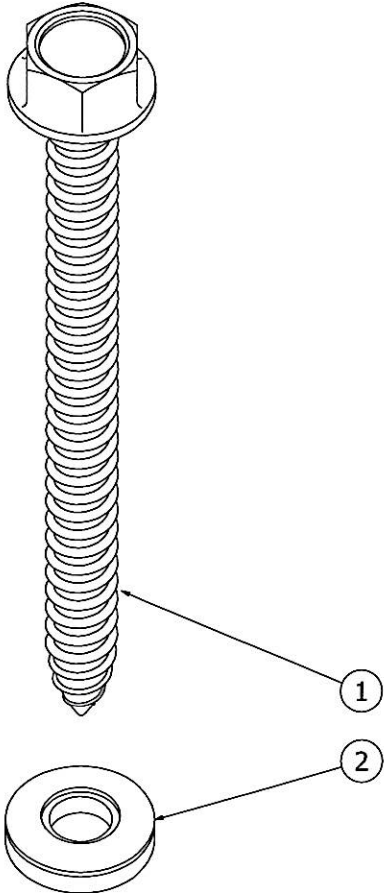
LATERAL DESIGN VALUE(Z) = 241 LBS. (FROM NDS TABLE 12M)
LATERAL LOADS Z'=241X1.6X1X0.97X1X1X2X1.5/2.5 =448.88 LBS.
*ASSUMED G=0.55 SOUTHERN PINE



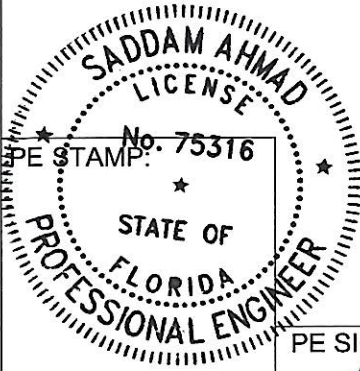
ITEM 1
#14-14 SCREW





ITEM 5 FROM SHEET 6
HEX HD EPDM ASSEMBLY, 3.0"



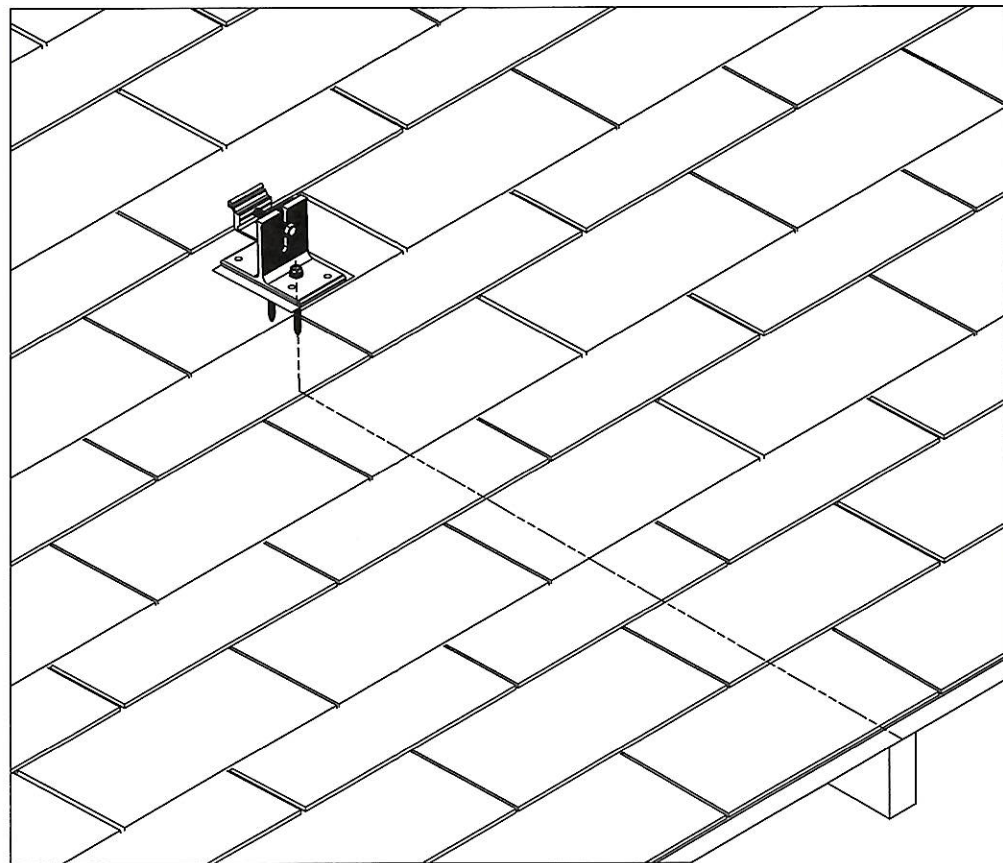
PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	P28503028-02	#14-14 TYPE AB, HWH, SS
2	1	P28503027	#14 SS EPDM WASHER



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By 
Miami-Dade Product Control

PE SIGNATURE: 
PE DATE: 8/24/23

REVISIONS		CHK
REV	DATE	DESCRIPTION
A	4/05/23	INITIAL RELEASE
B	5/06/23	REVISED
C	6/13/23	REMOVED SHEETS 6 THRU 10
D	8/22/23	SHBUTYLD2, M2 WAS SBUTYLD1, M1
FOR		MIAMI-DADE COUNTY
PROJECT		MIAMI-DADE CO. NOA
PROJECT ADDRESS		
TITLE		NXT STRONGHOLD BUTYL ATTACHMENT
DWG NO.		M-D NOA NXT
SHEET 3 OF 5		



NXT STRONGHOLD BUTYL INSTALLATION
NOT TO SCALE

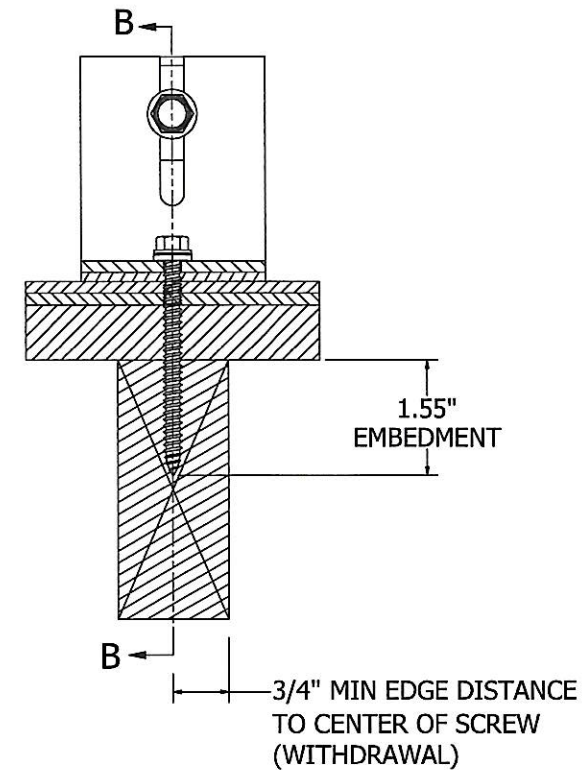
STRUCTURAL MEMBER SPECIFICATION:

MINIMUM WOOD GRADE = SPF #2
MINIMUM SPECIFIC GRAVITY = 0.42

ALLOWABLE FASTENER UPLIFT = 907.33 lbs
ALLOWABLE FASTENER LATERAL = 273 lbs

MINIMUM FASTENER EDGE DISTANCE
= 0.75" IN RAFTER <2.5" WIDE
= 1.25" IN RAFTER >2.5" WIDE

MINIMUM FASTENER END DISTANCE = 2.2"

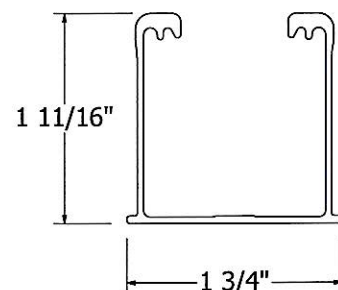


SECTION STRONGHOLD BUTYL DETAIL
NOT TO SCALE

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 23-1010.11

Expiration Date 07/13/2028

By *[Signature]*
Miami-Dade Product Control

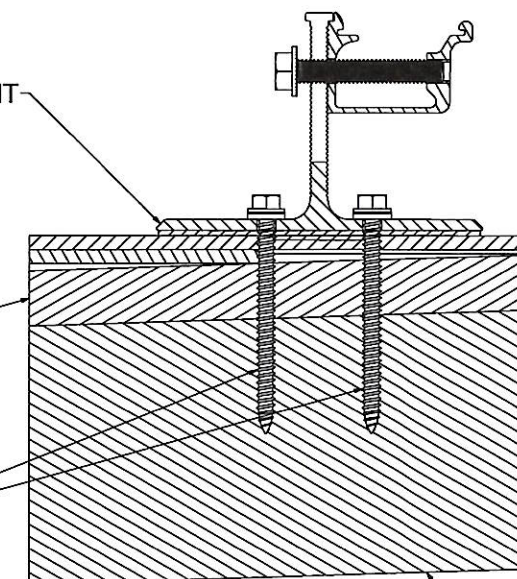


NXT RAIL

STRONGHOLD BUTYL ATTACHMENT

ROOF DECK
(STANDARD ROOF CONSTRUCTION)

2X #14-14 X 3 INCH SS HWH TYPE AB SCREW
WITH EPDM FLAT WASHER



SECTION B-B
NOT TO SCALE

BUILDING STRUCTURE
(WOOD FRAME)

REVISIONS	CHK	DESCRIPTION
REV DATE		
A 4/05/23		INITIAL RELEASE
B 5/08/23	AB	REVISED
C 6/13/23	NM	REMOVED SHEETS 6 THRU 10
D 8/22/23	NM	SHBUTYLD2, M2 WAS SBUTYLD1, M1

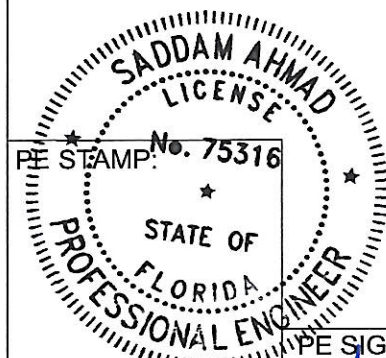
FOR
MIAMI-DADE
COUNTY

PROJECT
MIAMI-DADE CO.
NOA

PROJECT ADDRESS

TITLE
NXT
STRONGHOLD
BUTYL
ATTACHMENT

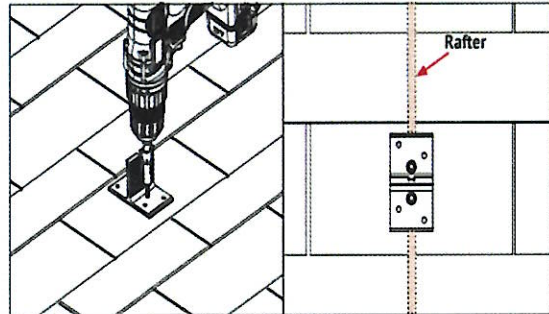
DWG NO.
M-D NOA NXT
SHEET 4 OF 5



PE SIGNATURE: *[Signature]*

PE DATE:

8/24/23



INSTALLING STRONGHOLD ATTACHMENT WITH BUTYL BASE TO RAFTER:
Peel-off the release paper from the underside of the attachment and place stronghold attachment with butyl over rafter location and align edge of mount with horizontal chalk line. Secure mount with the two (2) provided rafter screws in the rafter holes of the attachment.

Note:
Ensure to use drill extension or deep socket tool for installing rafter screws.

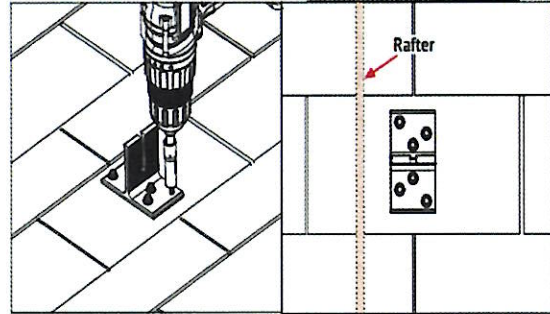
CAUTION

- To determine if the screw is engaging the rafter, there should be resistance to driving the screw through the entire length. If the screws do not properly engage the rafter, install the 4 additional deck screws.
- It is recommended to begin installation with the screws on the upslope side of the attachment and continue installing the screws on the downslope side of the attachment for best fit.

WARNING



Do not over-torque the structural screw.
When proper torque is applied, the EPDM washer should slightly expand out from the sides as shown in the image.



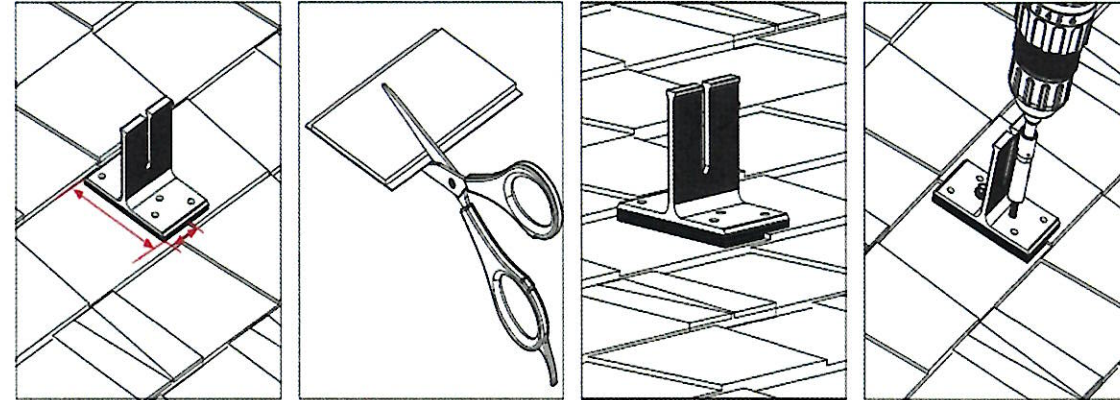
INSTALLING STRONGHOLD ATTACHMENT WITH BUTYL BASE TO DECK:
When installing the attachment to the decking instead of the rafter (direct-to-deck), install 4 additional screws on the remaining screw holes on the attachment

Note:

- Additional deck screws are NOT included in the KIT. Must be purchased separately.
- Pre-stock with additional screws in case going direct-to-deck.

CAUTION

- Allowable attachment spans may change for direct-to-deck applications.
- Unirac recommended spans are only valid with Unirac supplied screws.



INSTALLING STRONGHOLD DTD BUTYL ATTACHMENT OVER SHINGLE OVERLAP OR GAP

If the attachment falls over a shingle overlap, level the surface by following below steps:

- Measure the attachment overhang.
- Cut the butyl pads to required size.
- Stack extra butyl pad layers as necessary to level the roof and place the attachment.
- Begin installation with the screws on the upslope side of the attachment and continue to install the screws on the downslope side of the attachment.

PRO TIP

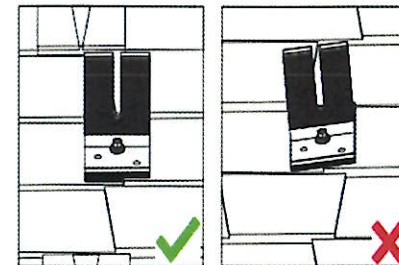
If the attachments overlap from one shingle course to the next shingle course in a rail-based system, reposition the attachment by moving up or down the shingle course along the same rafter line to avoid butyl layering.

Note:

- Extra butyl pads are NOT included in the KIT.
- Pre-stock with extra butyl pads from Unirac Kits in case installation is required over overlap or gap.


WARNING

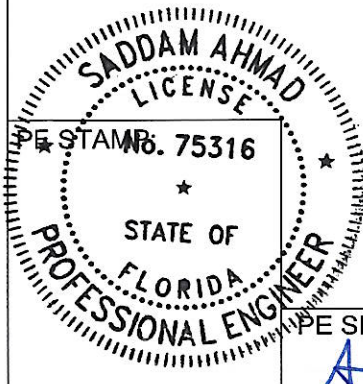
Installing attachment on uneven surfaces, shingle gaps or overlaps, creates a risk for water leakage and rail clamp misalignment due to gap created between the adhesive and roof surface.



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A	4/05/23	INITIAL RELEASE
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D	8/22/23	SHBUTYLD2, M2 WAS SBUTYLD1, M1

FOR
MIAMI-DADE COUNTY
PROJECT
MIAMI-DADE CO. NOA
PROJECT ADDRESS
TITLE
NXT STRONGHOLD BUTYL ATTACHMENT
DWG NO.
M-D NOA NXT
SHEET 5 OF 5

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PE SIGNATURE:

PE DATE:

8/24/23