



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

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.miamidadegov/economy

NOTICE OF ACCEPTANCE (NOA)

Butler Manufacturing
A Division of BlueScope Buildings North America, Inc.
13500 Botts Road
Grandview, Missouri 64030

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 High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: "MR-24" 0.032" (min.) Galvalume Steel Roof Panel

APPROVAL DOCUMENT: Drawing No. B, titled "MR-24 Roof Panel", sheets 1 through 6 of 6, prepared by Butler Manufacturing, A Division of BlueScope Buildings North America, Inc., signed & sealed by Russell L. Benton, P.E., on August 24, 2023, bearing the Miami-Dade County Product Control Renewal stamp with the Notice of Acceptance number and the expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each panel shall bear a permanent label w/the manufacturer's name or logo, Jackson, TN, and the 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 NOA #23-0908.03** and consists of this page 1, evidence submitted pages E-1, E-2, E-3, E-4, E-5 & E-6 as well as approval document mentioned above.

The submitted documentation was reviewed by **Helmy A. Makar, P.E., M.S.**



Helmy A. Makar
12/12/24

NOA No. 24-1021.01
Expiration Date: 12/09/2029
Approval Date: 12/12/2024

Butler Manufacturing
A Division of BlueScope Buildings North America, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 99-0816.08

A. DRAWINGS

1. *Drawing No. B, sheets 1 through 6 of 6, prepared by Suresh C. Satsangi, P.E., dated November 4, 1999, signed and sealed by Suresh C. Satsangi, P.E.*

B. TESTS

1. *Test report on Uplift Resistance per UL 580 Class 90 on MR-24 Roof Panel, prepared by Hurricane Test Laboratory, Inc., Report No. 0063-0311-99, dated 03/22-24/99, signed and sealed by Vinu J. Abraham, P.E.*
2. *Test report on Accelerated Weathering Testing of Coating 2000 hours per ASTM G26-96, prepared by Celotex, Report No. 520223, dated 08/02/99, signed and sealed by R. C. Miller, P.E.*
3. *Test report on Salt Spray of Coating 1000 hours per ASTM B117-95, issued by Celotex, Report # 520223, dated 08/02/99, signed & sealed by R. C. Miller, P.E.*
4. *Susceptibility to leakage test in accordance with Miami-Dade County Protocol PA 114 Appendix G, prepared by Celotex, Report No. 520223-1, dated 07/01/99, signed and sealed by R. C. Miller, P.E.*

C. CALCULATIONS

1. *Calculations titled "MR-24 Wind Load Design for Roof", dated 07/28/99, pages 1 through 10 of 10, prepared by Suresh C. Satsangi, P.E., signed and sealed by Suresh C. Satsangi, P.E.*

D. MATERIAL CERTIFICATIONS

1. *Mill Certified Test Report issued by U. S. Steel Group, dated 01/21/99, with chemical composition and mechanical properties of galvalume steel.*
2. *Tensile Test on specimen #3 of Test # 0063-0311-99, Report #9CM-777A, issued by QC Metallurgical, Inc., dated 04/23/99, signed & sealed by Frank Grate, P.E.*

2. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 02-1211.09

A. DRAWINGS

1. *Drawing No. B, titled "Mr-24 Roof Panel", sheets 1 through 6 of 6, prepared by Butler Manufacturing Company, dated 01/06/03, sheets 1 & 2 of 6, and 11/04/99, sheets 3, 4, 5, & 6 of 6, signed & sealed by John Ernest Lamb, P.E. on 01/16/03.*

B. TESTS


1. *None.*

C. CALCULATIONS

1. *None.*

D. MATERIAL CERTIFICATIONS

1. *None.*



Helmy A. Makar, P.E., M.S.
Product Control Section Supervisor
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NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

3. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 04-0803.01

A. DRAWINGS

1. *Drawing No. B, titled "MR-24 Roof Panel", sheets 1 through 6 of 6, prepared by Butler Manufacturing Company, dated 07/12/2004, sheets 1 & 2 of 6, & 11/04/1999, sheets 3, 4, 5, & 6 of 6, all signed & sealed by John Ernest Lamb, P.E. on 07/25/2004*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *Calculations titled "MR-24 Roof Panel", dated 07/08/04, 5 pages, prepared by Myron Kottwitz, P.E., signed and sealed by Myron Kottwitz.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Building Code Compliance Office.*

E. MATERIAL CERTIFICATIONS

1. *None.*

4. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #08-0208.04

A. DRAWINGS

1. *None.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Building Code Compliance Office.*

E. MATERIAL CERTIFICATIONS

1. *None.*

5. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #08-1112.11

A. DRAWINGS

1. *None.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*



Helmy A. Makar, P.E., M.S.
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D. QUALITY ASSURANCE

1. *By Miami-Dade County Building Code Compliance Office.*

E. MATERIAL CERTIFICATIONS

1. *None.*

6. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #09-0811.17

A. DRAWINGS

1. *Drawing #B, titled "MR-24 Roof Panel", sheets 1 through 6 of 6, issued by Butler Manufacturing Company, signed & sealed by Russell Benton, P.E., on 09/15/09.*

B. TESTS

1. *Test report on Uplift Resistance per ASTM 1592 on MR-24 Roof Panel, prepared by Hurricane Test Laboratory, Inc., Report No. 0063-0904-08, dated 12/19/08, signed and sealed by Vinu J. Abraham, P.E.*

C. CALCULATIONS

1. *None.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Building Code Compliance Office.*

E. MATERIAL CERTIFICATIONS

1. *None.*

7. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #10-0901.20

A. DRAWINGS

1. *Drawing No. B, titled "MR-24 Roof Panel", sheets 1 through 6 of 6, prepared by Butler Manufacturing, A Division of BlueScope Buildings North America, Inc., signed & sealed by Russell L. Benton, P.E., on August 20, 2010.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Building and Neighborhood Compliance Department.*

E. MATERIAL CERTIFICATIONS

1. *None.*



Helmy A. Makar, P.E., M.S.
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Butler Manufacturing
A Division of BlueScope Buildings North America, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

8. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #14-0520.16

A. DRAWINGS

1. *Drawing No. B, titled "MR-24 Roof Panel", sheets 1 through 6 of 6, prepared by Butler Manufacturing, A Division of BlueScope Buildings North America, Inc., signed & sealed by Russell L. Benton, P.E., on June 10, 2014.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Department of Regulatory and Economic Resources.*

E. MATERIAL CERTIFICATIONS

1. *None.*

9. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #14-0922.03

A. DRAWINGS

1. *None.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Department of Regulatory and Economic Resources.*

E. MATERIAL CERTIFICATIONS

1. *None.*

10. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #17-0803.42

A. DRAWINGS


1. *Drawing No. B, titled "MR-24 Roof Panel", sheets 1 through 6 of 6, prepared by Butler Manufacturing, A Division of BlueScope Buildings North America, Inc., signed & sealed by Russell L. Benton, P.E., on September 27, 2017.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*



Helmy A. Makar, P.E., M.S.
Product Control Section Supervisor
NOA No. 24-1021.01
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NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

D. QUALITY ASSURANCE

1. *By Miami-Dade County Department of Regulatory and Economic Resources.*

E. MATERIAL CERTIFICATIONS

1. *None.*

11. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #19-0708.07

A. DRAWINGS

1. *None.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Department of Regulatory and Economic Resources.*

E. MATERIAL CERTIFICATIONS

1. *None.*

12. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #20-0922.07

A. DRAWINGS

1. *Drawing No. B, titled "MR-24 Roof Panel", sheets 1 through 6 of 6, prepared by Butler Manufacturing, A Division of BlueScope Buildings North America, Inc., signed & sealed by Russell L. Benton, P.E., on September 11, 2020.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Department of Regulatory and Economic Resources.*

E. MATERIAL CERTIFICATIONS

1. *None.*

F. STATEMENTS

1. *FBC, 2020 Edition compliance letter, prepared by Butler Manufacturing, A Division of BlueScope Buildings NA, Inc., signed & sealed by Russell L. Benton, P.E., on 09/11/20*


Helmy A. Makar, P.E., M.S.

Product Control Section Supervisor

NOA No. 24-1021.01

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Butler Manufacturing
A Division of BlueScope Buildings North America, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

13. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #23-0908.03

A. DRAWINGS

1. *Drawing No. B, titled "MR-24 Roof Panel", sheets 1 through 6 of 6, prepared by Butler Manufacturing, A Division of BlueScope Buildings North America, Inc., signed & sealed by Russell L. Benton, P.E., on August 24, 2023.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Department of Regulatory and Economic Resources.*

E. MATERIAL CERTIFICATIONS

1. *None.*

F. STATEMENTS

1. *FBC, 2023 Edition compliance letter, prepared by Butler Manufacturing, A Division of BlueScope Buildings NA, Inc., signed & sealed by Russell L. Benton, P.E., on 08/22/2023.*

14. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. *None.*

B. TESTS

1. *Test report on Uplift Resistance per ASTM 1592 on MR-24 Roof Panel, prepared by Farabaugh Engineering and Testing, Inc., Report No. T263-24, dated 10/10/24, signed and sealed by Daniel G. Farabaugh, P.E.*

C. CALCULATIONS

1. *None.*

D. QUALITY ASSURANCE


1. *By Miami-Dade County Department of Regulatory and Economic Resources.*

E. MATERIAL CERTIFICATIONS

1. *None.*

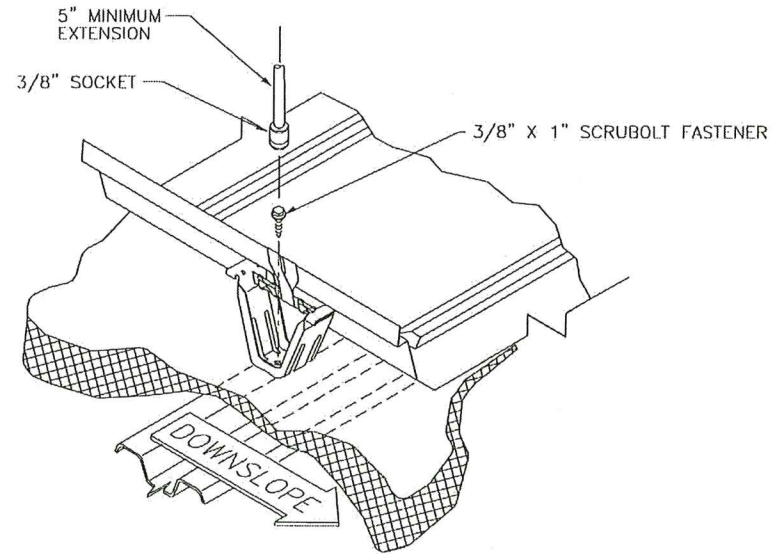
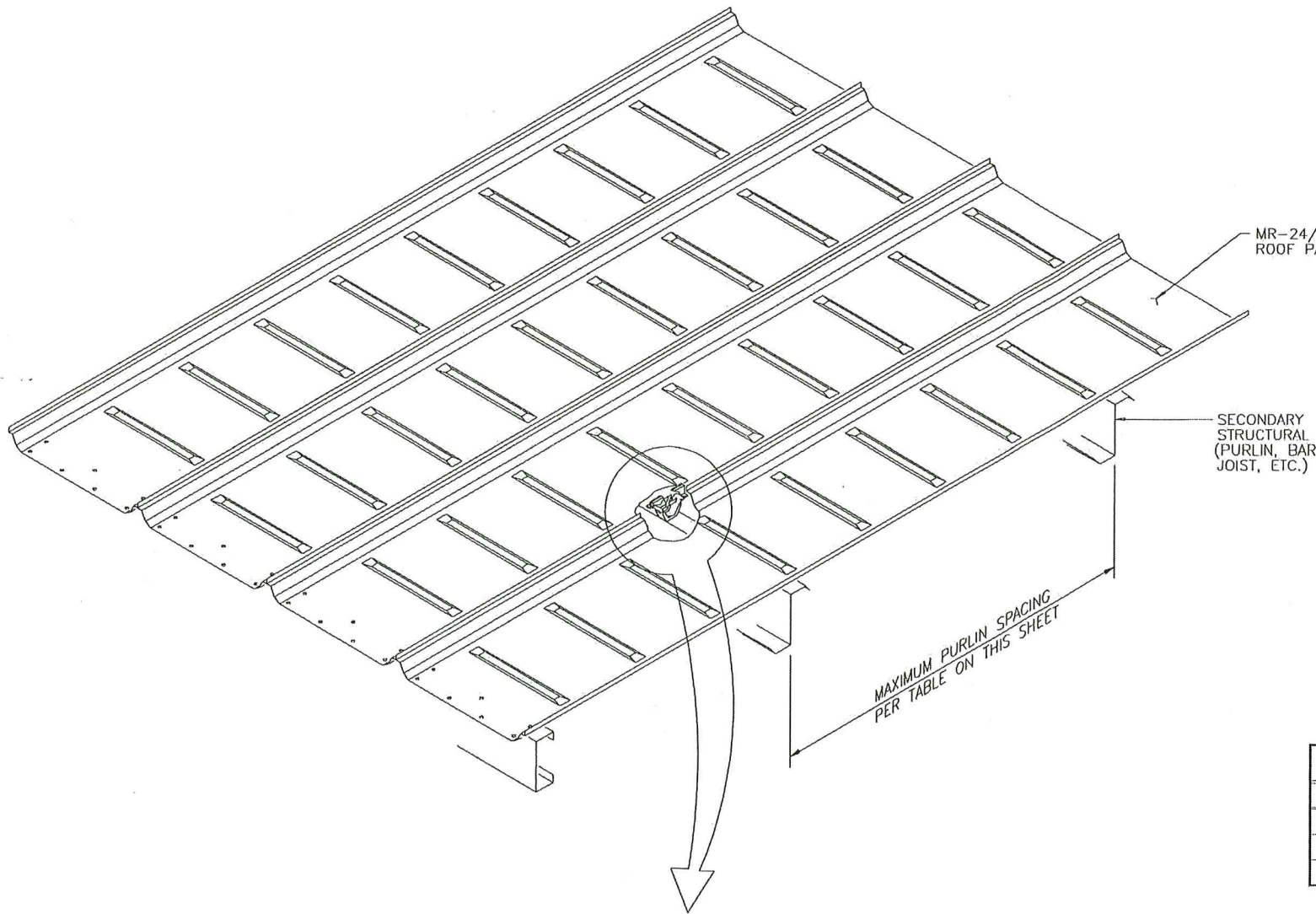
F. STATEMENTS

1. *FBC, 2023 Edition compliance letter, prepared by Butler Manufacturing, A Division of BlueScope Buildings NA, Inc., signed & sealed by Russell L. Benton, P.E., on 10/09/2024.*



Helmy A. Makar, P.E., M.S.
Product Control Section Supervisor
NOA No. 24-1021.01
Expiration Date: 12/09/2029
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REVISION NUMBER 1			REVISION NUMBER 2			REVISION NUMBER 3			REVISION NUMBER 4			REVISION NUMBER 5		
DATE 07/01/10			DATE 06/09/14			DATE 07/14/17			DATE 09/08/20			DATE 08/21/23		
DWBY BSN			DWBY RHE			DWBY BSN			DWBY BSN			DWBY NF		
REVISED TO BINA TITLE BLOCK AND NUMBER TO P-081383. ADD BUTLER LOGO			REVISED REFERENCE IN NOTE 1 FOR FLORIDA BUILDING CODE TO 2010, WAS 2007.			CHANGE 2010 TO 2017 IN NOTE 1 23731			REVISED FLORIDA BUILDING CODE DATE FROM 2017 TO 2020. 24319			REVISED FLORIDA BUILDING CODE DATE FROM 2020 TO 2023. PER 153185		

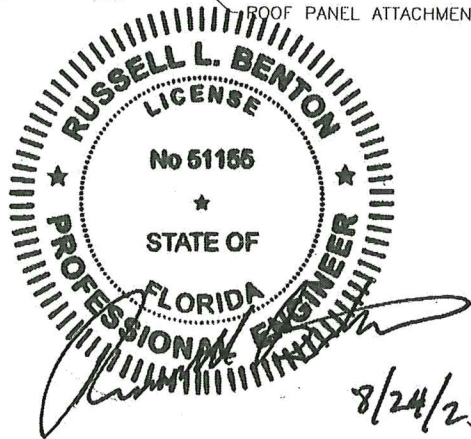
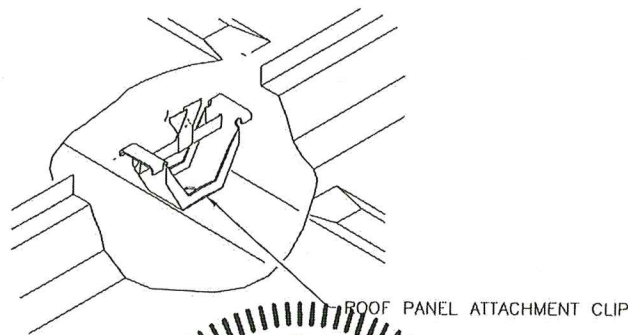


NOTE:
WITH THE EXCEPTION OF THE PURLIN SPACING AND THE CLIP ATTACHMENT FASTENER SHOWN ON THIS DRAWING REFER TO THE STANDARD MR-24 DRAWINGS FOR ALL OTHER DETAILS AND INSTALLATION INSTRUCTIONS.

PURLIN SPACING		
ROOF ZONE	MAXIMUM PURLIN SPACING	MAX. UPLIFT PRESSURE
FIELD (INTERIOR)	4'-0"	45.0
EDGE	2'-0"	77.5
CORNER	1'-3"	115.8

GENERAL NOTES:

- THIS STRUCTURAL ROOF PANEL SHALL BE DESIGNED IN ACCORDANCE WITH THE 2023 EDITION OF THE FLORIDA BUILDING CODE.
- ALL BUTLER MR-24 ROOF PANELS SHALL BE 22 GAUGE (0.032" MIN.) GALVALUME STEEL SHEET CONFORMING TO ASTM A 792, COATING DESIGNATION AZ55, WITH A MINIMUM FY=50 KSI.
- ALL PANEL CLIPS SHALL HAVE A 16 GAUGE (0.062") BASE CONFORMING TO ASTM A 653 GRADE 42, COATING DESIGNATION G60 SHALL HAVE OVERALL DIMENSIONS OF 4 3/8" (LONG) X 1 1/2" (WIDE) X 2 1/4" (TALL) OR 3 5/16" (TALL), AND SHALL HAVE A 24 GAUGE STAINLESS STEEL TAB, 1 1/4" (WIDE).
- ALL SCREWS SHALL BE 3/8" DIA. X 1" HEX HEAD, SELF TAPPING SCRUBOLT, WITH EPDM BACKED STEEL WASHER, PART NUMBER 097196 BY BUTLER MANUFACTURING COMPANY.
- ALL PANEL CLIPS SHALL BE ATTACHED TO PURLINS WITH A MINIMUM THICKNESS OF 0.067".
- VALLEY ASSEMBLY IS NOT ALLOWED IN THIS ROOF PANEL APPROVAL.
- EACH PANEL TO PANEL CONNECTION IS TO BE MADE WITH A POSITIVE, FIELD FORMED STANDING DOUBLE-LOCK SEAM.
- THIS 22 GAUGE (0.032" MIN.) BUTLER MR-24 ROOF PANEL SHALL BE USED FOR ROOF CONSTRUCTION. EVERY PROJECT SHALL BE CONSTRUCTED USING THE SAME DETAILS SHOWN ON THESE APPROVED DRAWINGS INCLUDING:
 - DETAILS OF ALL PANEL MATERIAL CHARACTERISTICS AND SECTIONS WITH DIMENSIONS AND THICKNESS.
 - ASSEMBLY DETAILS INCLUDING ALL CONNECTIONS AND FASTENERS DIAGRAM WITH SIZE AND LOCATION.
 - PANEL'S MAXIMUM SPAN AND PRESSURE FOR THE ROOF'S FIELD, PERIMETER, AND CORNER ZONES BASED ON THE PANEL'S ALLOWABLES SHOWN IN THE TABLE ABOVE.



Russell L Benton, PE#51155

PRODUCT RENEWED
as complying with the Florida
Building Code
Acceptance No. 24-1021-01
Expiration Date 12/09/2029
By *Heidi A. Mc*
Miami Code Product Control

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 23-0908-03
Expiration Date 12/09/2024
By *Heidi A. Mc*
Miami Code Product Control



MR-24 PANEL INSTALLATION DADE COUNTY FLORIDA			
DRAWN BY JRS	CHECKED BY MJH	GROUP NUMBER: 02-030-06	
FIRST RELEASE DATE 01/21/10	REVISION DATE 08/21/23	B	P-081383 05



NO DIMENSIONAL LOCATION
REQUIREMENTS FOR 6" FLUTE
PATTERN IN RELATION TO END
OF PANEL
(TYPICAL BOTH ENDS OF PANEL)

MATERIAL GRADES	MATERIAL DESCRIPTION	B. M. C. SPEC. NO.
GA. OF MAT'L		
22 (0.032" MIN.)		
GR. 50	ALUMINUM ZINC ALLOY (GALVALUME)	MS-05-01



1. DIMENSIONAL TOLERANCES = $\pm 1/32$ (EXCEPT AS NOTED)
2. ALL INSIDE FORMING RADII = $1/32$ (EXCEPT AS NOTED)
3. ANGLE TOLERANCES $\pm 2'$ (EXCEPT AS NOTED)
(ANGLES TO BE MEASURED FROM A FLAT PLANE WITH PANEL HELD TO THAT PLANE WITHOUT DISTORTION OF FABRICATED CROSS-SECTIONAL SHAPE AND WITH OUTSIDE CORRUGATIONS FREE).
4. CROSS SECTIONAL TOLERANCES SHOWN TO BE HELD THROUGHOUT LENGTH OF PANEL EXCEPT WHERE PANEL IS DISTORTED BY SHEARING OR BENDING.
(MAXIMUM ALLOWABLE LATERAL OR VERTICAL DISTORTION BY THE SHEARING OPERATIONS IS $\pm 1/32$ FROM "AS ROLLED SHAPE")
5. THE LENGTH OF FEMALE LIP MUST BE AT LEAST $1/16"$ LONGER THAN THE MALE HEM.

PRODUCT RENEWED
as complying with the Florida
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Acceptance No. 24-1021.01
Expiration Date 12/09/2029
By *H. G. A. Miller*
Miami Dade Product Control

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 23-0908.03
Expiration Date 12/09/2022
By Hely A. Miller
Miami-Dade Product Control

SHEET 2 OF 6

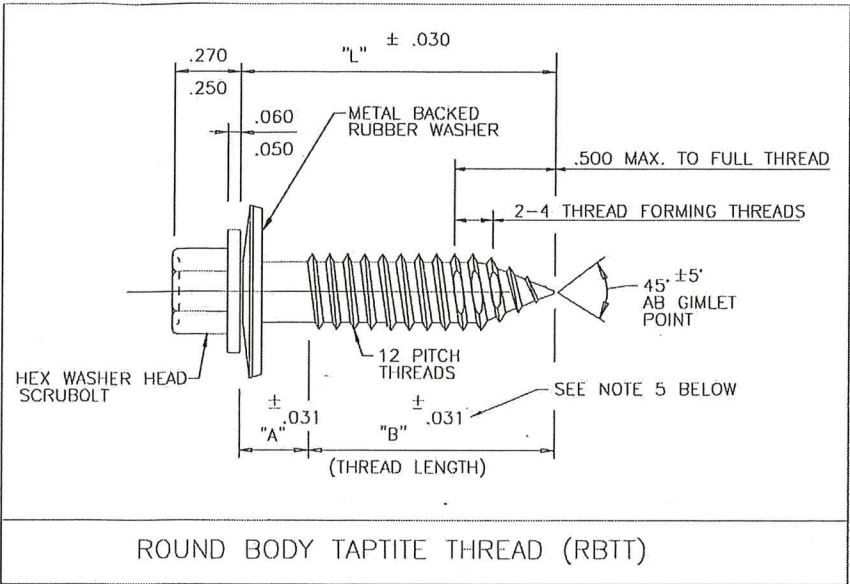
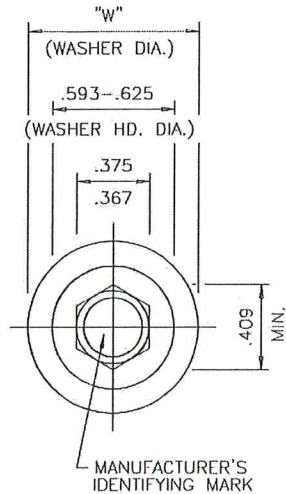


MR-24 ROOF PANEL
DADE COUNTY FLORIDA

Inc.	DRAWN BY	CHECKED BY	GROUP NUMBER: 02-030-06		
	JRS	MJH	B	P-081384	0
	FIRST RELEASE DATE	REVISION DATE			
	01/21/10	07/17/17			

Russell L Benton, PE#51155

REVISION NUMBER 1			REVISION NUMBER 2			REVISION NUMBER 3		
REVISE TO BINA TITLE BLOCK AND NUMBER TO P-081385. ADD BUTLER LOGO.			CHANGE EWS 10.073 TO MS-06-03 IN MATERIAL NOTE 1 AND 2			REVISED TO SHOW 097222 AS A FULLY THREADED FASTENER PER ENH #149752		
DATE 07/01/10	DWBY BSN	CHKD RLB	DATE 07/17/17	DWBY BSN	CHKD MJH	DATE 01/04/23	DWBY RHE	CHKD ARS



ASSEMBLY		SCRUBOLT WITHOUT WASHER						METAL BACKED RUBBER WASHER		
		SCRUBOLT PART NO.	MATERIAL	NOMINAL SIZE (SEE NOTE 6)	"L"	"A"	"B"	WASHER PART NO.	"W"	WASHER DWG. NO.
095984	0.031	095304	SS NOTE 1	11/32" X 7/8"	.875"	SEE NOTE 4	.875"	097436	.729	095016
096932	0.038	096930	ST. NOTE 2	3/8" X 1 1/4"	1.25"	SEE NOTE 4	1.250"	095154	.729	095016
097104	0.039	097103	SS NOTE 1	11/32" X 1 1/4"	1.25"	SEE NOTE 4	1.250"	097436	.729	095016
097196	0.039	097195	ST. NOTE 2	3/8" X 1"	1.00"	SEE NOTE 4	1.00"	095154	.729	095016
097222	0.055	097221	ST. NOTE 2	3/8" X 2"	2.00"	SEE NOTE 4	2.00"	095154	.729	095016
097264	0.074	096931	ST. NOTE 2	3/8" X 2 3/4"	2.75"	.750"	2.00"	095154	.729	095016
097270	0.060	097268	ST. NOTE 2	3/8" X 2 1/4"	2.25"	.250"	2.00"	095154	.729	095016
097271	0.086	097269	ST. NOTE 2	3/8" X 3 1/2"	3.50"	.500"	3.00"	095154	.729	095016
097292	0.125	097291	ST. NOTE 2	3/8" X 5"	5.00"	2.000"	3.00"	095154	.729	095016
097298	0.145	097297	ST. NOTE 2	3/8" X 6"	6.00"	3.000"	3.00"	095154	.729	095016

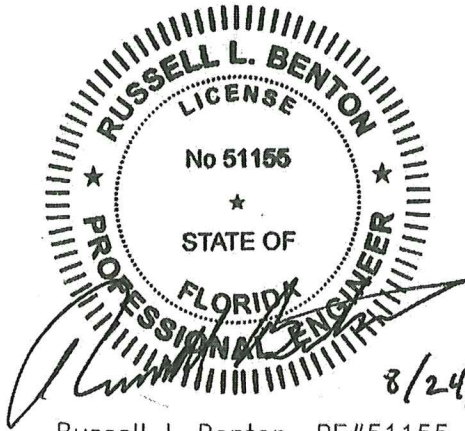
SEE NOTE 5

MATERIALS:

- 410 STAINLESS WITH CLEAR CHROMATE, MS-06-03
- CARBON STEEL WITH YELLOW CHROMATE - MS-06-03
- WASHER SPEC. AND DIMENSIONS - SEE DWG 095016

SCRUBOLT WITH FULL THREADS:

- FULL THREAD TO WITHIN 1 THREAD OF HEAD AND SHANK JUNCTURE.
- 3" THREAD LENGTH
HAS A ± .050 TOLERANCE
- DIAMETER OF 3/8" SCRUBOLT IS .367±.003
DIAMETER OF 11/32" SCRUBOLT IS .345±.003

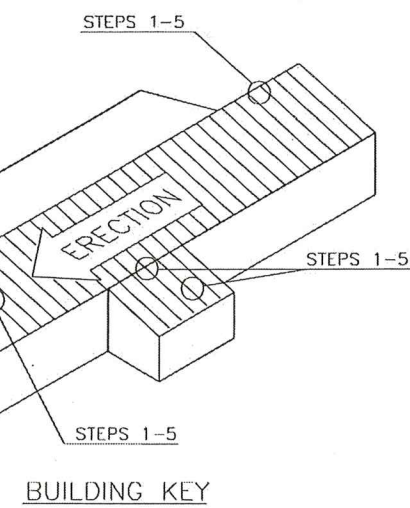
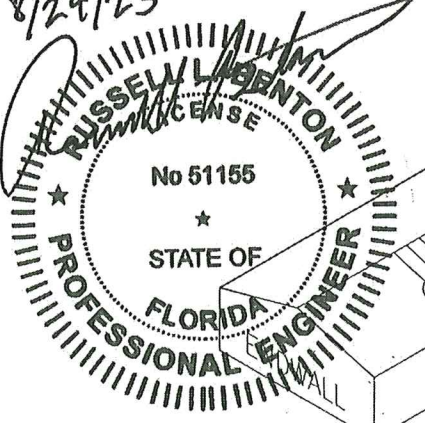


PRODUCT REVIEWED
as complying with the Florida
Building Code
Acceptance No 24-1021-01
Expiration Date 12/09/2029
By *Helga A. Miller*
Miami Date Product Control

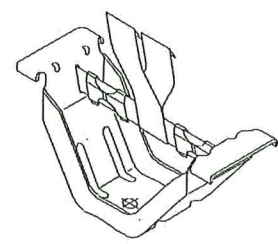
PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 23-0908.03
Expiration Date 12/09/2024
By *Helga A. Miller*
Miami Date Product Control

BUTLER			MR-24 HEX HEAD SCRUBOLTS		
Butler Manufacturing a division of BlueScope Buildings North America, Inc. 1540 GENESSEE ST. KANSAS CITY, MO. 64102			DADE COUNTY FLORIDA		
DRAWN BY JRS	CHECKED BY MJH	GROUP NUMBER: 02-030-01	B P-081385 03		
FIRST RELEASE DATE 01/21/10	REVISION DATE 01/04/23				

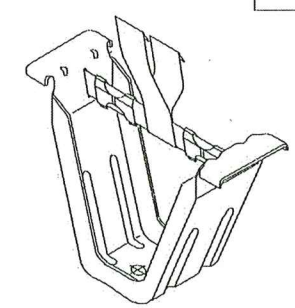
Russell L Benton, PE#51155
8/24/23



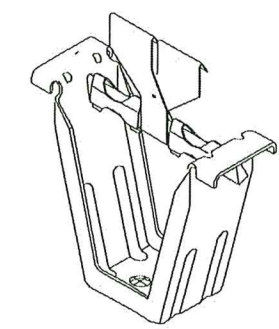
*NOTE:
MR-24 CLIP 560743, 560744 OR 560745
MAY BE SUPPLIED WHEN FACTORY MUTUAL
CLASSIFICATION IS SPECIFIED.



SHORT PANEL CLIP (560440 OR *560743)
(WITHOUT THERMAL SPACER BLOCK)

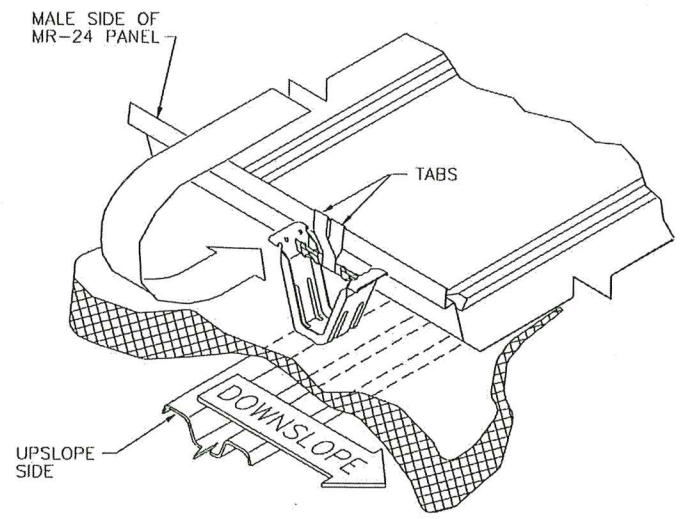


TALL PANEL CLIP (560441 OR *560744)
(WITH THERMAL SPACER BLOCK)

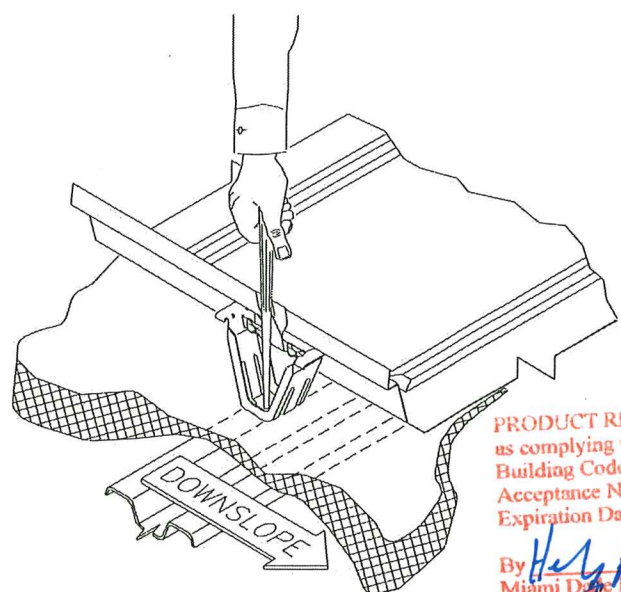


EXTRA TALL PANEL CLIP (*560745)
(WITH THERMAL SPACER BLOCK FOR 6" TO 9" INSULATION)

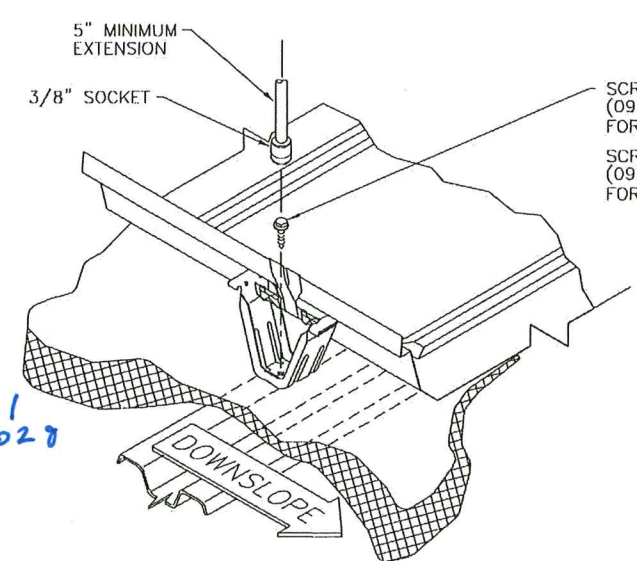
WARNING
ALWAYS USE FALL PROTECTION WHILE
WORKING AROUND ROOF OPENINGS.



STEP 3 HOOK PANEL CLIP TABS
OVER PANEL AND ROTATE
CLIP INTO POSITION



STEP 4 TEMPORARILY SECURE THE
PANEL CLIP WITH A
DRIFT PIN



STEP 5 INSTALL SCRUBOLT FASTENER

INSTALLATION OF SCRUBOLT REQUIRES A 3/8"
SOCKET AND A 5" (MINIMUM) EXTENSION.

PRODUCT RENEWED
as complying with the Florida
Building Code
Acceptance No. 24-1021-01
Expiration Date 12/09/2028
By: *Heidi P. Miller*
Miami Data Product Control

IMPORTANT NOTES:
1. ALWAYS MAKE SURE TABS ARE CENTERED IN THE
MR-24 CLIP AFTER THE CLIP IS INSTALLED.
2. PANEL CLIPS MUST BE ATTACHED TO ALL ROOF
SECONDARY SUPPORT MEMBERS INCLUDING ALL
INTERMEDIATE MEMBERS, SUB-PURLINS, ETC.

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 23-0908.03
Expiration Date 12/09/2024
By: *Heidi P. Miller*
Miami Data Product Control

REVISION NUMBER 1		REVISION NUMBER 2		REVISION NUMBER 3	
DATE	07/01/10	DATE	03/02/15	DATE	09/08/20
DWBY	CHD	DWBY	CHD	DWBY	CHD
BSN	RLB	BSN	RKP	BSN	RLB
REVISE TO BNA TITLE BLOCK AND NUMBER TO P-081386. ADD BUTLER LOGO.		ADD EXTRA TALL CLIP (560745) AND FASTENERS FOR INSTALLATION. ADD FM CLIPS (560743 AND 560744).		ADD NOTE: 2 TO IMPORTANT NOTES.	

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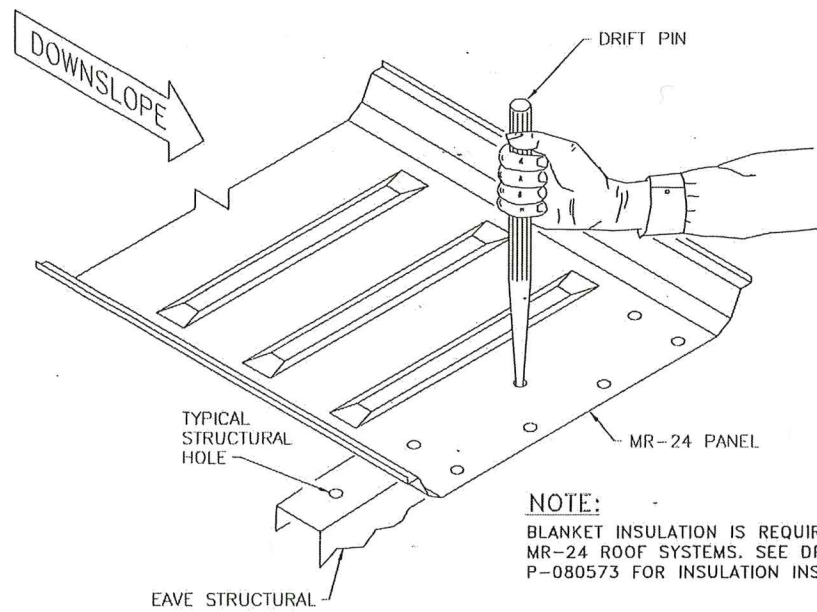
MR-24 PANEL CLIP INSTALLATION DADE COUNTY FLORIDA	
DRAWN BY JRS	CHECKED BY MJH
FIRST RELEASE DATE 01/21/10	REVISION DATE 09/08/20
GROUP NUMBER: 02 - 030 - 06	
B	P-081386 03

REVISION NUMBER 1		REVISION NUMBER 2		REVISION NUMBER 3		REVISION NUMBER 4	
DATE	07/01/10	DATE	03/11/14	DATE	09/20/16	DATE	09/08/20
BY	CHD	BY	CHD	BY	CHD	BY	CHD
BSN	RLB	RHE	MJH	RHE	CHD	BSN	RLB
REVISE TO BBA TITLE BLOCK AND NUMBER TO P-081387. ADD BUTLER LOGO.		REVISED TO SHOW NEW STARTING PLATFORM AND SAFETY PROCEDURE FOR ENGAGING ROOF RUNNER. ADDED FLUTES TO MR-24 PANEL.		REVISED TO IMPORTANT NOTE CALLOUT TO ALWAYS MAKE SURE THE QUICK RELEASE PINS ARE IN PLACE BEFORE ATTEMPTING TO PLACE ROOF RUNNER ON STARTING PLATFORM.		ADD NOTES FOR HIGH SIDE SINGLE SLOPE BUILDINGS IN STEP 4.	



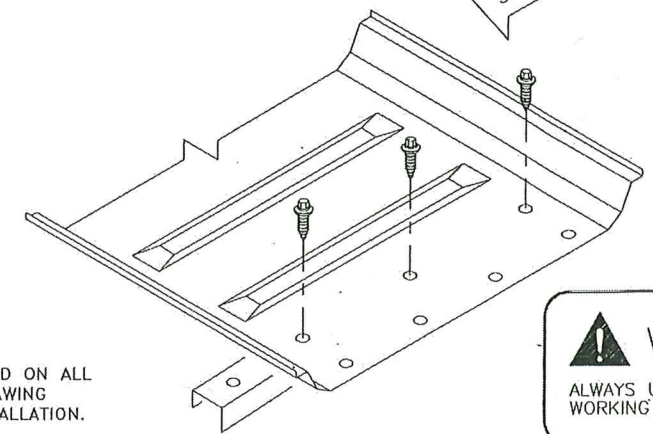
STEP 4 - NEXT PANEL
DO NOT LAY PANEL TOO FAR AHEAD OF THE SEAMING OPERATION.

Russell L Benton, PE#51155



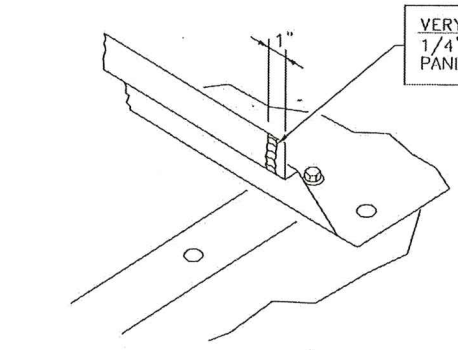
STEP 1 - LOCATE STRUCTURAL HOLE
• REFER TO ROOF PANEL LAYOUT DRAWING PROVIDED WITH EACH ORDER FOR PANEL PLACEMENT.
• PANELS CLIPS ARE NOT INSTALLED AT EAVE STRUCTURAL.

NOTE:
BLANKET INSULATION IS REQUIRED ON ALL MR-24 ROOF SYSTEMS. SEE DRAWING P-080573 FOR INSULATION INSTALLATION.



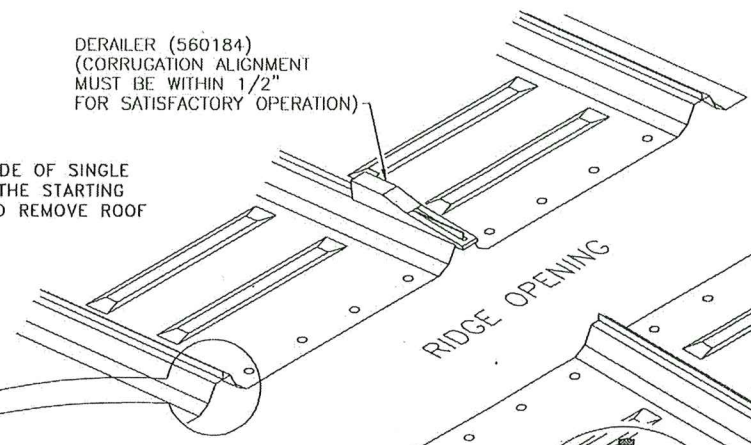
STEP 2 - INSTALL FASTENERS
• INSTALL APPROPRIATE FASTENERS BEFORE PANEL CORRUGATIONS ARE LOCK SEAMED.

WARNING
ALWAYS USE FALL PROTECTION WHILE WORKING AROUND ROOF OPENINGS.



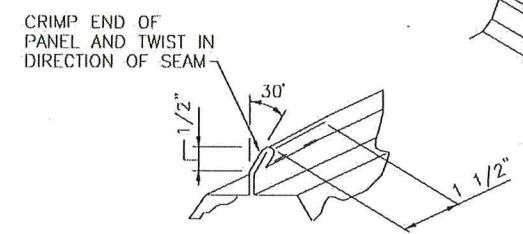
STEP 3 - INSTALL SEALANT

NOTE:
TO HELP PREVENT WALL STAINING CAUSED BY ROOF RUN-OFF, INSTALL EDGE OF ROOF TRIM OR GUTTER PARTS IMMEDIATELY AFTER ROOF PANELS ARE INSTALLED.



NOTE:
FOR HIGH SIDE OF SINGLE SLOPE USE THE STARTING PLATFORM TO REMOVE ROOF RUNNER.

VERY IMPORTANT:
APPLY 1/4" DIA. BEAD OF GUN GRADE PANLASTIC (025392) AT HIGH SIDE SINGLE SLOPE BUILDINGS

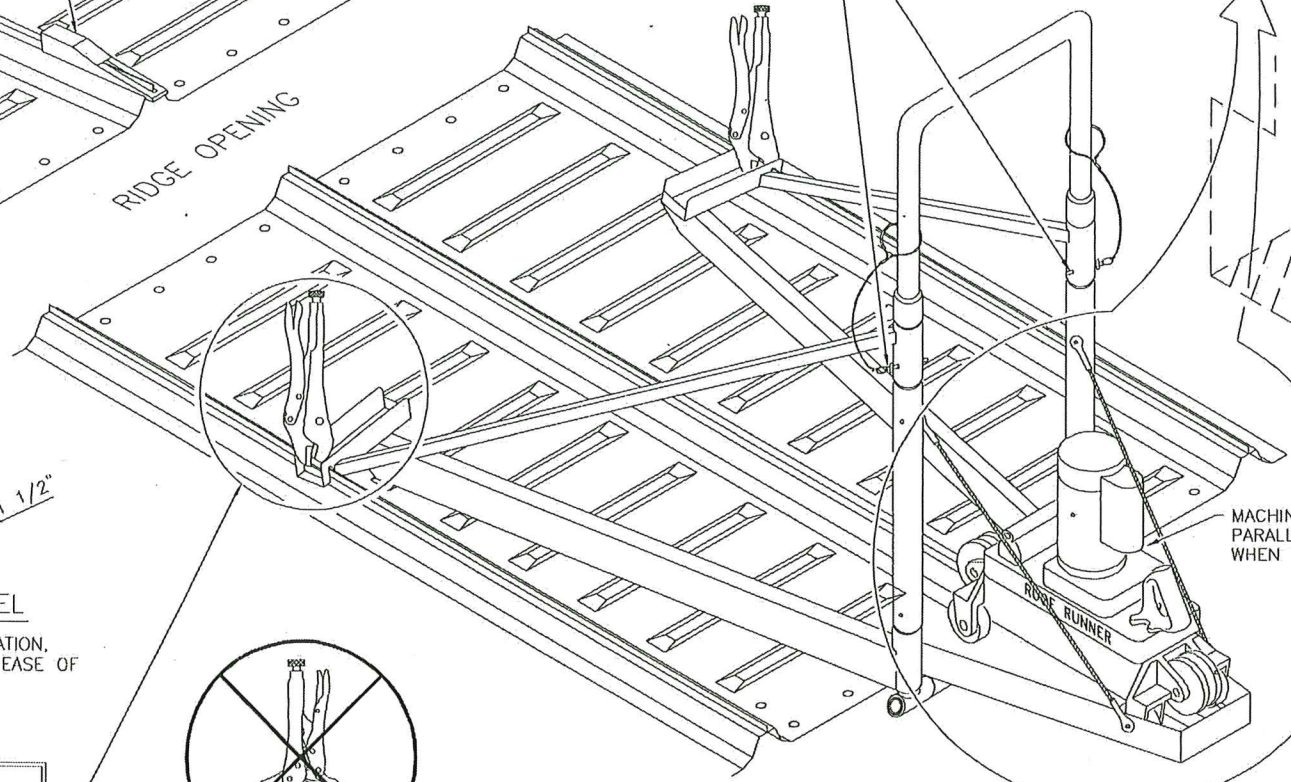
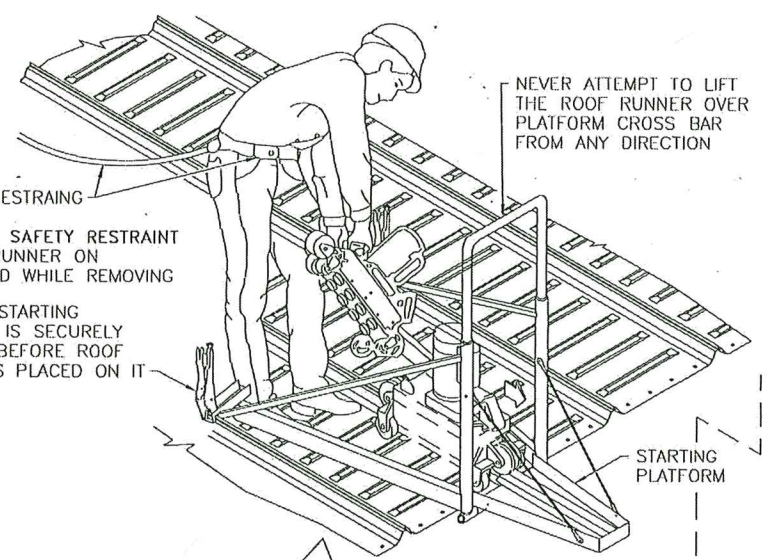


STEP 5 - CRIMP PANEL
• BEFORE STARTING SEAMING OPERATION, CRIMP THE START OF SEAM FOR EASE OF ROOF RUNNER ENGAGEMENT.

IMPORTANT:
DO NOT USE C-CLAMP STYLE LOCKING PLIERS WHEN SECURING THE STARTING PLATFORM AT MR-24 CORRUGATION SEAM LOCATIONS. ONLY CURVED JAW TYPE, (9" MIN.), MAY BE USED.

IMPORTANT:
QUICK RELEASE PINS MUST ALWAYS BE IN PLACE BEFORE ATTEMPTING TO PLACE ROOF RUNNER ON STARTING PLATFORM

WORKER SHOULD WEAR SAFETY RESTRAINT WHILE PLACING ROOF RUNNER ON STARTING PLATFORM AND WHILE REMOVING
BE SURE STARTING PLATFORM IS SECURELY CLAMPED BEFORE ROOF RUNNER IS PLACED ON IT



STEP 6 - SEAMING OPERATION
• BE SURE PANELS ARE PROPERLY NESTED TOGETHER PRIOR TO SEAMING
• PANELS CAN BE TEMPORARILY HELD IN PLACE WITH VICE GRIPS BEFORE SEAMING.

IMPORTANT:
THE AREA BELOW WHERE A STARTING PLATFORM IS BEING USED MUST BE DESIGNATED A WORK EXCLUSION ZONE.

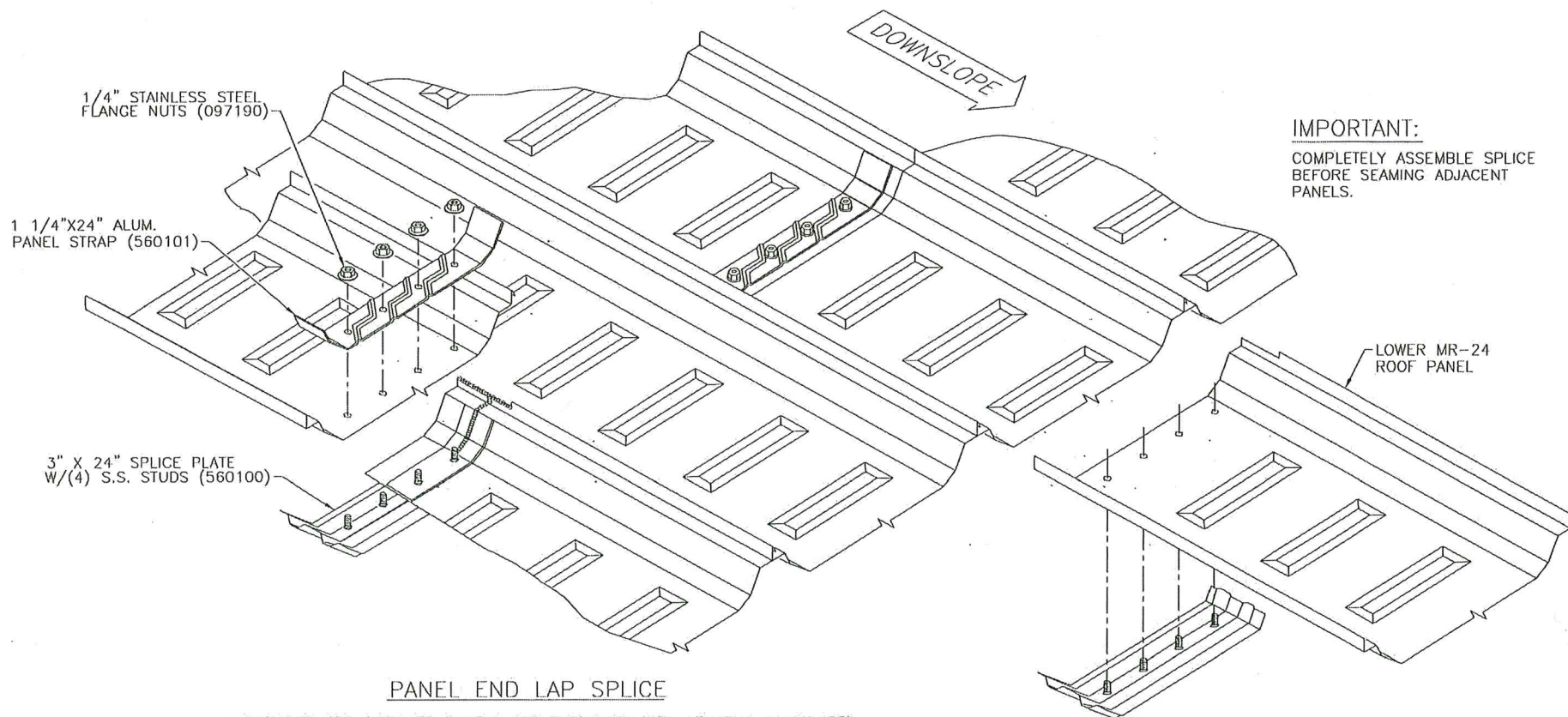
PRODUCT REVISED as complying with the Florida Building Code
Acceptance No. 23-0908.03
Expiration Date 12/09/2024
By Hely A. M... Miami Dade Product Control

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1540 GENESSEE ST.
KANSAS CITY, MO. 64102

MR-24 PANEL INSTALLATION DADE COUNTY FLORIDA			
DRAWN BY	CHECKED BY	GROUP NUMBER: 02-030-06	
JRS	MJH		
FIRST RELEASE DATE	REVISION DATE		
01/21/10	09/08/20		
		B	P-081387 04

REVISION NUMBER 1		REVISION NUMBER 2	
DATE	07/01/10	DATE	08/06/18
BY	SSN	BY	SSN
CHKD	RUB	CHKD	RHE
APP		APP	ARB
REVISED TO BNA TITLE BLOCK AND NUMBER TO P-081388.		REVISED TO ADD TORQUE LIMITER SOCKET DETAIL AND DIRECTIONS FOR USE. ENH #24263.	

RUSSELL L. BENTON
 LICENSE
 No 51155
 STATE OF
 FLORIDA
 PROFESSIONAL ENGINEER
[Signature]
 8/24/23
 Russell L Benton, PE#51155

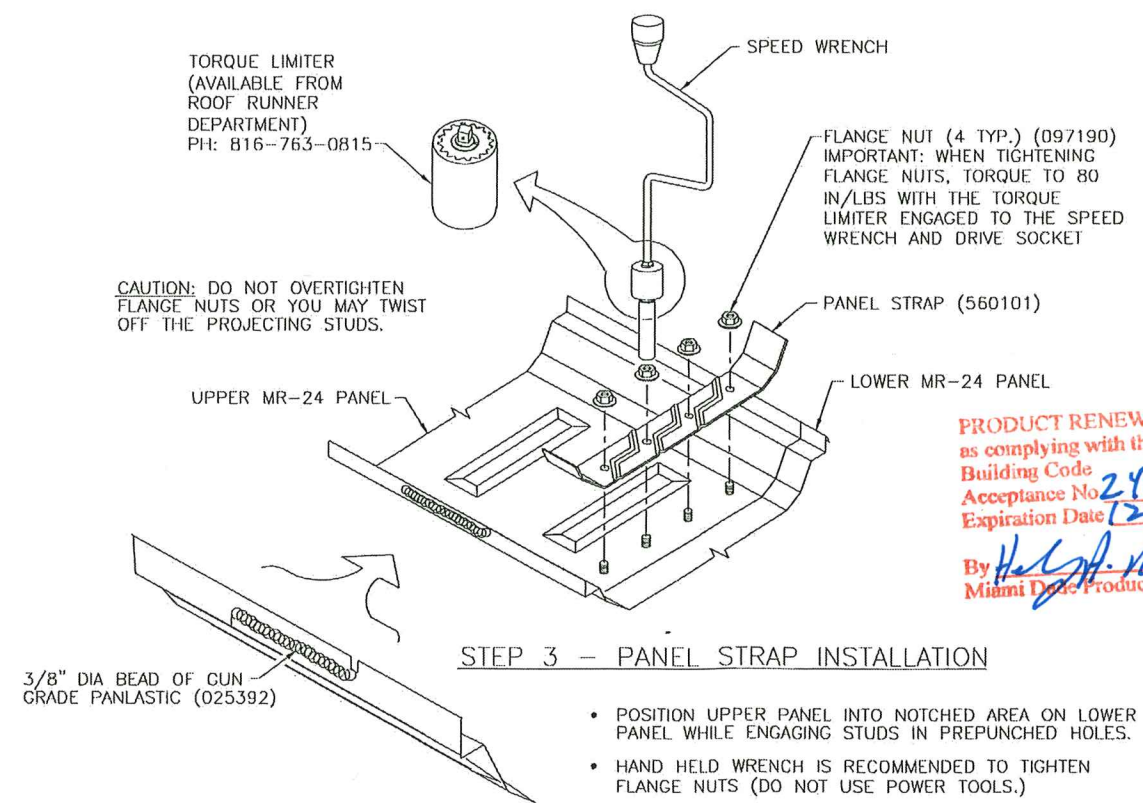


PANEL END LAP SPLICE

- PUNCHED AND NOTCHED PANELS ARE FURNISHED WITH LENGTHS CALCULATED FOR END LAP SPLICES TO OCCUR OVER SECONDARY STRUCTURALS.
- REFER TO ROOF PANEL LAYOUT DRAWINGS PROVIDED WITH EACH ORDER FOR PROPER PLACEMENT OF STAGGERED END LAP SPLICE LOCATIONS.

STEP 1 - SPLICE PLATE INSTALLATION

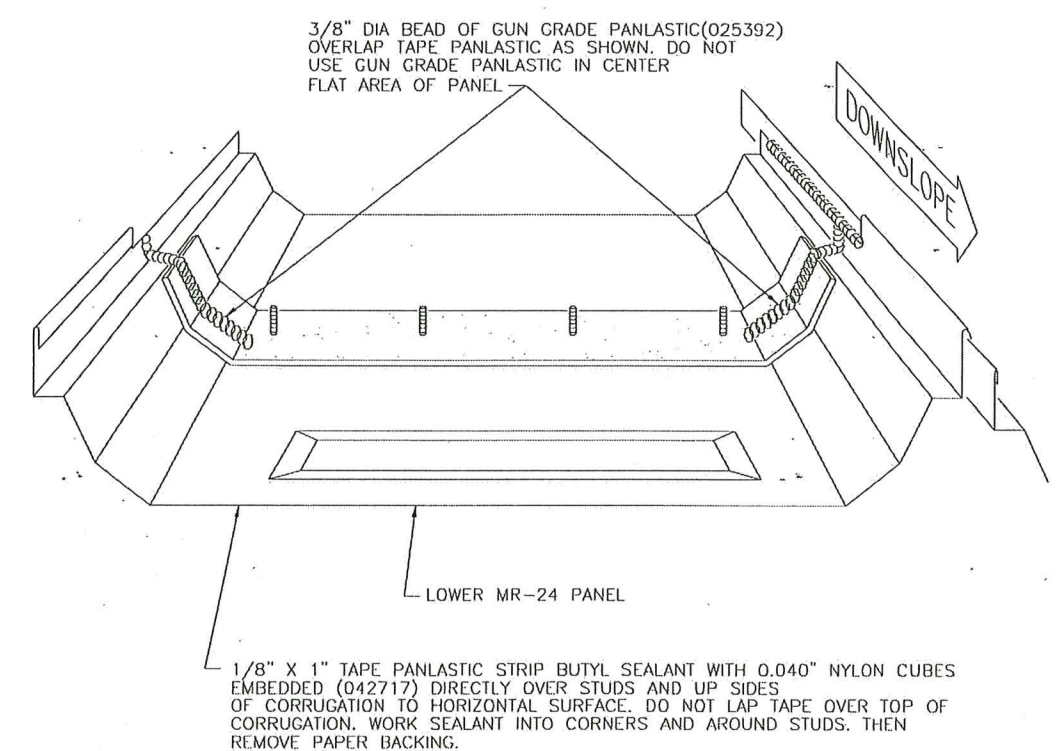
- ATTACH PANEL AT EAVE TO STRUCTURAL MEMBER.
- FOR EASE OF INSTALLATION, SPLICE PLATE (560100) CAN BE TEMPORARILY ATTACHED TO PANEL WITH (2) FLANGE NUTS BEFORE POSITIONING PANEL.



STEP 3 - PANEL STRAP INSTALLATION

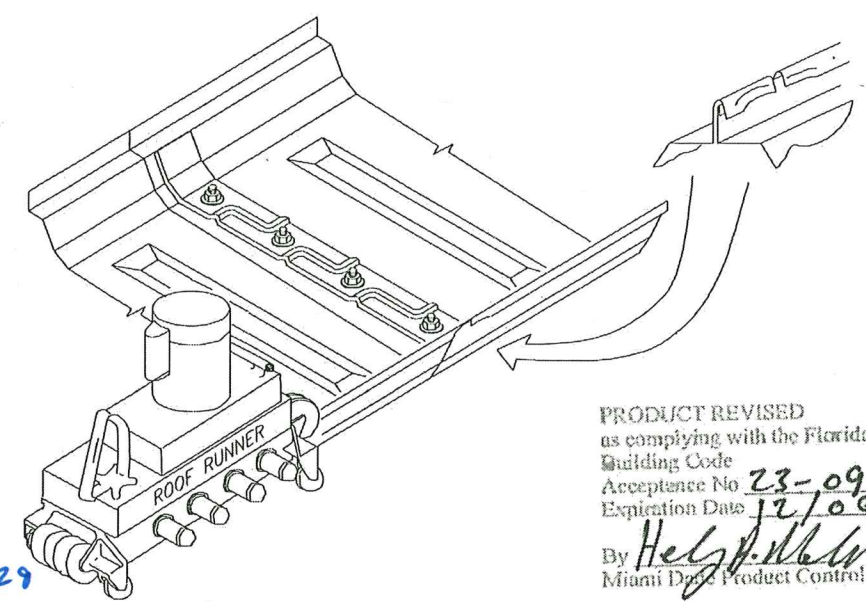
- POSITION UPPER PANEL INTO NOTCHED AREA ON LOWER PANEL WHILE ENGAGING STUDS IN PREPUNCHED HOLES.
- HAND HELD WRENCH IS RECOMMENDED TO TIGHTEN FLANGE NUTS (DO NOT USE POWER TOOLS.)
- IF STUDS BREAK, INSTALL A NEW SPLICE PLATE.
- APPLY GUN GRADE PANLASTIC TO BACK SIDE OF SEAM BEFORE SUCCEEDING PANELS ARE INSTALLED.

IMPORTANT:
 COMPLETELY ASSEMBLE SPLICE BEFORE SEAMING ADJACENT PANELS.



STEP 2 - SEALANT APPLICATION

1/8" X 1" TAPE PANLASTIC STRIP BUTYL SEALANT WITH 0.040" NYLON CUBES EMBEDDED (042717) DIRECTLY OVER STUDS AND UP SIDES OF CORRUGATION TO HORIZONTAL SURFACE. DO NOT LAP TAPE OVER TOP OF CORRUGATION. WORK SEALANT INTO CORNERS AND AROUND STUDS. THEN REMOVE PAPER BACKING.



STEP 4 - SEAMING OPERATION

- INSPECT EACH END LAP SPLICE FOR PROPER FIT AND WEATHER TIGHTNESS.

PRODUCT RENEWED
 as complying with the Florida Building Code
 Acceptance No 24-1021.01
 Expiration Date 12/09/2029
 By *[Signature]*
 Miami Dade Product Control

PRODUCT REVISED
 as complying with the Florida Building Code
 Acceptance No 23-0908.03
 Expiration Date 12/09/2024
 By *[Signature]*
 Miami Dade Product Control

BUTLER Butler Manufacturing a division of BlueScope Buildings North America, Inc. 1540 GENESSEE ST. KANSAS CITY, MO. 64102		MR-24 END LAP SPLICE DADE COUNTY FLORIDA		GROUP NUMBER: 02-030-06	
DRAWN BY JRS	CHECKED BY MJH	FIRST RELEASE DATE 01/21/10	REVISION DATE 08/06/18	B	P-081388 02