



**BUILDING CODE COMPLIANCE OFFICE (BCCO)  
PRODUCT CONTROL DIVISION**

**MIAMI-DADE COUNTY, FLORIDA  
METRO-DADE FLAGLER BUILDING  
140 WEST FLAGLER STREET, SUITE 1603  
MIAMI, FLORIDA 33130-1563  
(305) 375-2901 FAX (305) 375-2908**

**NOTICE OF ACCEPTANCE (NOA)**

**Butler Manufacturing Company  
1540 Genessee Street  
Kansas City, Missouri 64102**

**SCOPE:**

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) 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 Division (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. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division 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 Company, dated January 06, 2003, sheets 1 & 2 of 6, and dated November 4, 1999, sheets 3, 4, 5, & 6 of 6, all signed and sealed by John Ernest Lamb, P.E. on January 16, 2003, 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 Division.

**MISSILE IMPACT RATING: Large and Small Missile Impact**

**LABELING:** Each panel shall bear a permanent label with the manufacturer's name or logo, city, state 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.

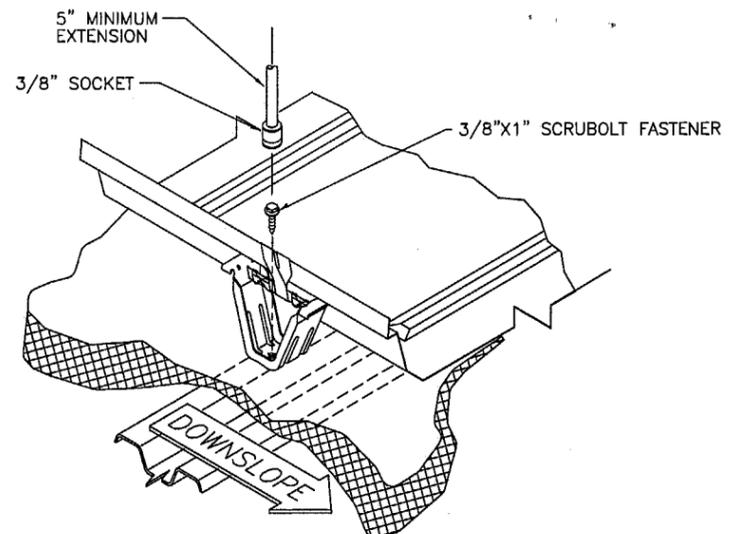
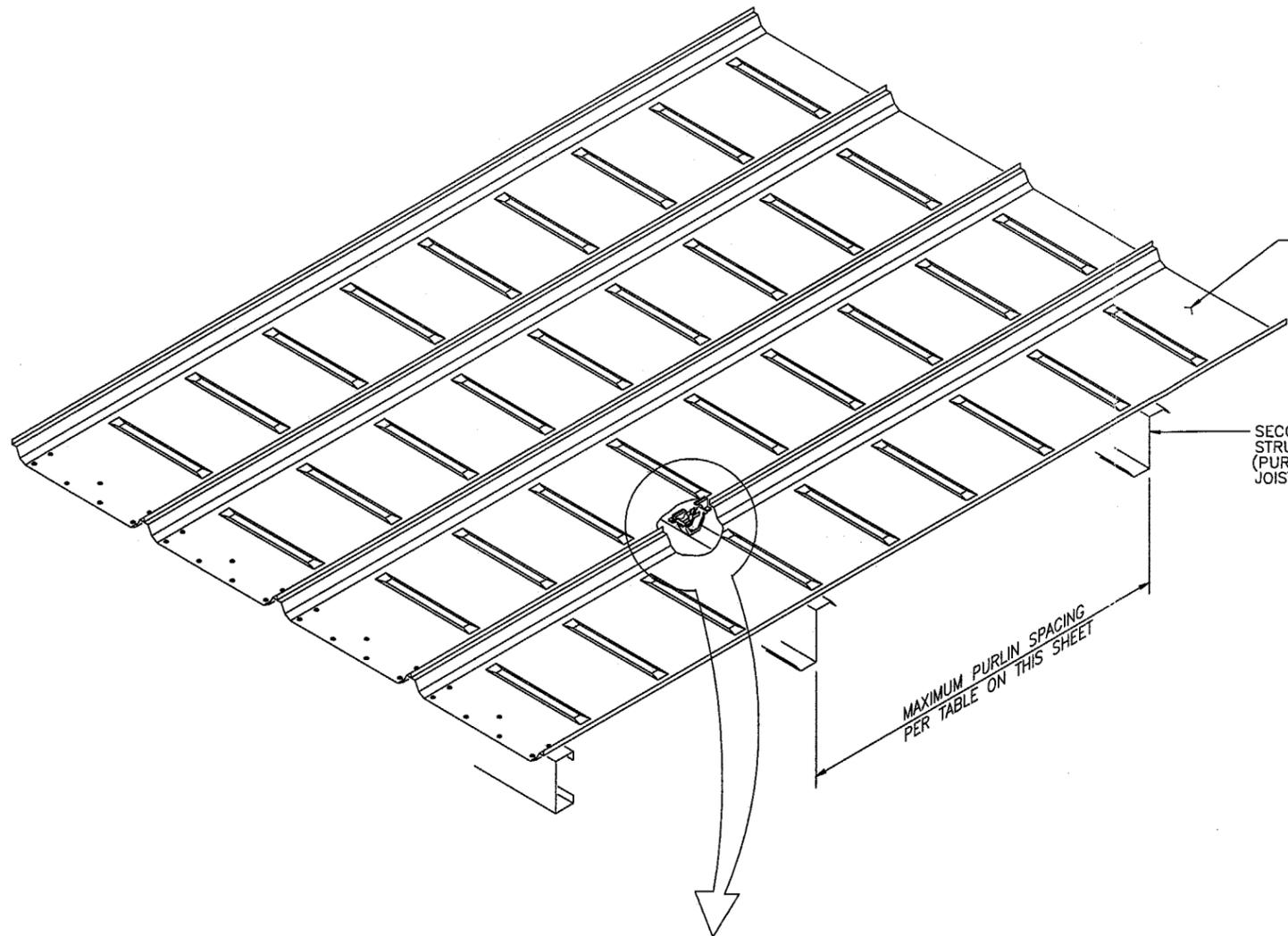
**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA **revises & renews** NOA # 99-0816.08 & consists of this page 1 & approval document mentioned above. The submitted documentation was reviewed by **Helmy A. Makar, P.E.**

H.M.  
05/29/03



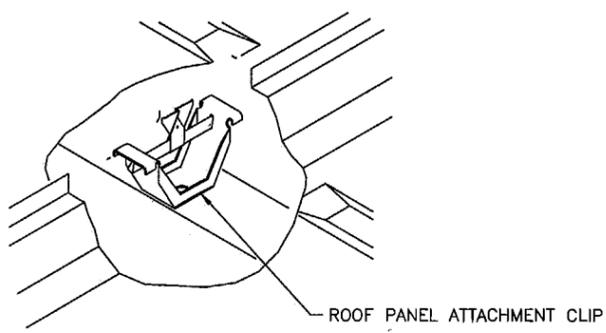
**NOA No 02-1211.09  
Expiration Date: 12/09/2007  
Approval Date: 05/29/2003  
Page 1**



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"	54.0
EDGE	2'-0"	93.0
CORNER	1'-3"	139.0

PRODUCT REVISED  
 as complying with the Florida  
 Building Code  
 Acceptance No 02-1211-09  
 Expiration Date 12/09/2007  
 By *Helmut A. Meier*  
 Miami Dade Product Control  
 Division



GENERAL NOTES:

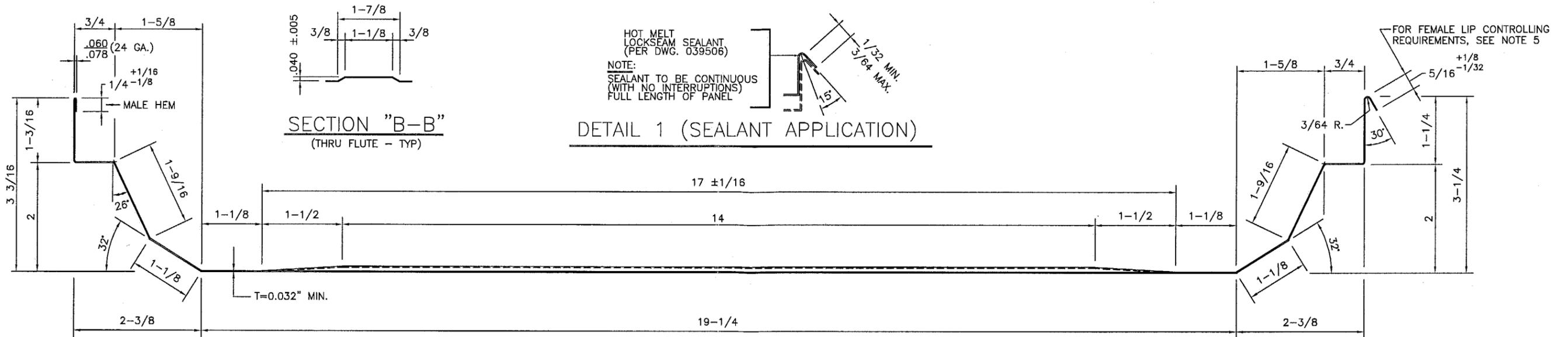
1. THIS STRUCTURAL ROOF PANEL SHALL BE DESIGNED IN ACCORDANCE WITH THE 2001 EDITION OF THE FLORIDA BUILDING CODE.
2. ALL BUTLER MR-24 ROOF PANELS SHALL BE 22 GAUGE (0.032" MIN.) GALVALUME STEEL SHEET CONFORMING TO ASTM A 792, COATING DESIGNATION AZ55, WITH A MINIMUM FY=60 KSI.
3. ALL PANEL CLIPS SHALL 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.
4. 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.
5. ALL PANEL CLIPS SHALL BE ATTACHED TO PURLINS WITH A MINIMUM THICKNESS OF 0.067".
6. VALLEY ASSEMBLY IS NOT ALLOWED IN THIS ROOF PANEL APPROVAL.
7. EACH PANEL TO PANEL CONNECTION IS TO BE MADE WITH A POSITIVE, FIELD FORMED STANDING DOUBLE-LOCK SEAM.
8. 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.

*Helmut A. Meier*  
 11/6/03

FIRST RELEASE	DATE	11/04/99	CHKO MJH
REVISION NUMBER 1	DATE	01/06/03	DRWIN CHKD MJH
	ADDED	(0.032" MIN.)	
	DELETED	REFERENCE TO	
		MIAMI DADE COUNTY 1994	
		EDITION OF S.F.B.C.	

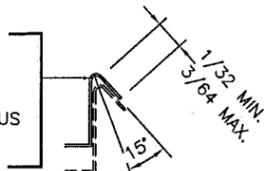
GROUP	DRAWING NUMBER	REV.
02-030-06	B 1081383	01

MR-24	MR-24 PANEL INSTALLATION DADE COUNTY FLORIDA	ALL BUILDINGS
	BUTLER MANUFACTURING COMPANY	
DATE	DRAWING NUMBER	REV.
01/06/03	B 1081383	01
GROUP		
02-030-06		

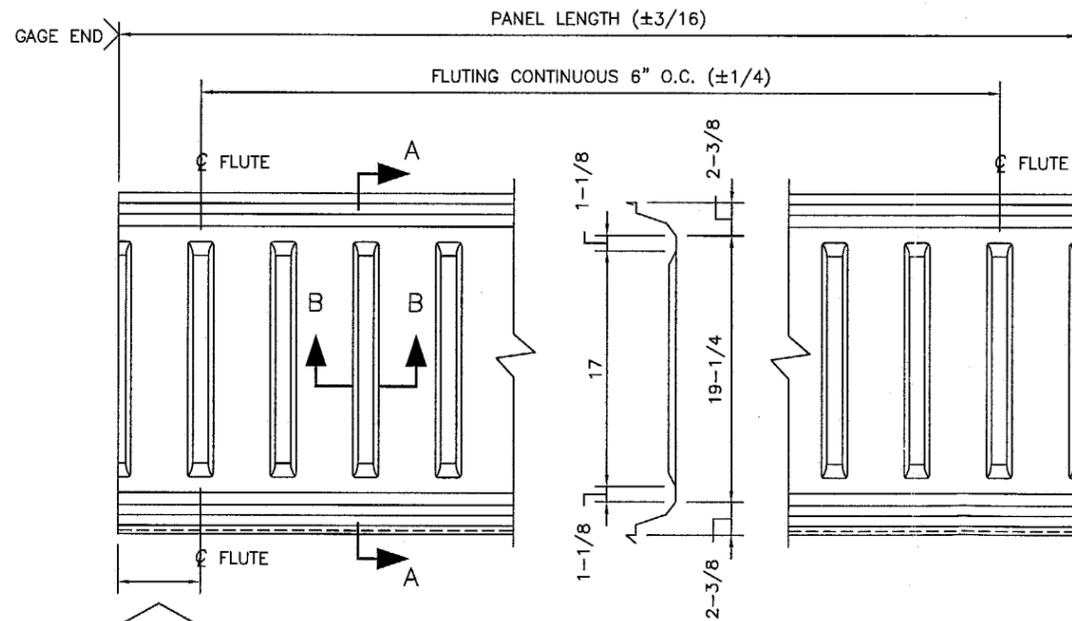


HOT MELT  
LOCKSEAM SEALANT  
(PER DWG. 039506)

NOTE:  
SEALANT TO BE CONTINUOUS  
(WITH NO INTERRUPTIONS)  
FULL LENGTH OF PANEL

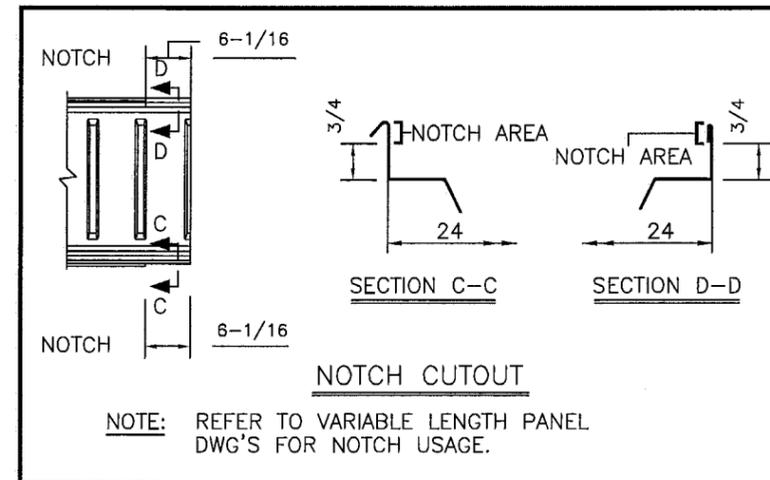


FOR FEMALE LIP CONTROLLING  
REQUIREMENTS, SEE NOTE 5



PLAN VIEW (BASIC PANEL)

NO DIMENSIONAL LOCATION  
REQUIREMENTS FOR 6\"/>



NOTES:

1. DIMENSIONAL TOLERANCES = ±1/32 (EXCEPT AS NOTED)
2. ALL INSIDE FORMING RADII = 1/32 (EXCEPT AS NOTED)
3. ANGLE TOLERANCES ±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 ±1/32 FROM "AS ROLLED SHAPE")
5. THE LENGTH OF FEMALE LIP MUST BE AT LEAST 1/16" LONGER THAN THE MALE HEM.

PRODUCT REVISED  
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Building Code  
Acceptance No 02-1211-09  
Expiration Date 12/09/2007  
By *Helmut A. Weber*  
Miami Dade Product Control  
Division

*Handwritten signature*  
1/16/03

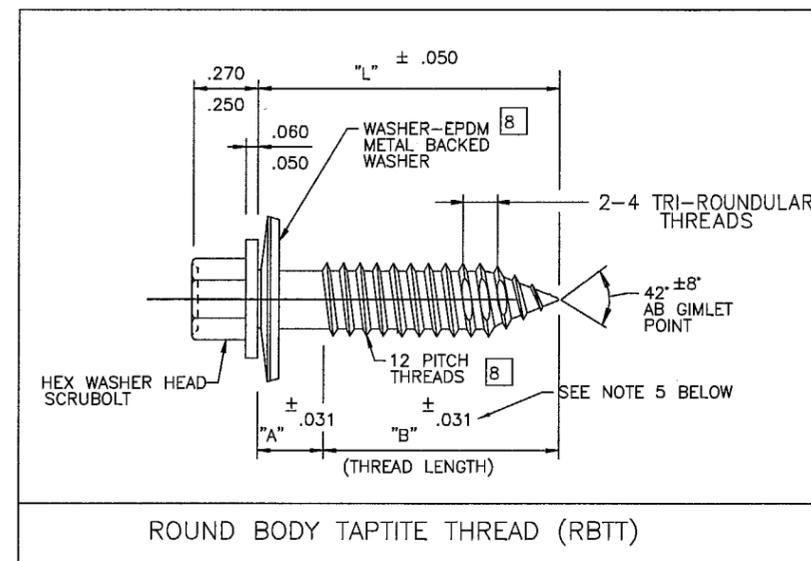
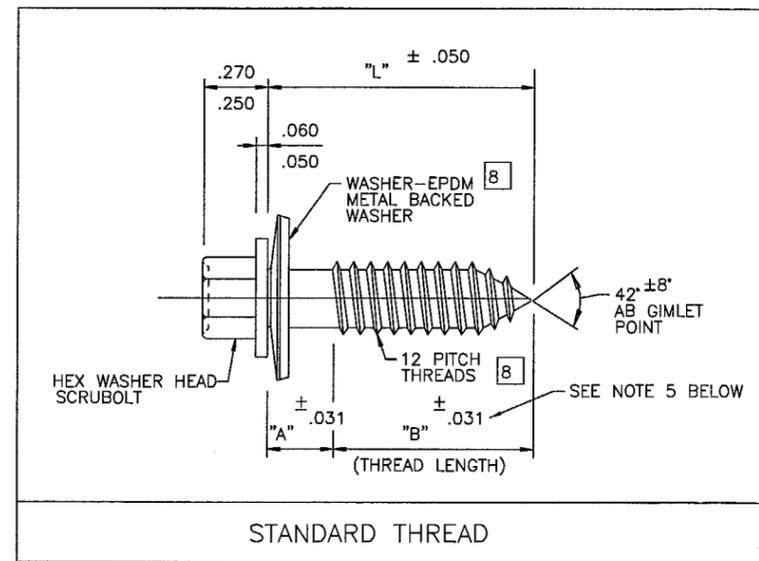
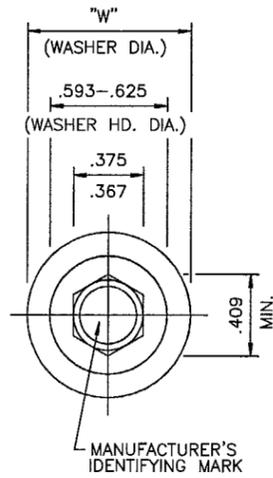
FIRST RELEASE DATE 11/04/99

REVISION NUMBER 1	ADDED 0.032" MIN. TO MATERIAL DESCRIPTION
DATE 01/06/03	CHKD DRWN
DATE 11/04/99	CHKD DRWN
	JRS M/JH

MAT'L GRADES	MATERIAL DESCRIPTION	B. M. C. SPEC. NO.
GA. OF MAT'L		
GR. 60		
22 (0.032" MIN.)	ALUMINUM ZINC ALLOY (GALVALUME)	10179

GROUP 02-030-06 DRAWING NUMBER B 1081384 01 REV. 01

MR-24	MR-24 ROOF PANEL DADE COUNTY FLORIDA	ALL BUILDINGS
	BUTLER MANUFACTURING COMPANY	DATE 01/06/03 GROUP 02-030-06 DRAWING NUMBER B 1081384 01



ASSEMBLY		SCRUBOLT WITHOUT WASHER							METAL BACKED RUBBER WASHER		
PART NO.	WEIGHT	SCRUBOLT PART NO.	MATERIAL	NOMINAL SIZE	"L"	"A"	"B"	THREAD TYPE	WASHER PART NO.	"W"	WASHER DWG. NO.
095984	0.031	095304	SS NOTE 1	11/32 X 7/8	.875	SEE NOTE 5	.875	RBTT	097436	.729	095016
096865	0.031	096863	ST. NOTE 2	11/32 X 7/8	.875	SEE NOTE 5	.875	STANDARD	097384	.563	095016
096866	0.043	096864	ST. NOTE 2	11/32 X 1 1/2	1.50	SEE NOTE 5	1.500	STANDARD	097384	.563	095016
096902	0.034	096863	ST. NOTE 2	11/32 X 7/8	.875	SEE NOTE 5	.875	STANDARD	095349	.729	095016
096932	0.038	096930	ST. NOTE 2	11/32 X 1 1/4	1.25	SEE NOTE 5	1.250	STANDARD	095349	.729	095016
096933	0.077	096931	ST. NOTE 2	11/32 X 2 3/4	2.75	.750	2.00	STANDARD	095016	1.00	095016
097104	0.039	097103	SS NOTE 1	11/32 X 1 1/4	1.25	SEE NOTE 5	1.250	RBTT	097436	.729	095016
097196	0.039	097195	ST. NOTE 3	3/8 X 1	1.00	SEE NOTE 5	1.00	RBTT	095154	.729	095016
097222	0.055	097221	ST. NOTE 2	11/32 X 2	2.00	.187	1.813	STANDARD	095016	1.00	095016
097235	0.048	097221	ST. NOTE 2	11/32 X 2	2.00	.187	1.813	STANDARD	097384	.563	095016
097264	0.074	096931	ST. NOTE 2	11/32 X 2 3/4	2.75	.750	2.00	STANDARD	097384	.563	095016
097270	0.060	097268	ST. NOTE 3	3/8 X 2 1/4	2.25	.250	2.00	RBTT	095154	.729	095016
097271	0.086	097269	ST. NOTE 3	3/8 X 3 1/2	3.50	.500	3.00	RBTT	095154	.729	095016
097273	0.077	097272	ST. NOTE 2	11/32 X 3 1/2	3.50	.500	3.00	STANDARD	095349	.729	095016
097292	0.125	097291	ST. NOTE 3	3/8 X 5	5.00	2.000	3.00	RBTT	095154	.729	095016
097294	0.113	097293	ST. NOTE 2	11/32 X 5	5.00	2.000	3.00	STANDARD	095349	.729	095016
097298	0.145	097297	ST. NOTE 3	3/8 X 6	6.00	3.000	3.00	RBTT	095154	.729	095016
097420	0.157	097419	ST. NOTE 2	11/32 X 6	6.00	3.000	3.00	STANDARD	095349	.729	095016

SEE NOTE 6

**MATERIALS:**

- 410 STAINLESS W/CLEAR CHROMATE, BMC EMS 10,073
- CARBON STEEL W/YELLOW CHROMATE - BMC EMS 10,073 (LATEST REVISION)
- SAME AS 2. ABOVE EXCEPT GREEN DYE APPLIED
- WASHER SPEC. AND DIMENSIONS - SEE DWG 095016

**SCRUBOLT WITH FULL THREADS:**

- FULL THREAD TO WITHIN 1 THREAD OF HEAD & SHANK JUNCTURE.

**6. 3" THREAD LENGTH**

HAS A ± .050 TOLERANCE

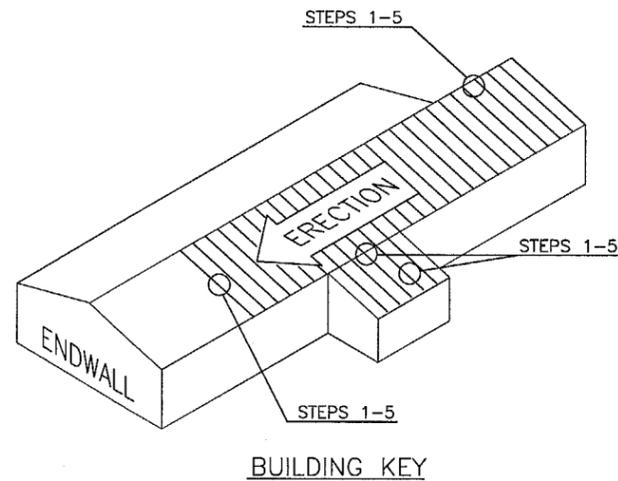
**PRODUCT REVISED**  
 as complying with the Florida  
 Bidding Code  
 Acceptance No 02-1211-09  
 Expiration Date 12/09/2007  
 By *Helmy A. M...*  
 Miami Dade Product Control  
 Division

*[Signature]*  
 1/16/03  
**John Ernest Lamb**  
 P.O. Box 1529  
 Laurinburg, NC 28353  
 Fla. PE # 27717

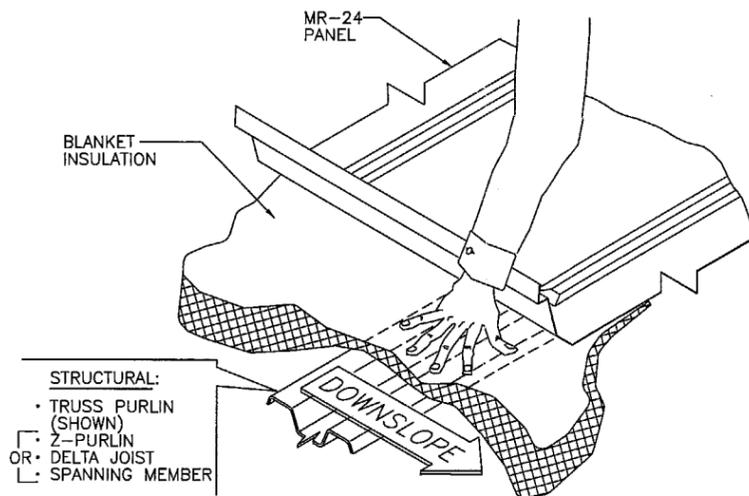
FIRST RELEASE  
 DATE 11/04/99  
 DRAWN URS  
 CHKD MJH

GROUP 02-030-01 DRAWING NUMBER B 1081385 REV. 00

FASTENERS BUTLER MANUFACTURING COMPANY  
 HEX HEAD SCRUBOLTS DADE COUNTY FLORIDA  
 ALL BUILDINGS  
 DATE 11/04/99 GROUP 02-030-01 DRAWING NUMBER B 1081385 REV. 00



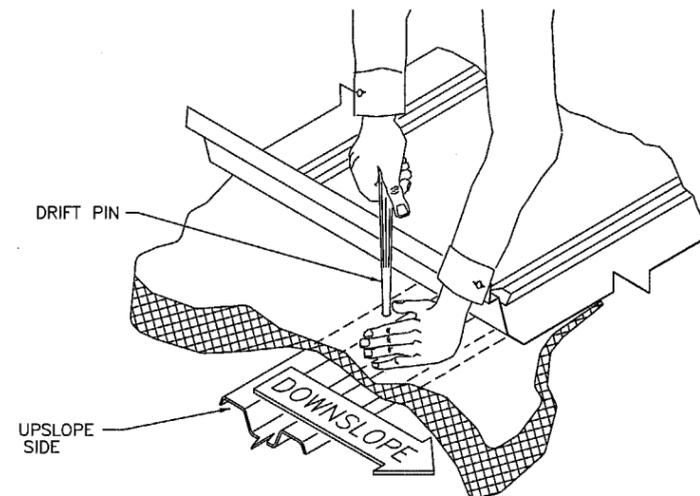
BUILDING KEY



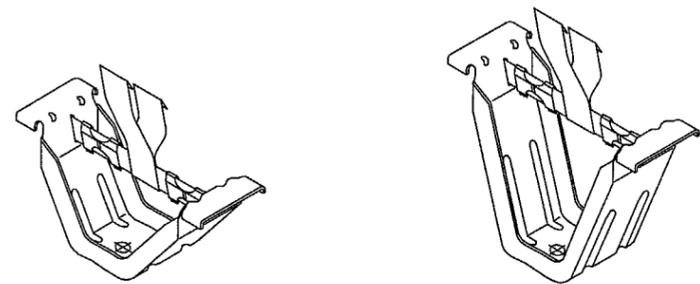
STRUCTURAL:  
 • TRUSS PURLIN (SHOWN)  
 • Z-PURLIN  
 OR • DELTA JOIST  
 • SPANNING MEMBER

**STEP 1** LOCATE STRUCTURAL

• FROM THE ADJACENT MR-24 PANEL, LOCATE THE STRUCTURAL UNDER THE BLANKET INSULATION.



**STEP 2** LOCATE HOLE IN STRUCTURAL WITH DRIFT PIN

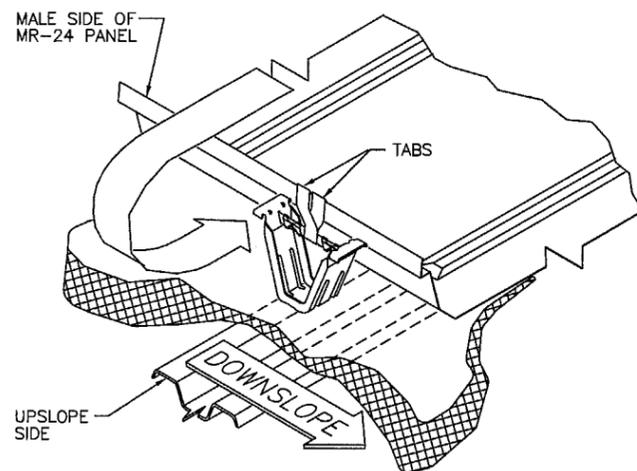


PANEL CLIP (560440)  
(WITHOUT SPACER BLOCK)

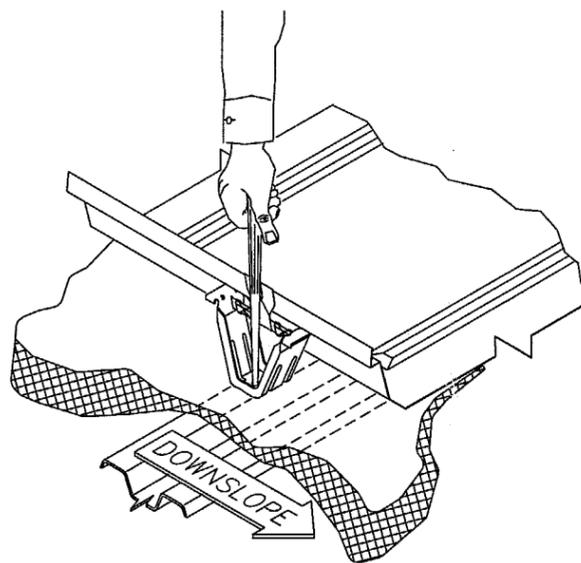
PANEL CLIP (560441)  
(WITH SPACER BLOCK)

PRODUCT REVISED  
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 By *Heather A. Miller*  
 Miami Dade Product Control  
 Division

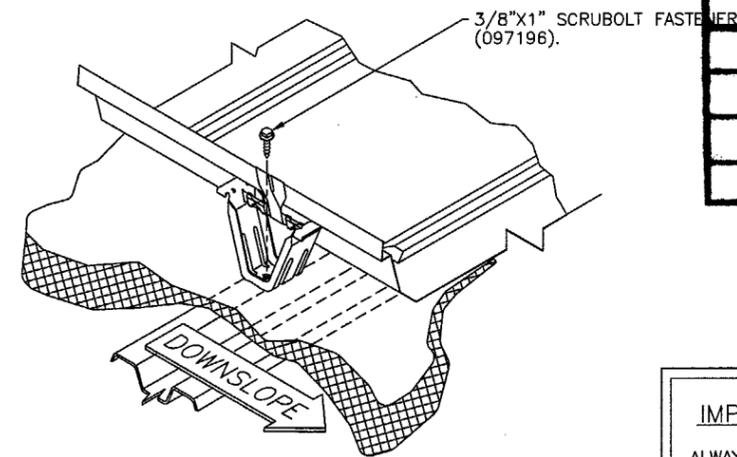
*John Ernest Lamb*  
 1/16/03  
**John Ernest Lamb**  
 P.O. Box 1529  
 Laurinburg, NC 28353  
 Fla. PE # 27717



**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

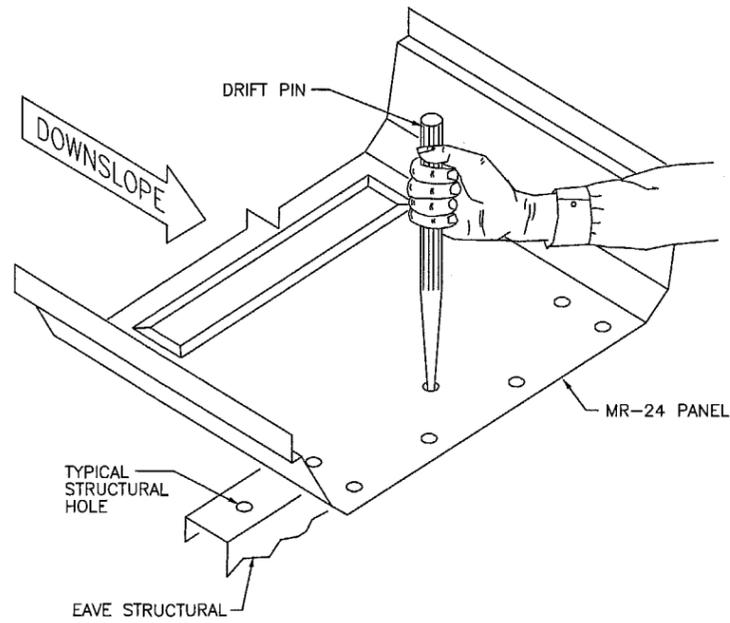
IMPORTANT NOTE

ALWAYS MAKE SURE TABS ARE CENTERED IN THE MR-24 CLIP AFTER THE CLIP IS INSTALLED.

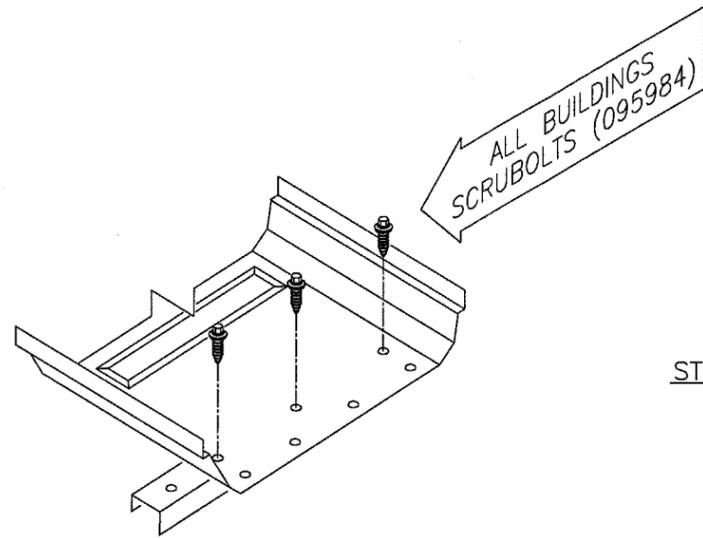
FIRST RELEASE  
 DATE 11/04/99  
 DRAWN CHKD  
 JRS MJH

GROUP 02-030-06 DRAWING NUMBER B 1081386 00 REV.

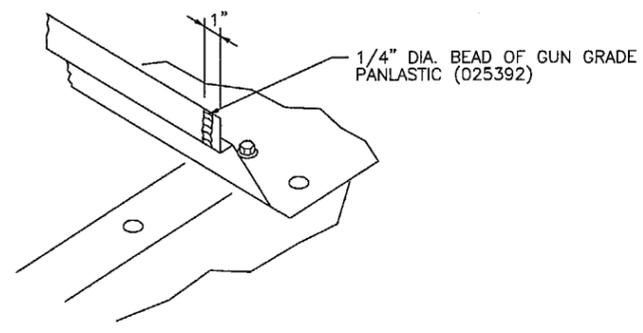
MR-24	MR-24 PANEL CLIP INSTALLATION DADE COUNTY FLORIDA	ALL BUILDINGS
	BUTLER MANUFACTURING COMPANY	DATE 11/04/99 GROUP 02-030-06
		DRAWING NUMBER B 1081386 00 REV.



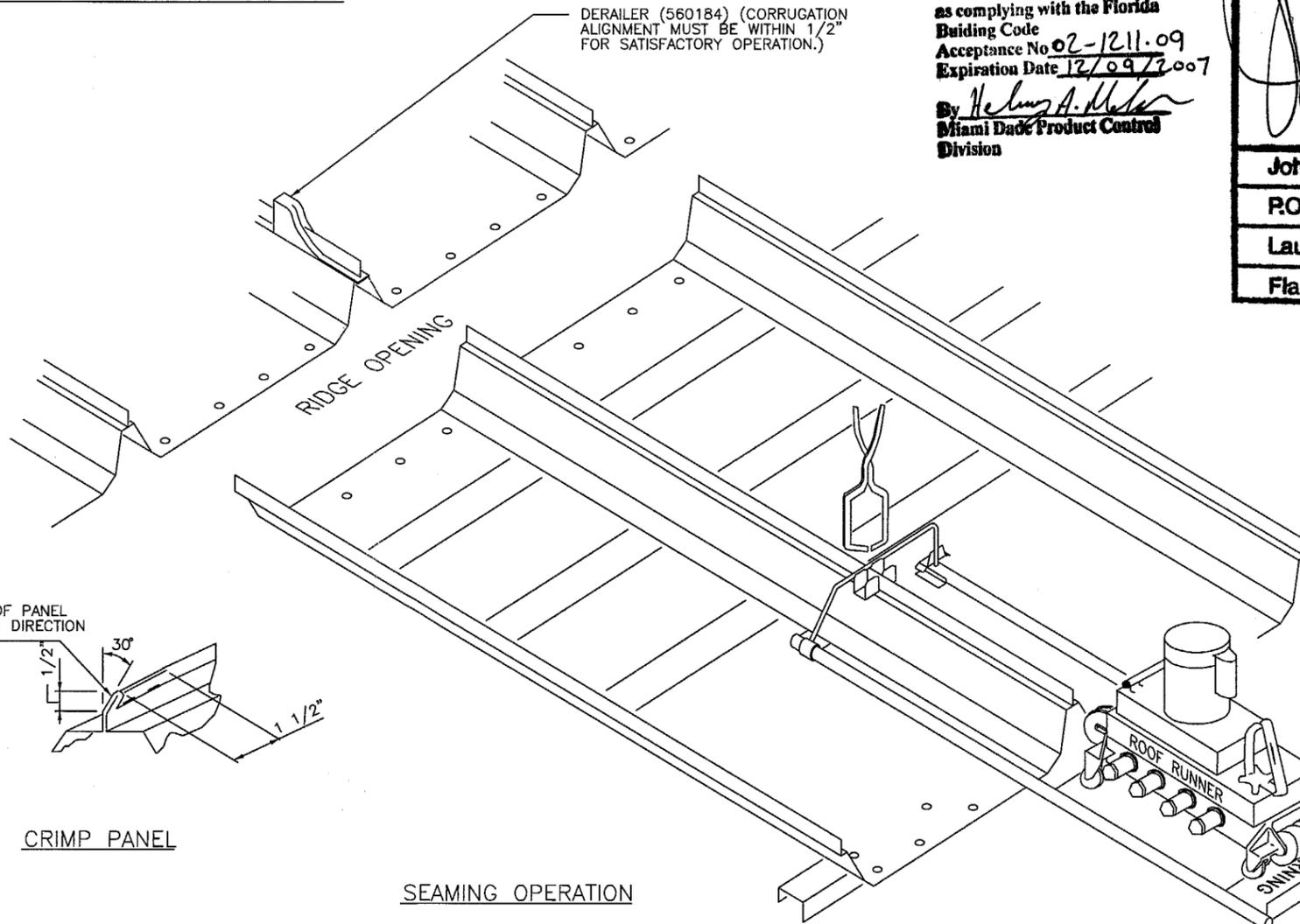
STEP 1 - LOCATE STRUCTURAL HOLE



STEP 2 - INSTALL FASTENERS



STEP 3 - INSTALL SEALANT



STEP 4 - NEXT PANEL

**PRODUCT REVISED**  
 as complying with the Florida  
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 Expiration Date 12/09/2007  
 By *Helmut A. Miller*  
 Miami Dade Product Control  
 Division

*John Ernest Lamb*  
 11/6/03

**John Ernest Lamb**  
 P.O. Box 1529  
 Laurinburg, NC 28353  
 Fla. PE # 27717

FIRST RELEASE  
 DATE 11/04/99  
 DRAWN JRS  
 CHKD MJH

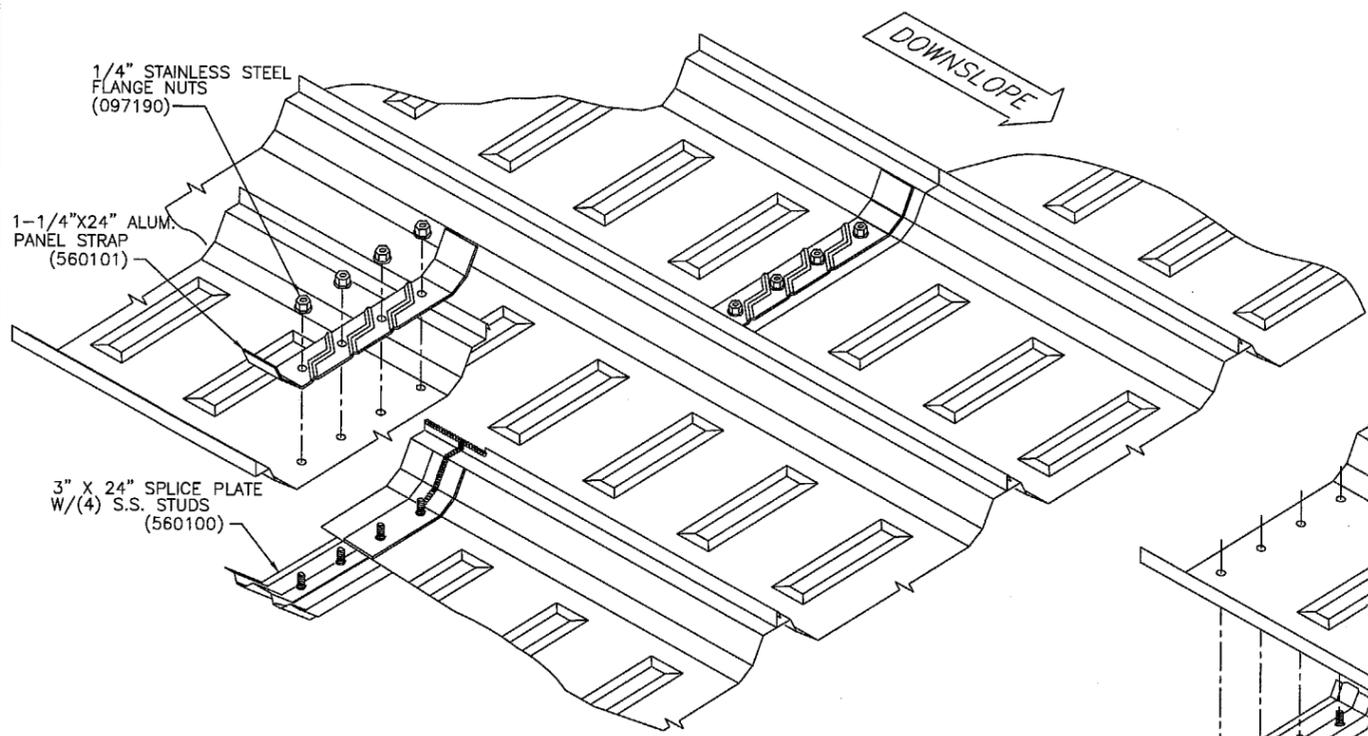
GROUP 02-030-06  
 DRAWING NUMBER B 1081387  
 REV. 00

MR-24  
 BUTLER MANUFACTURING COMPANY  
 DATE 11/04/99  
 GROUP 02-030-06

MR-24 PANEL INSTALLATION  
 DADE COUNTY FLORIDA

DRAWING NUMBER B 1081387  
 REV. 00

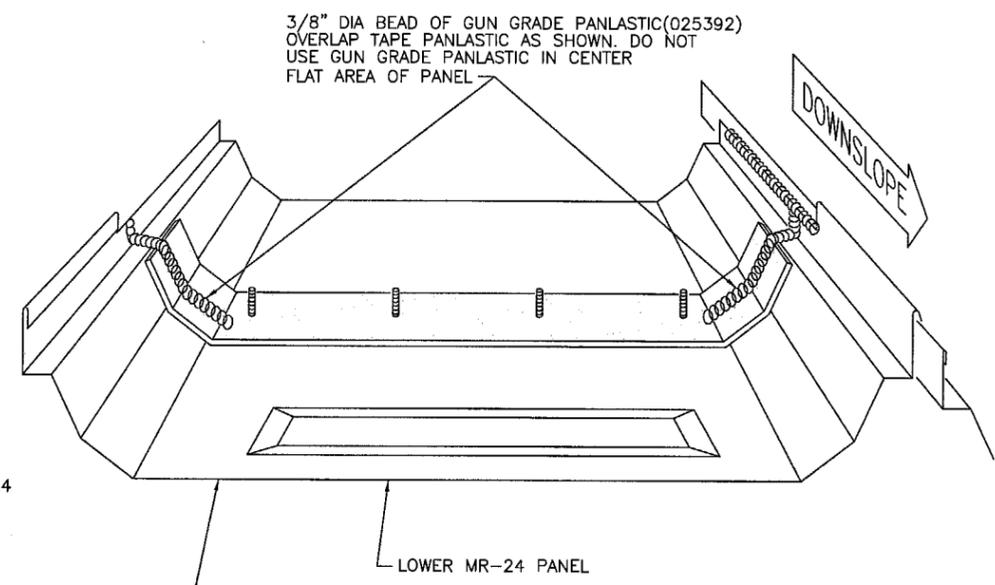
ALL BUILDINGS



**PANEL END LAP SPlice**

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

**IMPORTANT:**  
COMPLETELY ASSEMBLE SPICE BEFORE SEAMING ADJACENT PANELS.



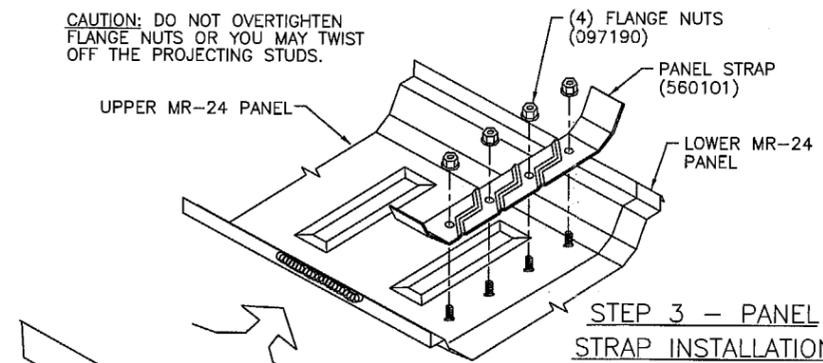
**STEP 2 - SEALANT APPLICATION**

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 1 - SPICE PLATE INSTALLATION**

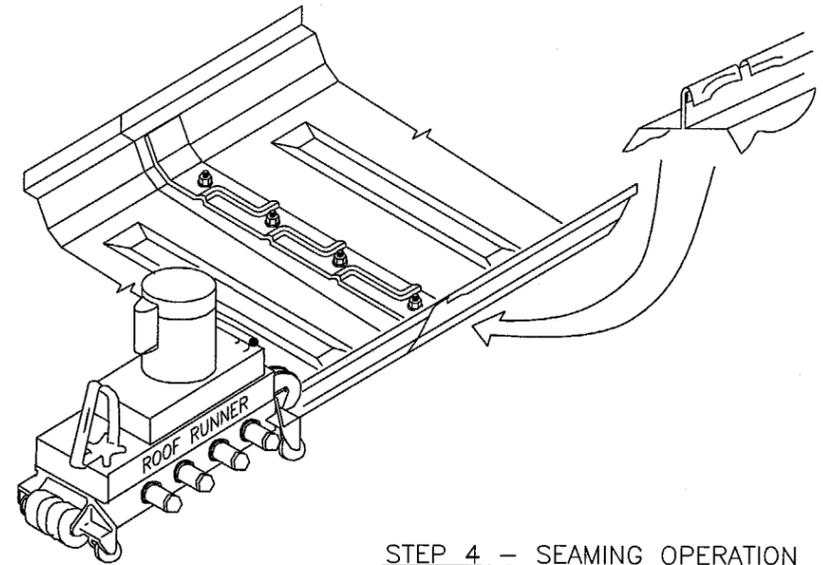
- ATTACH PANEL AT EAVE TO STRUCTURAL MEMBER.
- FOR EASE OF INSTALLATION, SPICE PLATE (560100) CAN BE TEMPORARILY ATTACHED TO PANEL WITH (2) FLANGE NUTS BEFORE POSITIONING PANEL.

CAUTION: DO NOT OVERTIGHTEN FLANGE NUTS OR YOU MAY TWIST OFF THE PROJECTING STUDS.



**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 SPICE PLATE.
- APPLY GUN GRADE PANLASTIC TO BACK SIDE OF SEAM BEFORE SUCCEEDING PANELS ARE INSTALLED.



**STEP 4 - SEAMING OPERATION**

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

3/8" DIA BEAD OF GUN GRADE PANLASTIC (025392)

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as complying with the Florida Building Code  
Acceptance No 02-1211.09  
Expiration Date 12/09/2007  
By *Helmut A. Miller*  
Miami Dade Product Control Division

FIRST RELEASE  
DATE 11/04/99  
DRAWN JRS  
CHKD MJK

*[Signature]*  
1/16/03  
**John Ernest Lamb**  
P.O. Box 1529  
Laurinburg, NC 28353  
Fla. PE # 27717

GROUP 02-030-06 DRAWING NUMBER B 1081388 REV. 00

MR-24	MR-24 END LAP SPICE DADE COUNTY FLORIDA	ALL BUILDINGS
	BUTLER MANUFACTURING COMPANY	DATE 11/04/99 GROUP 02-030-06
	DRAWING NUMBER B 1081388	REV. 00