



**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: Dwg. 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, 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 NOA # 02-1211.09 & consists of this page 1, evidence submitted page(s) as well as approval document mentioned above.

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



Helmy A. Makar
01/13/2005

**NOA No 04-0803.01
Expiration Date: 12/09/2007
Approval Date: 01/13/2005
Page 1**

Butler Manufacturing Company

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 Testing of Coating 1000 hours per ASTM B117-95, prepared by Celotex, Report No. 520223, dated 08/02/99, signed and 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 No. 0063-0311-99, Report No. 9CM-777A, prepared by QC Metallurgical, Inc., dated 04/23/99, signed and 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 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.*



Helmy A. Makar, P. E.
Product Control Examiner
NOA No 04-0803.01
Expiration Date: 12/09/2007
Approval Date: 01/13/2005

Butler Manufacturing Company

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. MATERIAL CERTIFICATIONS

1. *None.*

3. NEW EVIDENCE SUBMITTED

A, DRAWINGS

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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.*



Helmy A. Makar, P. E.
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Product Control Examiner
NOA No 04-0803.01
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Approval Date: 01/13/2005

Butler Manufacturing Company

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. MATERIAL CERTIFICATIONS

1. *None.*

3. NEW EVIDENCE SUBMITTED

A. DRAWINGS

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B. TESTS

1. *None.*

C. CALCULATIONS

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D. QUALITY ASSURANCE

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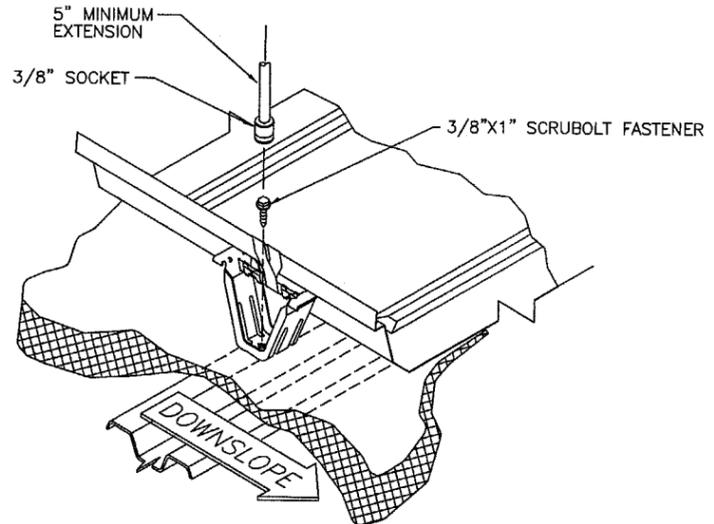
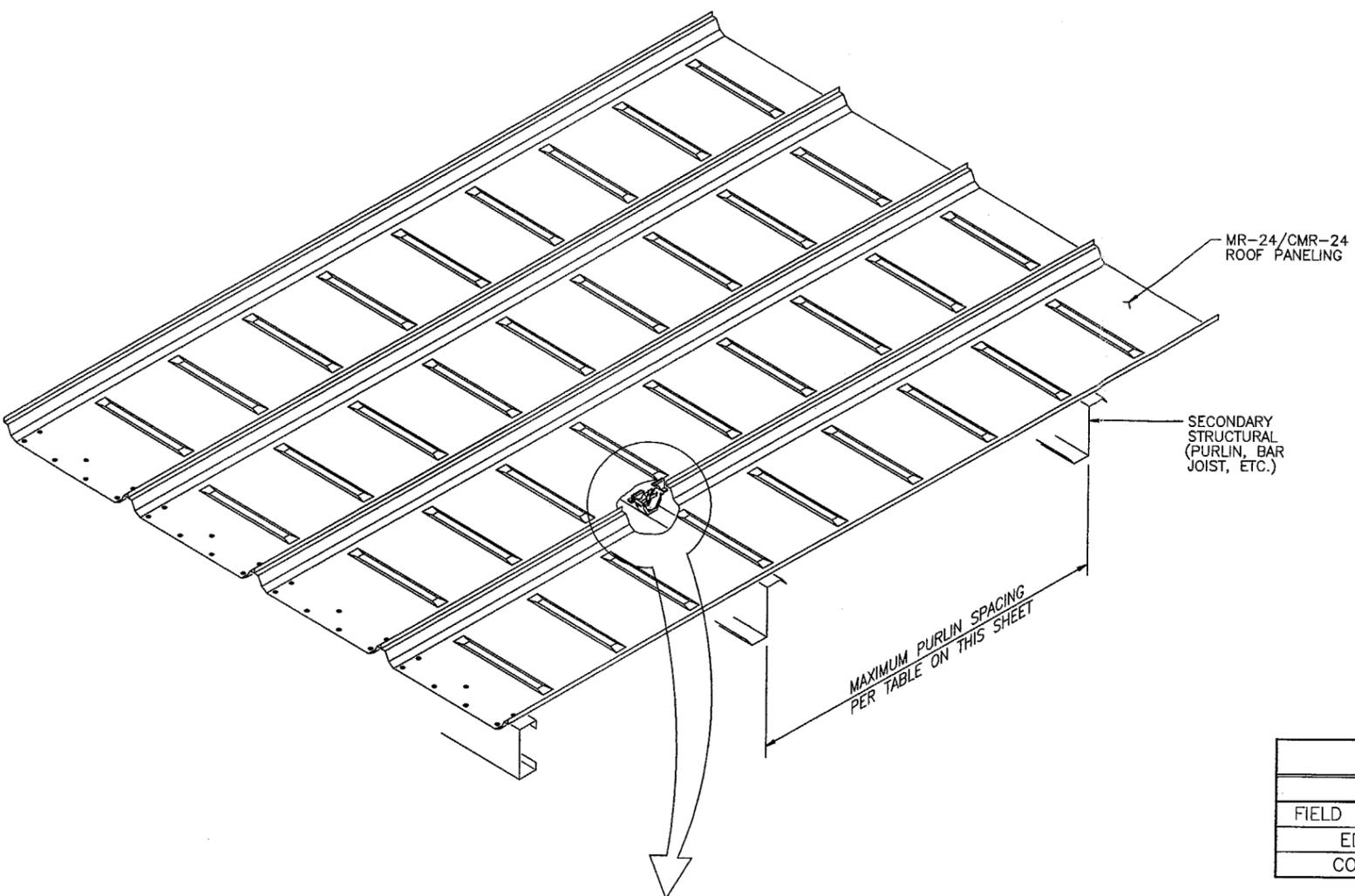
E. MATERIAL CERTIFICATIONS

1. *None.*



Helmy A. Makar, P. E.
Product Control Examiner
NOA No 04-0803.01
Expiration Date: 12/09/2007
Approval Date: 01/13/2005

FIRST RELEASE	DATE 11/04/99	CHKO MJH
REVISION NUMBER 1	DATE 01/06/03	ADDED (0.032" MIN.) TO 22 GAUGE MATERIAL DELETED REFERENCE TO DRWN CHKO MIAMI DADE COUNTY 1994 JRS I MJH EDITION OF SPEC.
REVISION NUMBER 2	DATE 07/12/04	CHANGED FY FROM 60 TO 50 REVISIONS MAX. UPLIFT PRESSURES IN CHART. JRS MDK



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

PRODUCT REVISED
 as complying with the Florida Building Code
 Acceptance No. *04-0803-01*
 Expiration Date *12/09/2007*
 By *Helmut A. Miller*
 Miami Dade Product Control Division

GENERAL NOTES:

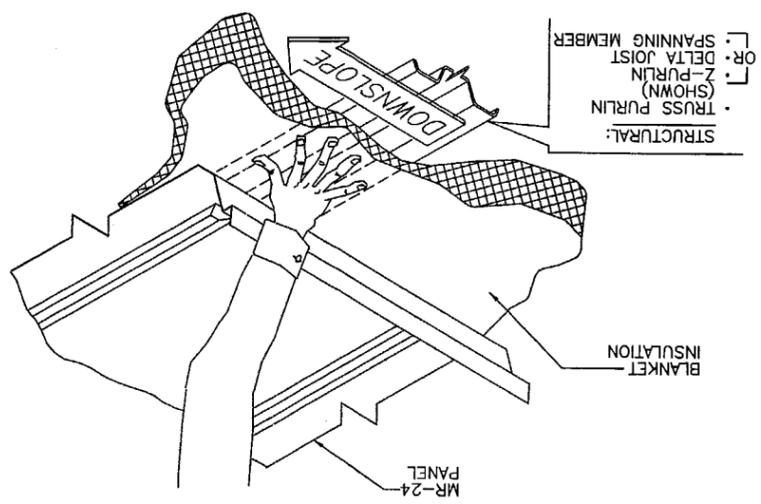
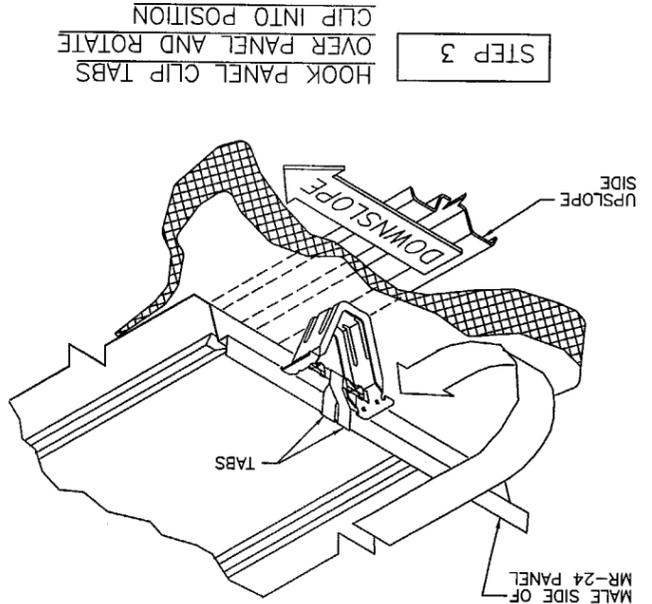
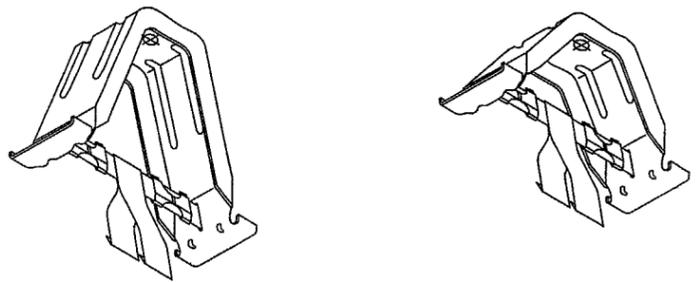
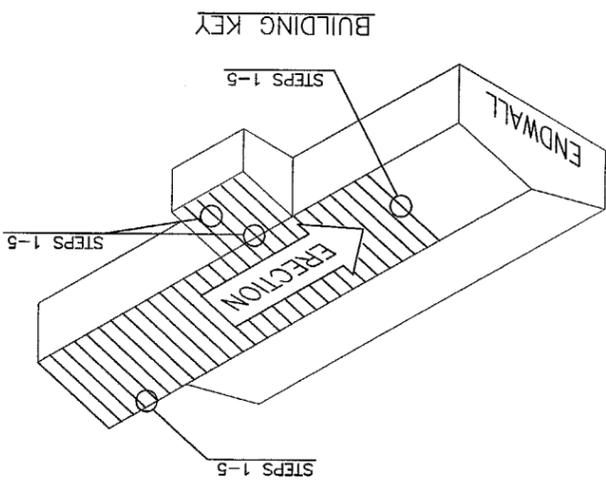
1. THIS STRUCTURAL ROOF PANEL SHALL BE DESIGNED IN ACCORDANCE WITH THE 2001 EDITION OF THE FLORIDA BUILDING CODE.
2. ALL BUTLER MR-24 ROOF PANELS SHALL BE 22 GAUGE (0.032" MIN.) GALVALUME STEEL SHEET CONFORMING TO ASTM A 792, COATING DESIGNATION AZ55, WITH A MINIMUM FY=50 KSI.
3. ALL PANEL CLIPS SHALL 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.

ROOF PANEL ATTACHMENT CLIP

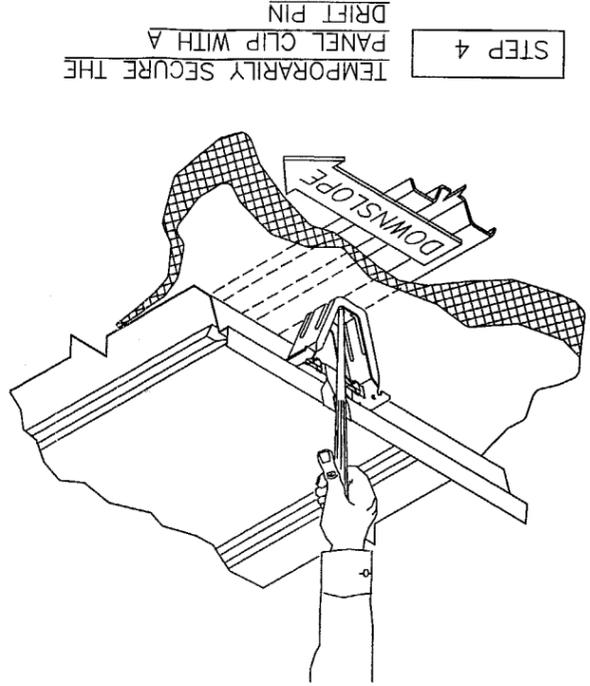
John Ernest Lamb
 7/25/04

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

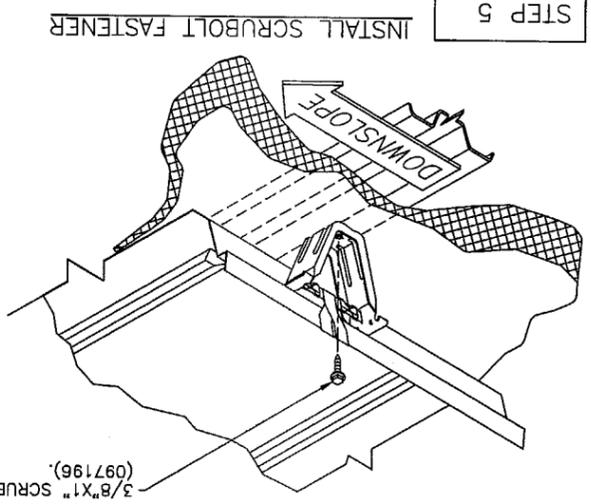
FIRST RELEASE	DATE	11/04/99
DRAWN	CHKD	M/JH
JRS		



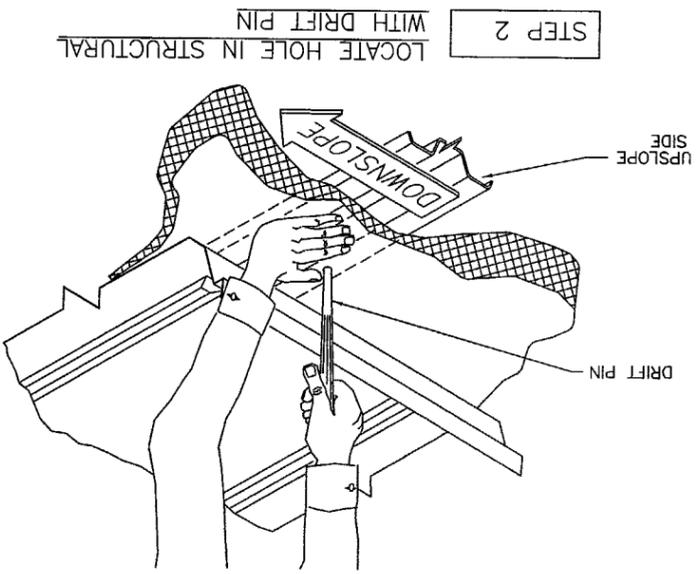
STEP 1
LOCATE STRUCTURAL FROM THE ADJACENT MR-24 PANEL. LOCATE THE STRUCTURAL UNDER THE BLANKET INSULATION.



STEP 4
TEMPORARILY SECURE THE PANEL CLIP WITH A DRIFT PIN



STEP 5
INSTALL SCRUBOLT FASTENER



STEP 2
LOCATE HOLE IN STRUCTURAL WITH DRIFT PIN

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

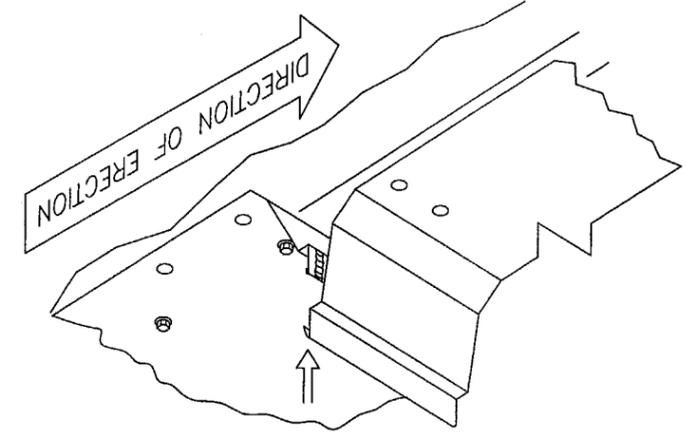
PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No. 04-0803.01
Expiration Date 12/09/2007
By *William H. Lamb*
Miami Trade Product Control
Division

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

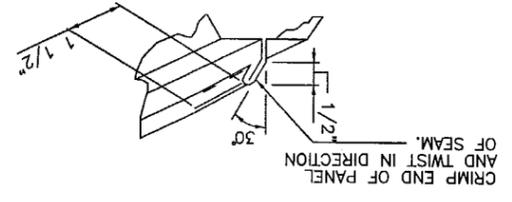
GROUP	02-030-06	REV.	B	1081386	00
DRAWING NUMBER					
DATE	11/04/99	REV.	B	1081386	00
GROUP	02-030-06				
MANUFACTURING COMPANY	BUTLER				
MR-24	MR-24 PANEL CLIP INSTALLATION				
ALL BUILDINGS	DADE COUNTY FLORIDA				

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

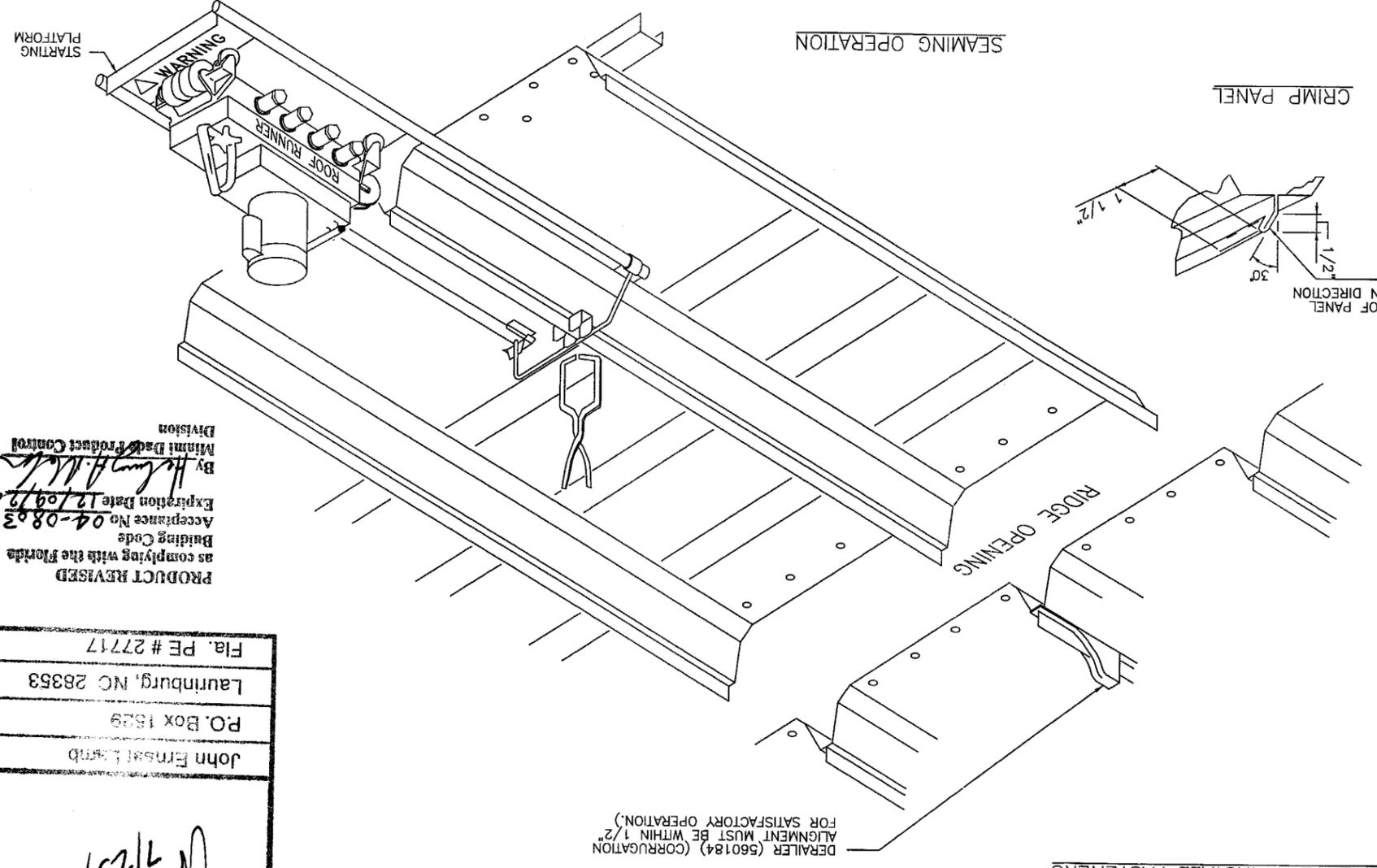
STEP 4 - NEXT PANEL



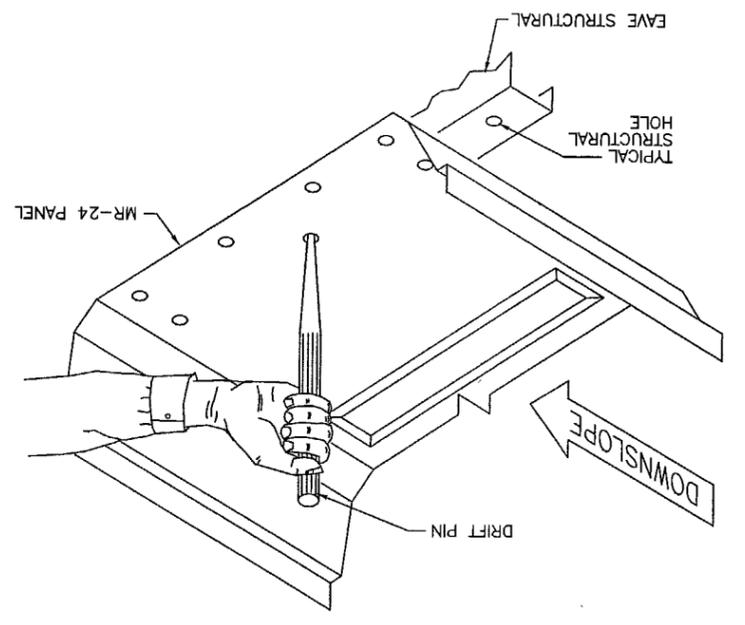
CRIMP PANEL



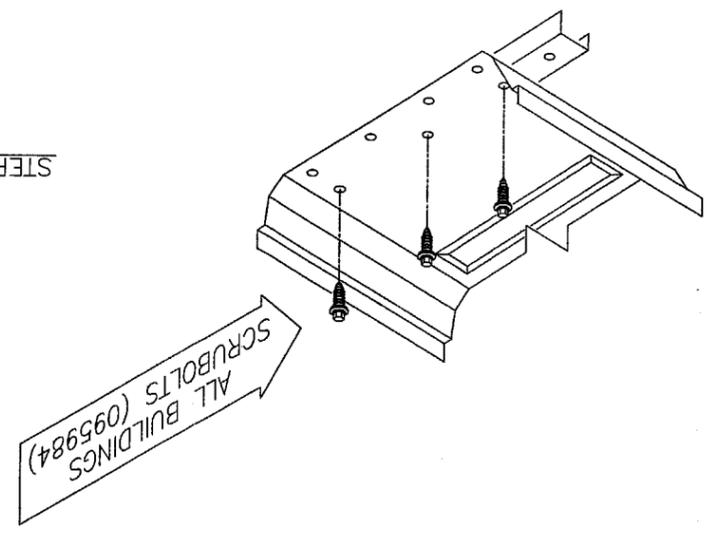
SEAMING OPERATION



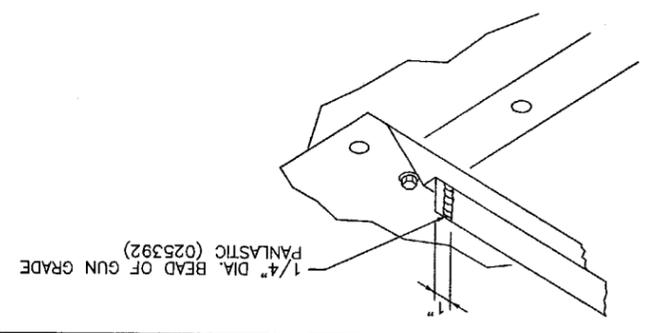
STEP 1 - LOCATE STRUCTURAL HOLE



STEP 2 - INSTALL FASTENERS



STEP 3 - INSTALL SEALANT



PRODUCT REVISED
 as complying with the Florida
 Building Code
 Acceptance No 04-0803-01
 Expiration Date 12/09/2007
 By *Henry A. M...*
 Minimum Date Product Control
 Division

John Ernsat Land
 John Ernsat Land
 P.O. Box 1829
 Laurinburg, NC 28353
 Fla. PE # 27717

MR-24	MR-24 PANEL INSTALLATION	ALL BUILDINGS
DATE	11/04/99	DRAWING NUMBER
GROUP	02-030-06	B
REV.	1081387	00

GROUP	02-030-06	B
REV.	1081387	00

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

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

[Handwritten Signature]
7/25/04

GROUP 02-030-06
DRAWING NUMBER B 1081388 00
REV. 1

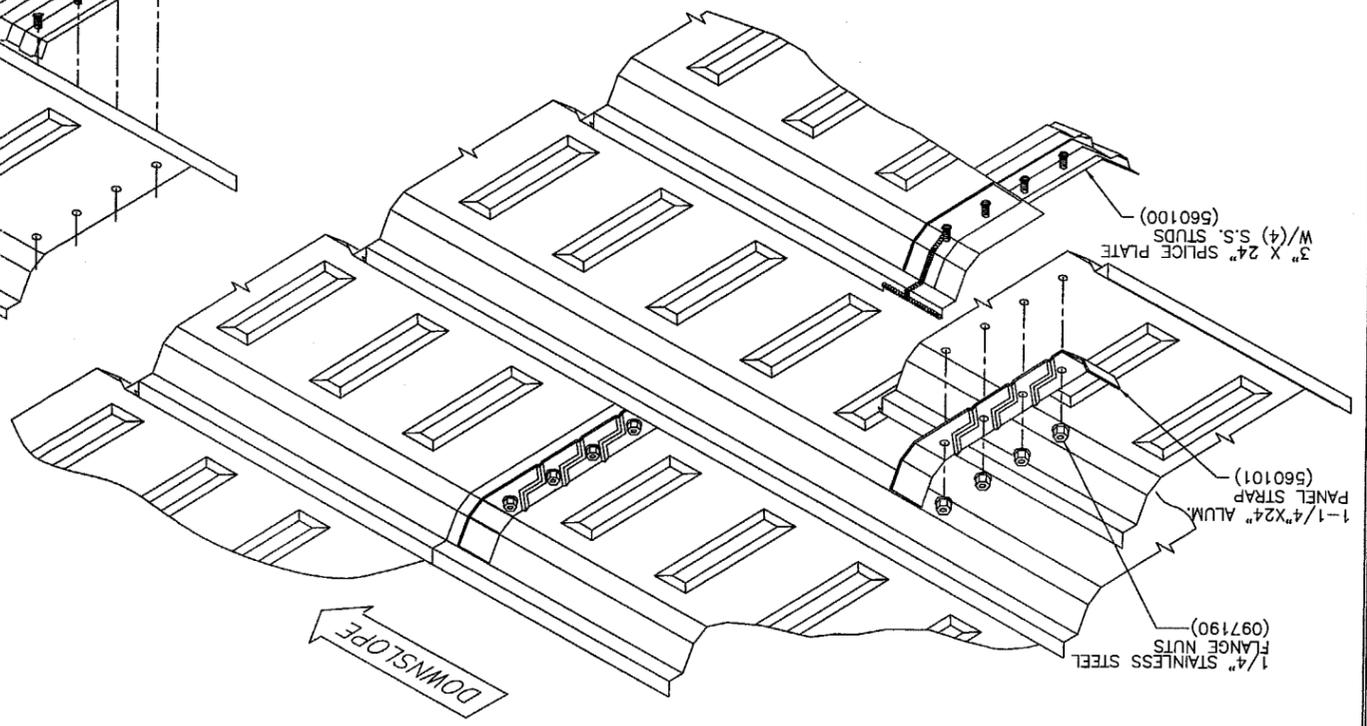
GROUP 02-030-06
DRAWING NUMBER B 1081388 00
REV. 1

MR-24 BUTLER MANUFACTURING COMPANY
MR-24 END LAP SPICE DADE COUNTY FLORIDA
ALL BUILDINGS

SHEET 6 OF 6

- 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.

PANEL END LAP SPICE

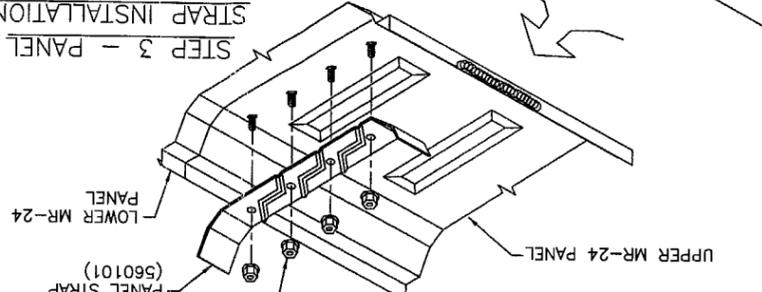


IMPORTANT:
COMPLETELY ASSEMBLE SPICE BEFORE SEAMING ADJACENT PANELS.

STEP 1 - SPICE PLATE INSTALLATION

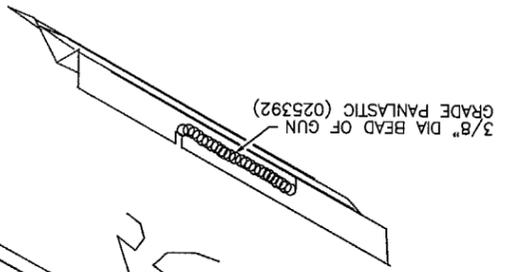
- ATTACH PANEL AT EAVE TO STRUCTURAL MEMBER.
- FOR EAVE OF INSTALLATION, SPICE PLATE (560100) CAN BE TEMPORARILY ATTACHED TO PANEL WITH (2) FLANGE NUTS BEFORE POSITIONING PANEL.

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



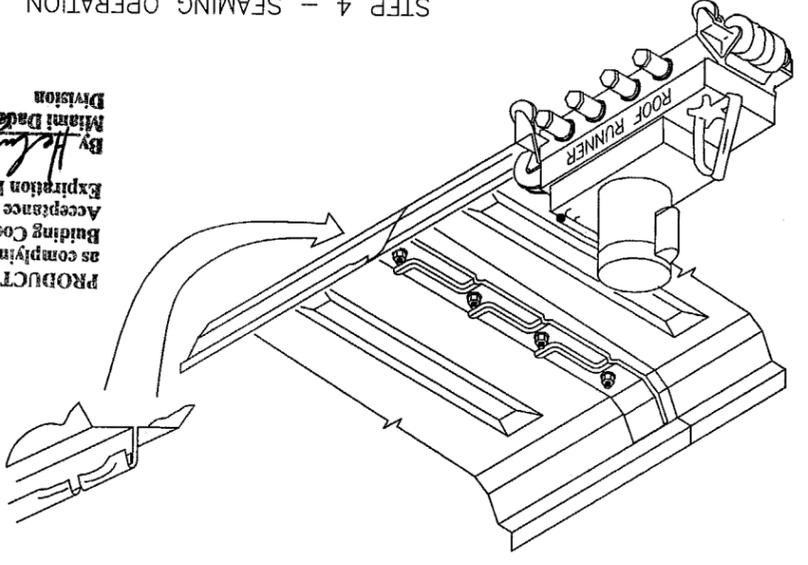
STEP 3 - PANEL STRAP INSTALLATION

- 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.



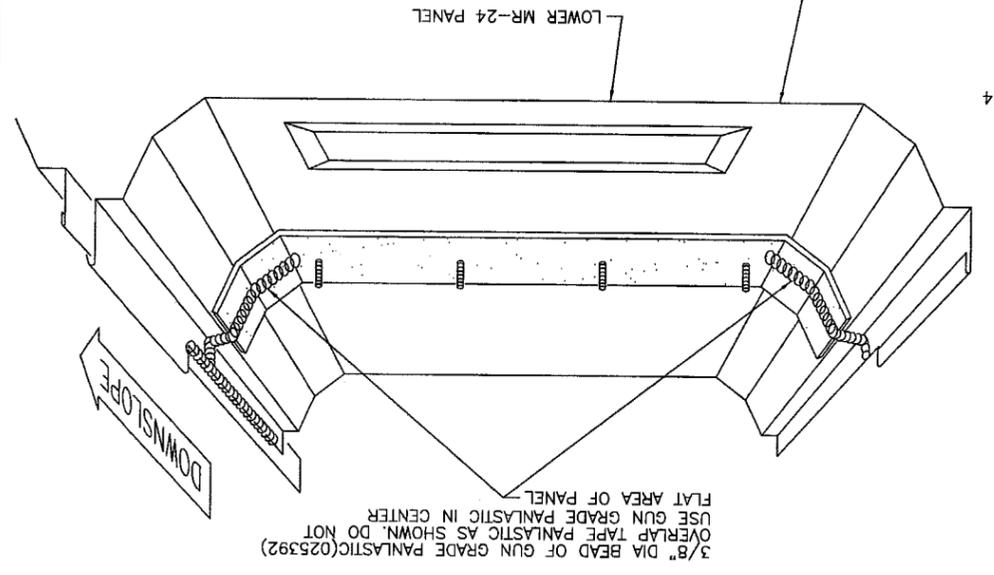
STEP 4 - SEAMING OPERATION

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



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.



3/8" DIA BEAD OF GUN GRADE PANLASTIC(025392) OVERLAP TAPE PANLASTIC AS SHOWN. DO NOT USE GUN GRADE PANLASTIC IN CENTER FLAT AREA OF PANEL.

PRODUCT REVISED as complying with the Florida Building Code Acceptance No. 04-0803.01
Expiration Date 12/09/2007
By *[Signature]*
Division: Miami Dade Product Control