



**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)

**Ceco Building Systems
2400 Highway 45 N
Columbus, MS 39705**

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: 0.025" (min.) Galvalume Steel Roof Panel

APPROVAL DOCUMENT: Drawing No. FLMAPROOF01, titled "MAP Roof Panel", sheets 1 through 8 of 8, dated July 07, 2004, prepared by Ceco Building Systems, signed and sealed by Gerald L. Hatch, P.E. on July 07, 2004, bearing the Miami-Dade County Product Control Approval stamp with the Notice of Acceptance number and approval 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 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
07/29/04

**NOA No 04-0122.18
Expiration Date: 07/29/2009
Approval Date: 07/29/2004
Page 1**

Ceco Building Systems

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. *Drawing No. FLMAPROOF01, titled " MAP Roof Panel ", sheets 1 through 8 of 8, dated July 07, 2004, prepared by Ceco Building Systems, signed and sealed by Gerald L. Hatch, P.E. on July 07, 2004.*

B. TESTS

1. *Test report # 0341-0925-03, by Hurricane Test Laboratory, Inc., dated November 24, 2003, per Florida Building Code TAS 201, TAS 202, & TAS 203, signed and sealed by Vinu J. Abraham, P.E.*

C. CALCULATIONS

1. *MAP wall panel load capacity calculations, 2 pages, dated December 29, 2003, by Duane S. Ellifritt, P.E., signed and sealed by Duane S. Ellifritt, P.E.*
2. *MAP wall panel load capacity calculations, 22 pages, dated December 23, 2003, by Gerald L. Hatch, P.E., signed and sealed by Gerald L. Hatch, P.E.*

D. QUALITY ASSURANCE

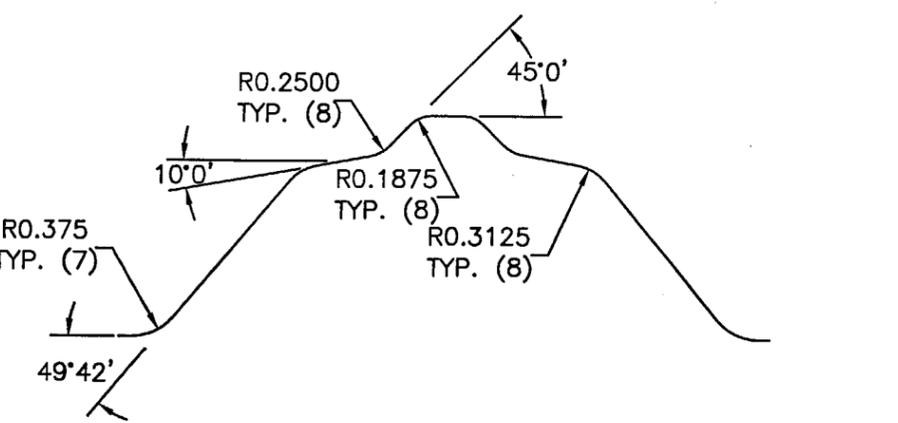
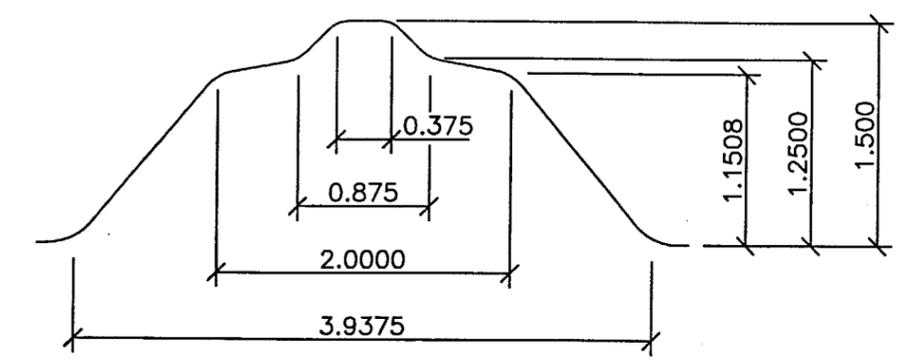
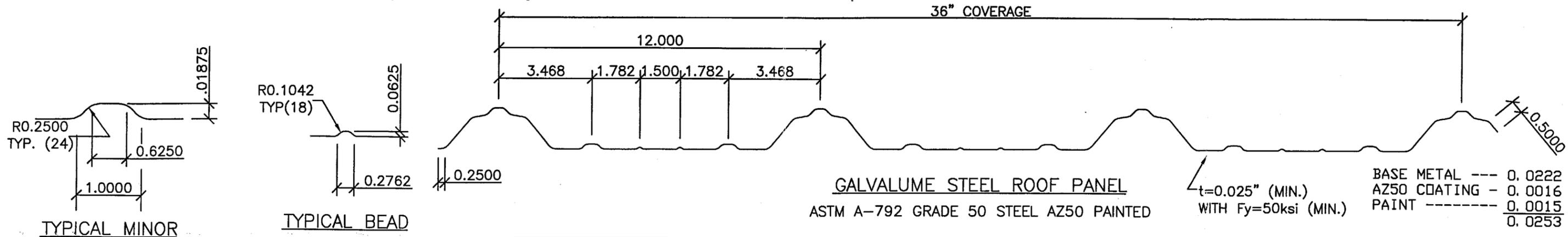
1. *By Miami-Dade County Building Code Compliance Office.*

E. MATERIAL CERTIFICATIONS

1. *Mill Certificate from United States Steel Corporation, dated September 04, 2003, with the Chemical and Structural properties of galvalume steel.*
2. *Tensile test report # 4AM-79, dated February 5, 2004, by QC Metallurgical, Inc., signed and sealed by Frank Grate, P.E.*



Helmy A. Makar, P. E.
Product Control Examiner
NOA No 04-0122.18
Expiration Date: 07/29/2009
Approval Date: 07/29/2004



Approved as complying with the Florida Building Code
 Date 07/29/2004
 NOA# 04-0122-18
 Miami Dade Product Control
 Division
 By Helmy A. Melon

NOTES:

- A.) This "MAP" Structural Roof Panel shown on this Product Approval Document has been designed in accordance with the 2001 Edition of the Florida Building Code. Design wind loads shall be determined as per section 1619 of the above mentioned code, for a basic wind speed of 146 m.p.h., and in accordance w/ ASCE 7-98 standard.
- B.) All steel sheet metal Roof Panels shall be 24 gauge (0.025" min.) and conform to structural quality ASTM A-792, Grade 50, AZ50, painted, Fy=50ksi minimum.
- C.) All screws to be Hex-Washer-Head, Self Drilling, Carbon Steel with 0.0005" minimum thickness zinc plating as manufactured by Atlas.
- D.) Installation of this Roof Panel shall be based on this Product Approval Document with NO deviation from the conditions detailed on this document.
- E.) Installation of this Roof Panel shall be onto purlins of 16 gauge (0.056 min. painted thickness) with fasteners as shown on this Product Approval Document.
- F.) This Product Approval Document will be considered invalid if modified.
- G.) Site specific projects shall be prepared by a Florida Registered Engineer or Architect which will become the professional of record (P.O.R.) for the project and who will be responsible for the proper use of this Product Approval Document.
- H.) The "MAP" Structural Roof Panel manufacturer's permanent label shall be placed at bottom of each panel. The label shall be one of the following:

Ceco Building Systems Columbus, MS Miami-Dade County Product Control Approved.	Ceco Building Systems Mount Pleasant, IA Miami-Dade County Product Control Approved.	Ceco Building Systems Rocky Mount, NC Miami-Dade County Product Control Approved.
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- J.) This 24 gauge (0.025" min.) "MAP" Roof Panel shall be used for roof construction only. Every "MAP" Roof Panel project shall be constructed using the same details shown on this drawing including:
 1. Details of all panel material characteristics and sections with dimensions and thickness.
 2. Assembly details including all connections and fastener diagram with size and location.
 3. Panel maximum design pressure for the roof field and end zones shall be equal to or less than the lowest pressure obtained from the panel allowables shown below.
- K.) The maximum positive design pressure for this 24 gauge (0.025" min.) "MAP" Roof Panel in the roof field, perimeter and end zones shall be the lowest pressure calculated based on the following panel allowable:
 1. Maximum allowable bending moment of panel at supports =140.00 lbs/ft.
 2. Maximum allowable bending moment of panel between supports =112.00 lbs/ft.
 3. EI value of panel =1,400,976 lbs-in²/ft.
 4. Maximum allowable deflection of the Roof panel =L/240.
 5. Maximum support reaction =308 lbs.
- L.) The maximum negative design pressure for this 24 gauge (0.025" min.) "MAP" Roof Panel in the roof field, perimeter and corner zone shall be the lowest pressure calculated based on the following panel allowable:
 1. Maximum allowable bending moment of panel at support =97.50 ft-lbs.
 2. Maximum allowable bending moment of panel between supports =78.0 ft-lbs.
 3. EI value of panel =764,810.0 lbs-in²/ft.
 4. Maximum allowable deflection of the roof panel =L/240.
 5. Maximum support reaction =366 lbs.

Maximum span of "MAP" Roof Panel for positive/negative pressure = 5.0ft.
 "MAP" Roof Panel has to be supported over three spans or more.

REVISIONS	BY	DATE	NOTES: THIS DRAWING IS NOT TO SCALE. MAP PANEL MANUFACTURED WITH TOOLING FROM "A.S.C. MACHINE TOOLS, INC." SPOKANE, WASHINGTON MARCH 30, 1995.	DRAWN BY	DATE	 Ceco Building Systems A Robertson Ceco Company	MAP ROOF PANEL PROFILE	DATE: 07/07/04
				CHECKED BY	DATE		DRAWING NUMBER	SHEET NO.
				APPROVED BY	DATE		FLMAPROOF01	1 OF 8

NOTE:

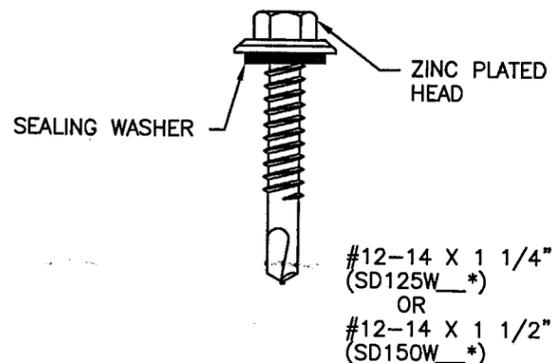
1. SEALED EAVE/PEAK FASTENER #12-14 x 1 1/4"
3 PER FOOT
ONE IN CENTER OF FLAT AND ONE
ADJACENT TO EACH MAJOR RIB
2. INTERMEDIATE FASTENER #12-14 x 1 1/4"
ONE PER FOOT
ADJACENT TO MAJOR RIB
3. ENDLAP FASTENER #12-14 x 1 1/4"
3 PER FOOT
ONE IN CENTER OF FLAT AND
ONE ADJACENT TO EACH MAJOR RIB
4. STITCH FASTENER 1/4-14 x 7/8"
12" ON CENTER MAXIMUM
5. SIDELAP MASTIC -
3/16" X 3/4" MASTIC
6. EAVE CLOSURE
SEALED EAVE - TOP, BOTTOM,
AND END JOINTS SEALED. WITH
3/32" X 1 1/2" MASTIC.
7. PEAK WITH RIDGE FLASHING
3/16" X 3/4" MASTIC TOP AND
BOTTOM OF CLOSURE.
8. TRIM FASTENER 1/4-14 x 7/8"
12" ON CENTER MAXIMUM
6" ON CENTER AT RIDGE FLASHING
9. RAKE FASTENER #12-14 x 1 1/4"
8" ON CENTER MAXIMUM

Approved as complying with the
Florida Building Code
Date 07/29/2004
NOA# 04-0122-18
Miami Dade Product Control
Division
By Heung A. Huh

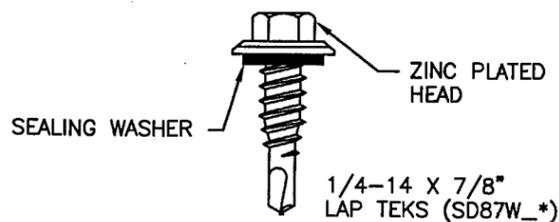
Handwritten signature and date:
7-7-04

   	REVISIONS	BY	DATE	NOTES: THIS DRAWING IS NOT TO SCALE. MAP PANEL MANUFACTURED WITH TOOLING FROM "A.S.C. MACHINE TOOLS, INC." SPOKANE, WASHINGTON MARCH 30, 1995.	DRAWN BY	DATE	 Ceco Building Systems A Robertson Ceco Company	MAP ROOF PANEL FASTENER USAGE	DATE:
					CHECKED BY	DATE		DRAWING NUMBER	07/07/04
					APPROVED BY	DATE		FLMAPROOF01	SHEET NO.
								2 OF 8	

STANDARD ROOF FASTENERS
(CARBON STEEL HEADS, ZINC PLATED)



STRUCTURAL FASTENER
(SELF-DRILLING SCREWS)



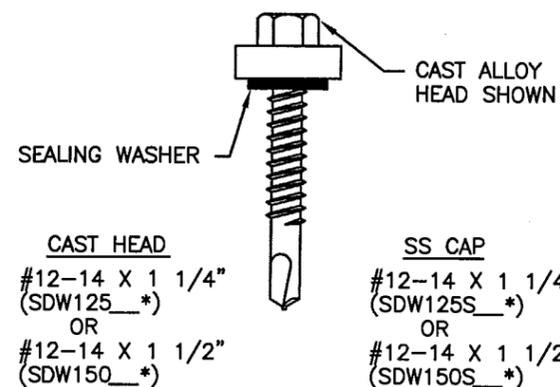
STITCH AND TRIM FASTENER
(SELF-DRILLING SCREWS)

* ADD LETTER DESIGNATION TO INDICATE COLOR (SEE COLOR CHART ON PAGE DM6.14).
ADD "G" IF NO COLOR (GALV.).

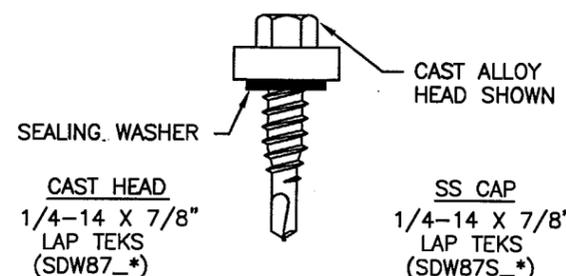
STANDARD ROOF SCREWS ARE CARBON STEEL WITH 0.0005 MINIMUM THICKNESS ZINC PLATING PLUS POLYMER COATING FOR LONG TERM CORROSION RESISTANCE. PAINTING OF HEADS IS OPTIONAL. SCREWS HAVE 5/16" HEX-WASHER-HEAD (HWH) WITH WASHER FACE UNDERCUT FOR SEALING WASHERS. SEALING WASHERS ARE EITHER PVC OR EPDM.

STRUCTURAL FASTENERS 1 1/4" LONG ARE USED WITH BLANKET INSULATION THROUGH 4" THICK; 1 1/2" LONG FASTENERS ARE USED WITH INSULATION GREATER THAN 4" THICK THROUGH 6" THICK. STRUCTURAL FASTENERS 1 7/8" LONG (STAND-OFF SCREWS) ARE USED WITH THERMAL BLOCKS AND/OR RIGID BOARD INSULATION UP TO 1" THICK. LONGER STAND-OFF SCREWS MUST BE ORDERED FOR THICKER RIGID BOARD INSULATION.

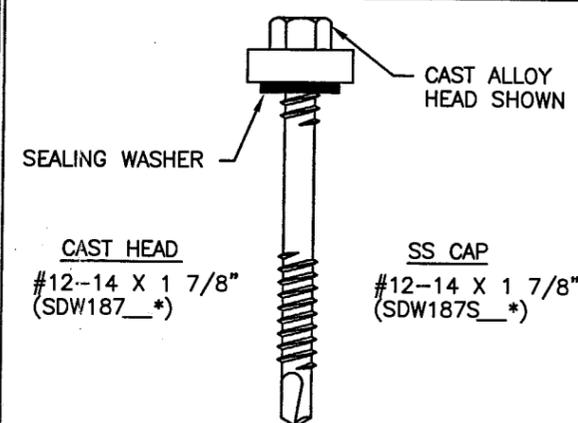
OPTIONAL ROOF FASTENERS
"EXTENDED LIFE" HEADS FOR WARRANTED ROOFS



STRUCTURAL FASTENER
(SELF-DRILLING SCREWS)



STITCH FASTENER
(SELF-DRILLING SCREWS)



STRUCTURAL FASTENER
(SELF-DRILLING STAND-OFF SCREWS)

* ADD LETTER DESIGNATION TO INDICATE COLOR (SEE COLOR CHART ON PAGE DM6.14).
ADD "G" IF NO COLOR (GALV.).

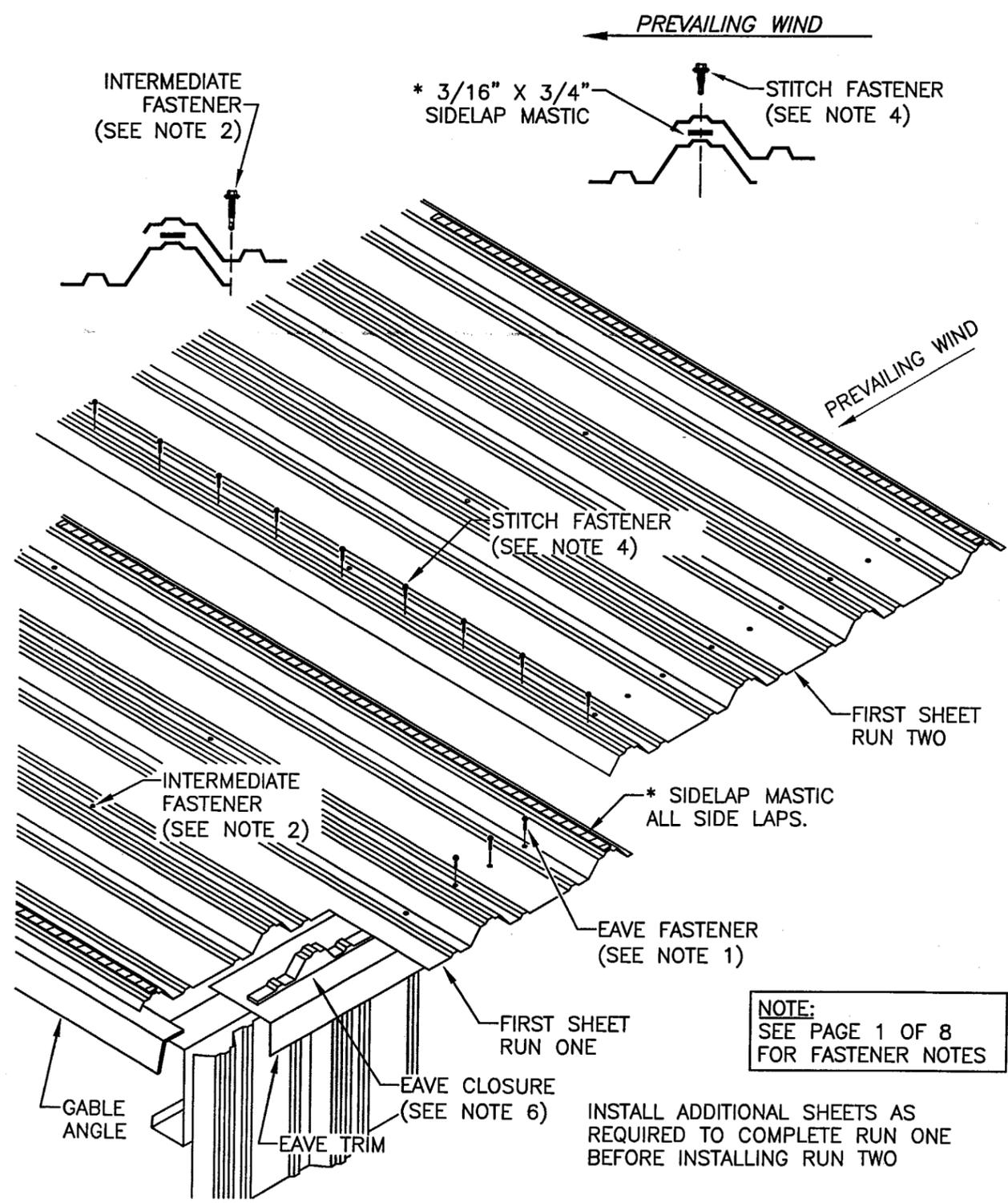
OPTIONAL ROOF SCREWS ARE CARBON STEEL WITH "EXTENDED LIFE" HEADS WHICH CAN BE EITHER AN ALLOY (ZN/AL) CASTING OR A STAINLESS STEEL CAP. THIS TYPE SCREW IS REQUIRED FOR 20 YEAR ROOF WARRANTIES. CAST ALLOY HEADS ARE TO BE USED UNLESS THE CUSTOMER SPECIFICALLY SPECIFIES STAINLESS STEEL CAPS. PAINTING OF HEADS IS OPTIONAL. SCREWS HAVE 5/16" HEX-WASHER-HEAD (HWH) WITH WASHER FACE UNDERCUT FOR SEALING WASHERS. SEALING WASHERS ARE EPDM.

STRUCTURAL FASTENERS 1 1/4" LONG ARE USED WITH BLANKET INSULATION THROUGH 4" THICK; 1 1/2" LONG FASTENERS ARE USED WITH INSULATION GREATER THAN 4" THICK THROUGH 6" THICK. STRUCTURAL FASTENERS 1 7/8" LONG (STAND-OFF SCREWS) ARE USED WITH THERMAL BLOCKS AND/OR RIGID BOARD INSULATION UP TO 1" THICK. LONGER STAND-OFF SCREWS MUST BE ORDERED FOR THICKER RIGID BOARD INSULATION.

Approved as complying with the
Florida Building Code
Date 07/29/2004
NOAW 04-0122.18
Miami Dade Product Control
Division
By Helmuth H. Meyer

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7-7-04

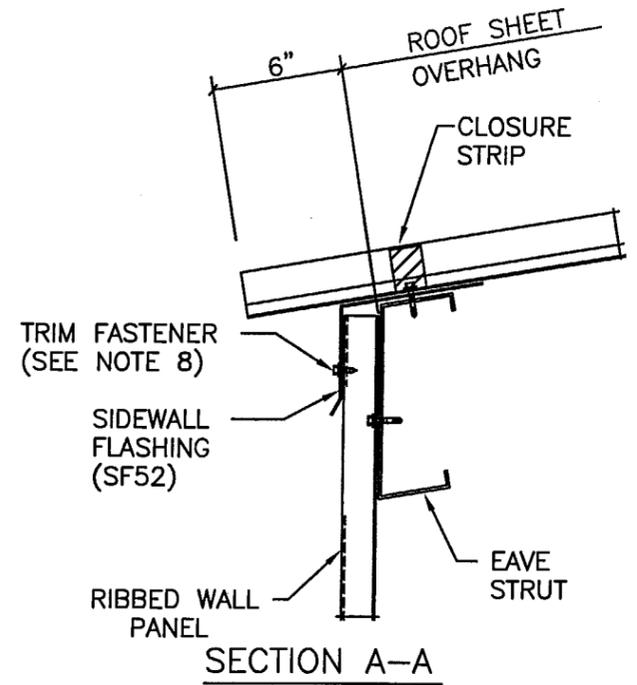
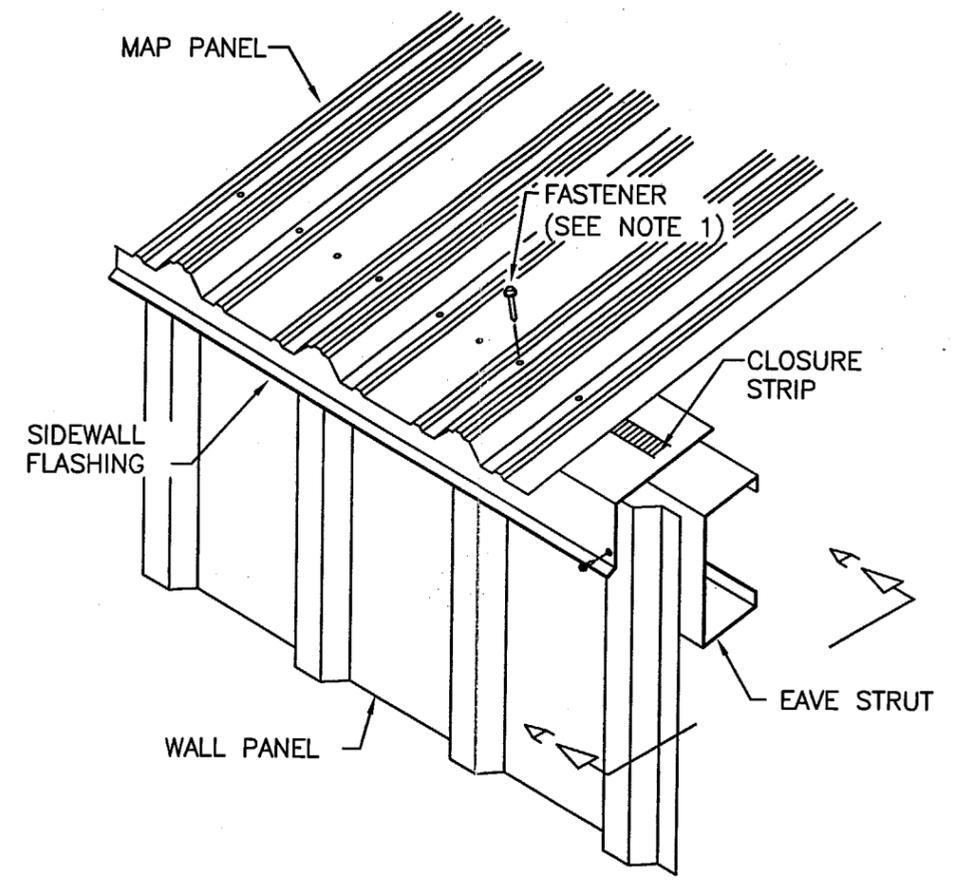
	REVISIONS	BY	DATE	NOTES: THIS DRAWING IS NOT TO SCALE. MAP PANEL MANUFACTURED WITH TOOLING FROM "A.S.C. MACHINE TOOLS, INC." SPOKANE, WASHINGTON MARCH 30, 1995.	DRAWN BY	DATE	Ceco Building Systems A Robertson Ceco Company	MAP ROOF PANEL FASTENERS	DATE: 07/07/04
					CHECKED BY	DATE		DRAWING NUMBER	SHEET NO.
					APPROVED BY	DATE		FLMAPROOF01	3 OF 8



NOTE:
SEE PAGE 1 OF 8
FOR FASTENER NOTES

INSTALL ADDITIONAL SHEETS AS
REQUIRED TO COMPLETE RUN ONE
BEFORE INSTALLING RUN TWO

NOTE: INSULATION NOT
SHOWN FOR CLARITY



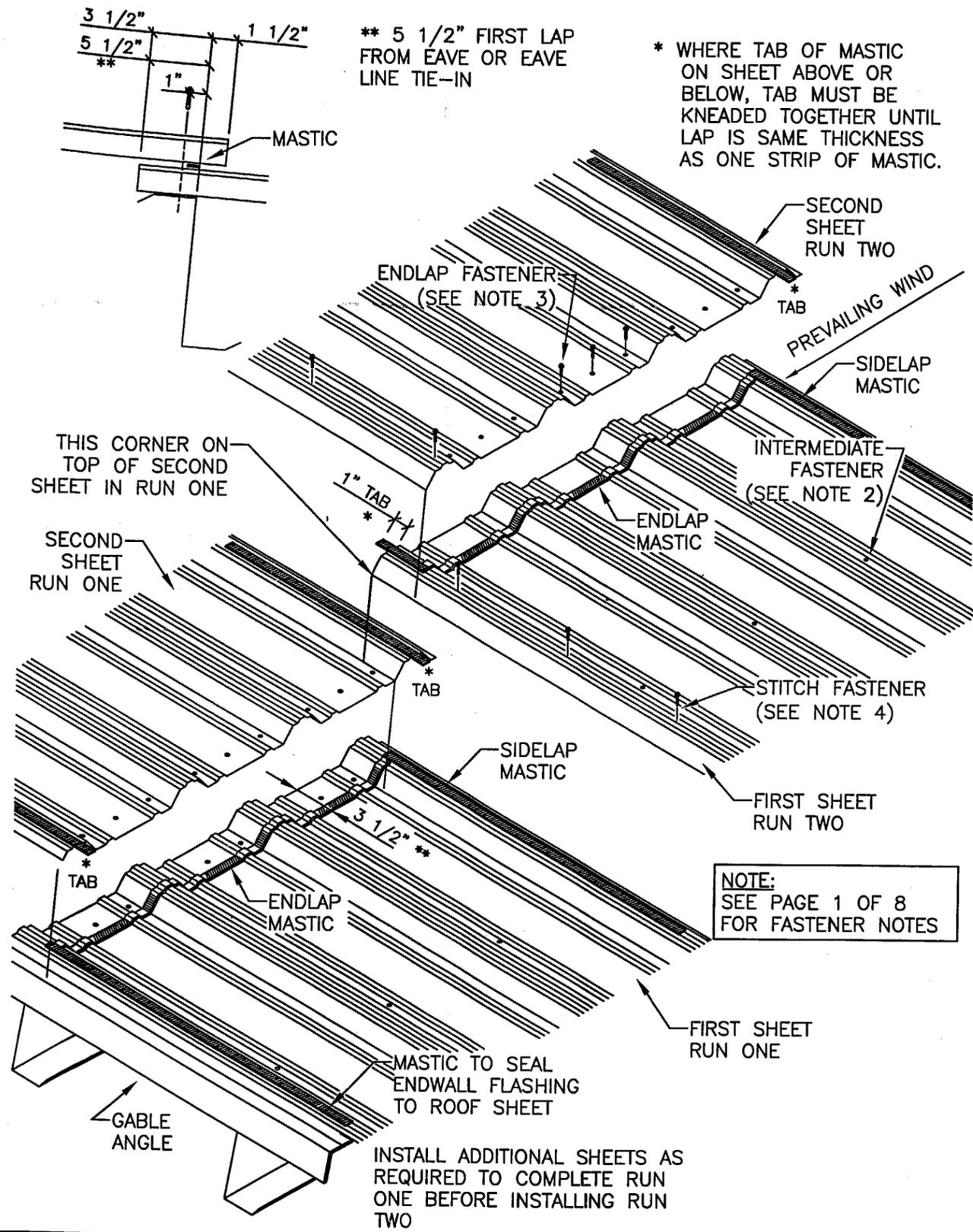
NOTE:
SEALED EAVE FASTENER
SEALED EAVE - 3 PER FOOT
ONE IN CENTER OF FLAT AND ONE
ADJACENT TO EACH MAJOR RIB

EAVE CLOSURE
SEALED EAVE - TOP, BOTTOM,
AND END JOINTS SEALED. WITH
3/32" X 1 1/2" MASTIC.

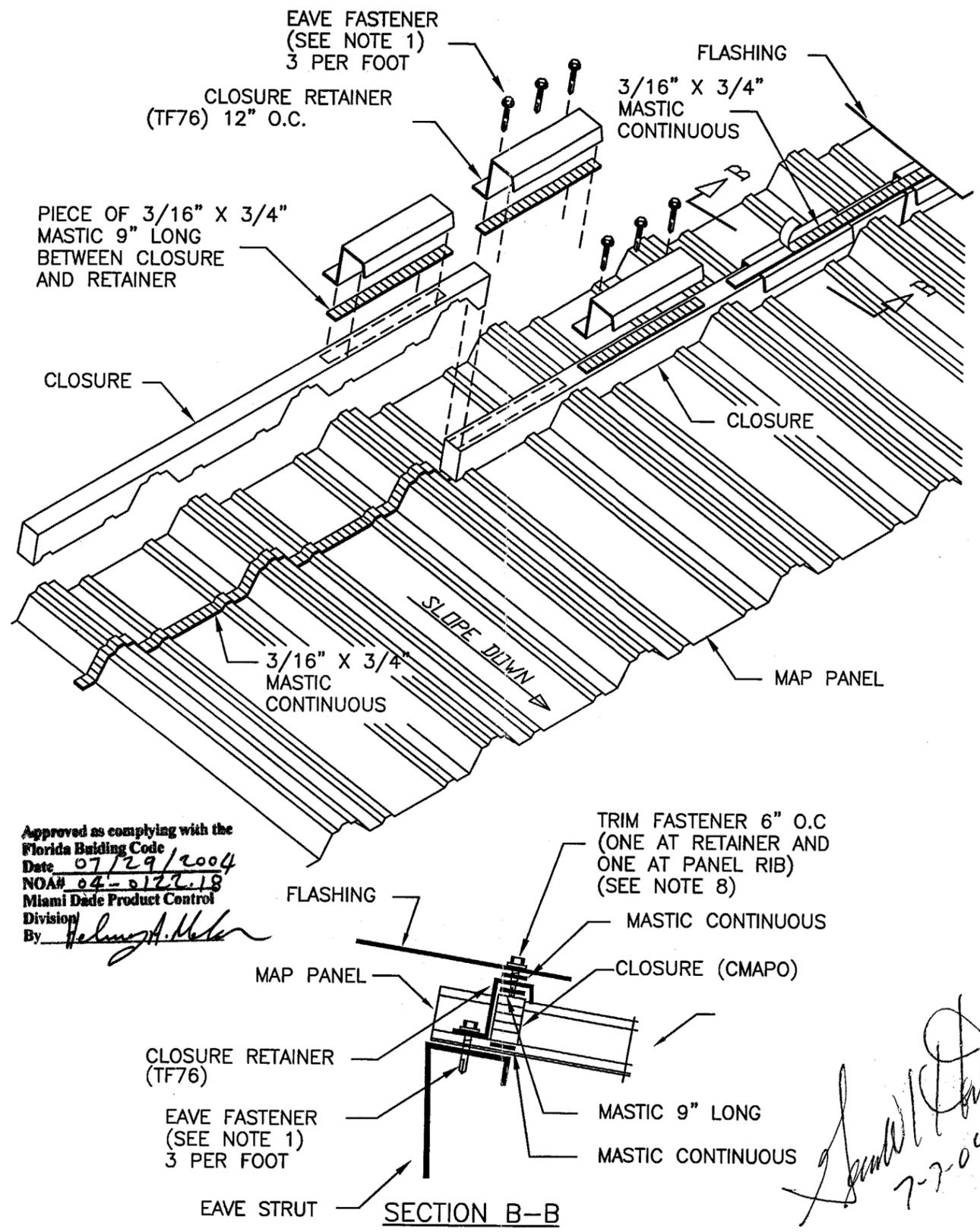
Approved as complying with the
Florida Building Code
Date 07/29/2004
NOA# 04-0122.18
Miami Dade Product Control
Division
By *Helmut Miller*

Samuel Katz
7-7-04

	REVISIONS	BY	DATE	NOTES: THIS DRAWING IS NOT TO SCALE. MAP PANEL MANUFACTURED WITH TOOLING FROM "A.S.C. MACHINE TOOLS, INC." SPOKANE, WASHINGTON MARCH 30, 1995.	DRAWN BY	DATE	MAP ROOF PANEL EAVE DATE: 07/07/04		
					CHECKED BY	DATE		DRAWING NUMBER FLMAPROOF01	
					APPROVED BY	DATE			SHEET NO. 4 OF 8
				Ceco Building Systems A Robertson Ceco Company					



NOTE:
SEE PAGE 1 OF 8
FOR FASTENER NOTES



Approved as complying with the
Florida Building Code
Date 07/29/2004
NOAH 04-0122.18
Miami Dade Product Control
Division
By *Helmut A. Moler*

7-7-04

REVISIONS	BY	DATE

NOTES:
THIS DRAWING IS NOT TO SCALE.
MAP PANEL MANUFACTURED WITH
TOOLING FROM "A.S.C. MACHINE
TOOLS, INC." SPOKANE, WASHINGTON
MARCH 30, 1995.

DRAWN BY	DATE
CHECKED BY	DATE
APPROVED BY	DATE

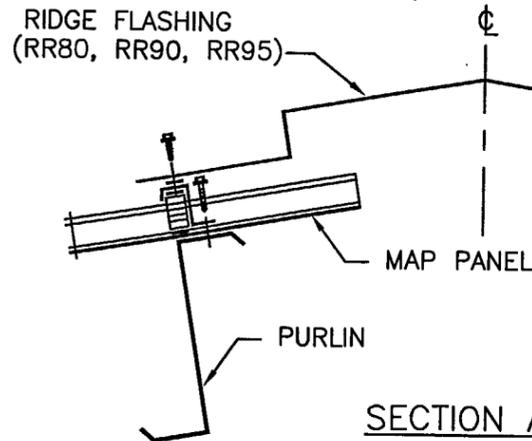
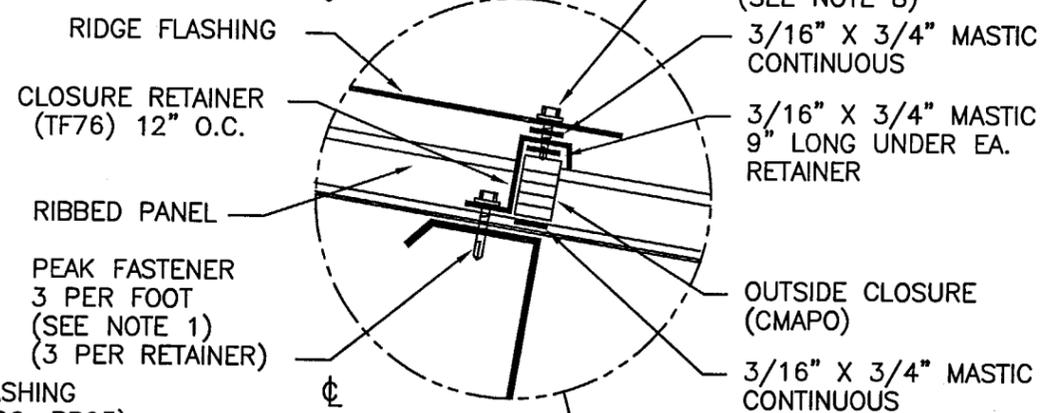
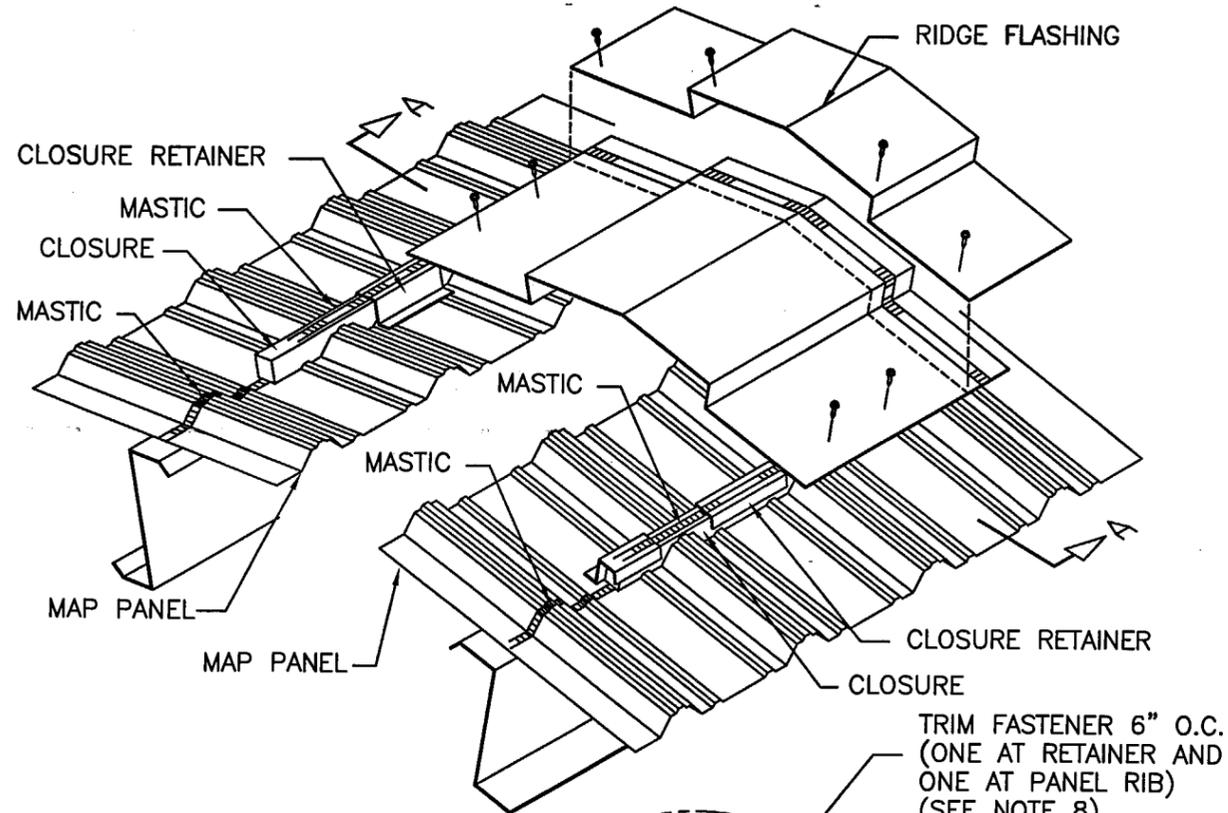


MAP ROOF PANEL ENDLAPS
AND HIGH SIDE SEALING

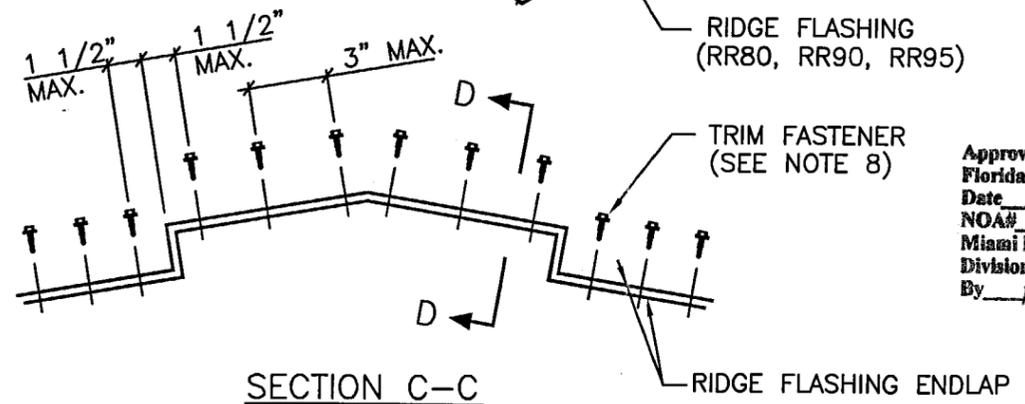
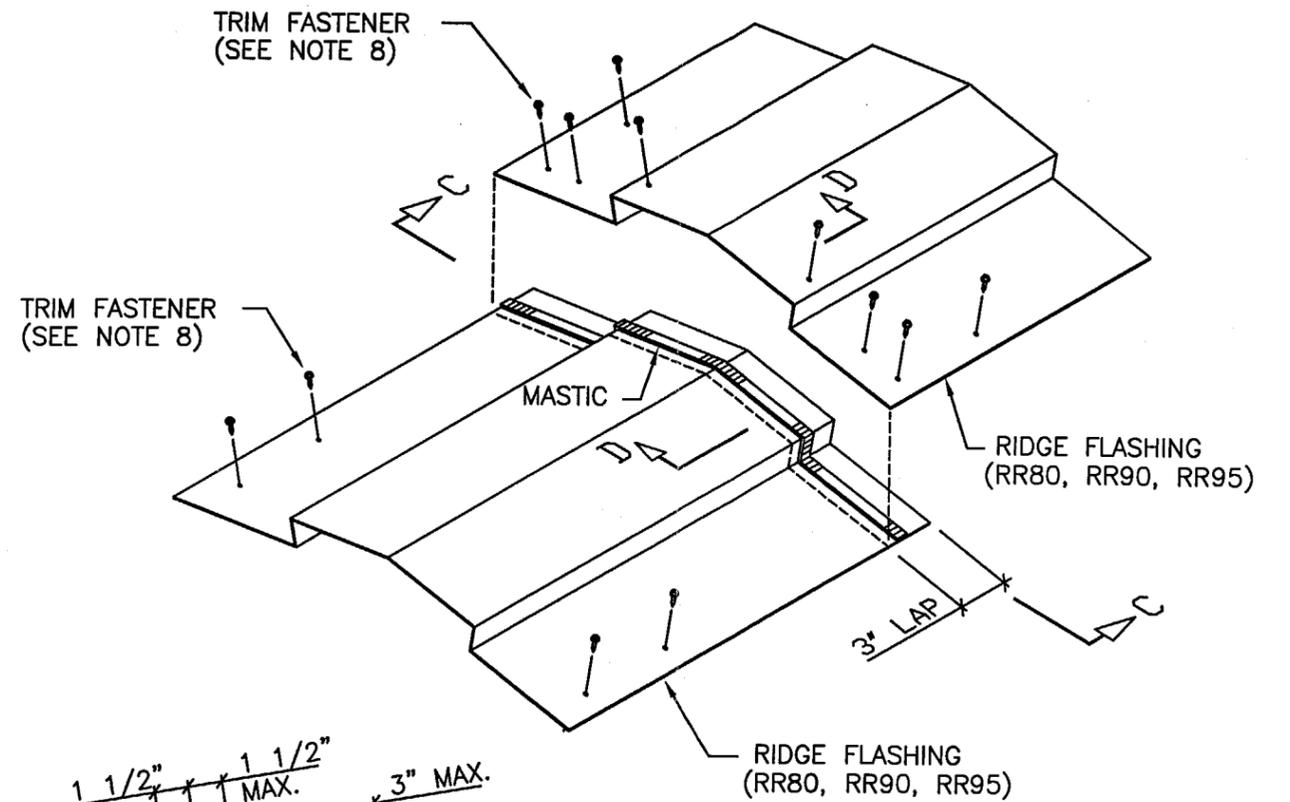
DRAWING NUMBER
FLMAPROOF01

DATE:
07/07/04

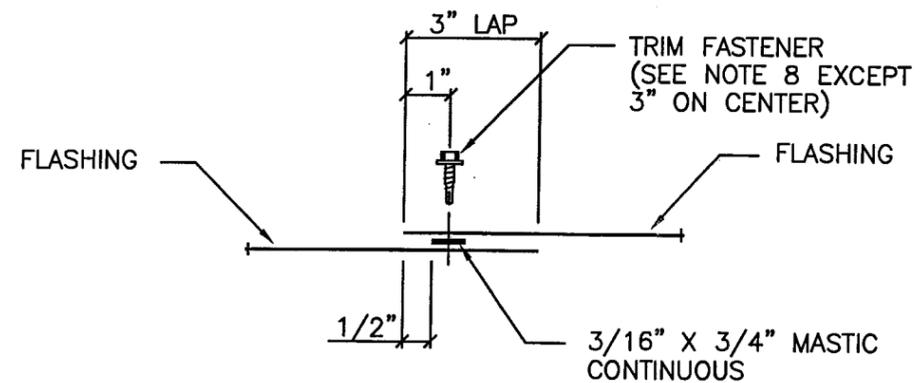
SHEET NO.
5 OF 8



SECTION A-A



SECTION C-C



SECTION D-D

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Florida Building Code
Date 07/29/2004
NOA# 04-0127-18
Miami Dade Product Control
Division
By Helmut A. Weber

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7-7-04

REVISIONS	BY	DATE

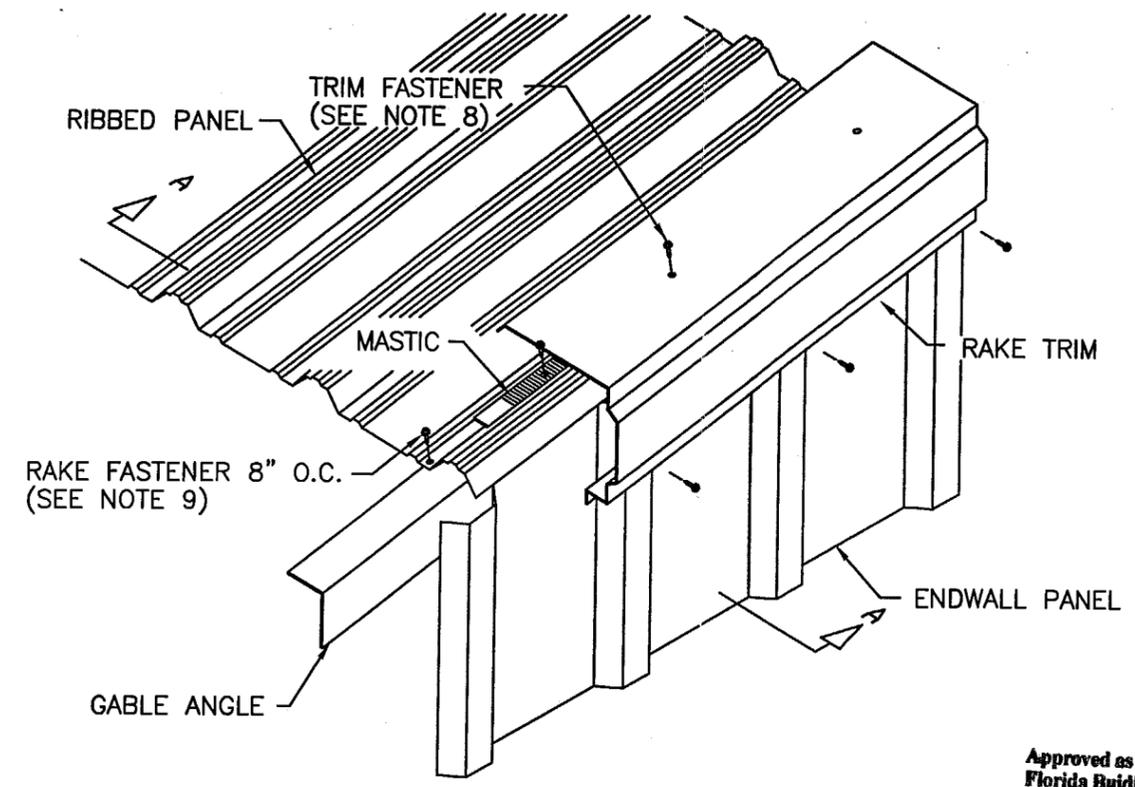
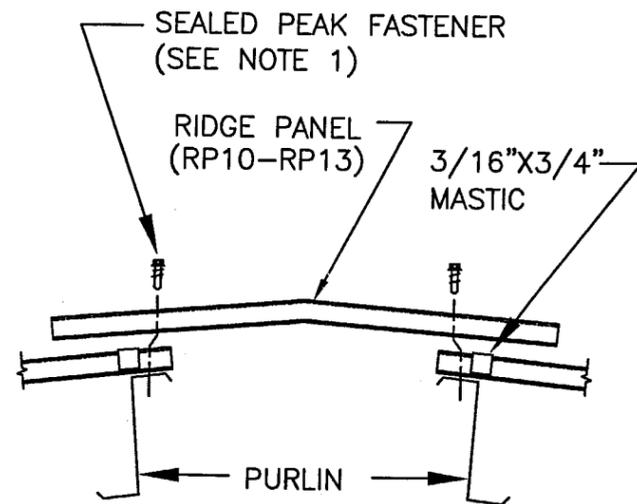
NOTES:
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MAP PANEL MANUFACTURED WITH
TOOLING FROM "A.S.C. MACHINE
TOOLS, INC." SPOKANE, WASHINGTON
MARCH 30, 1995.

DRAWN BY	DATE
CHECKED BY	DATE
APPROVED BY	DATE

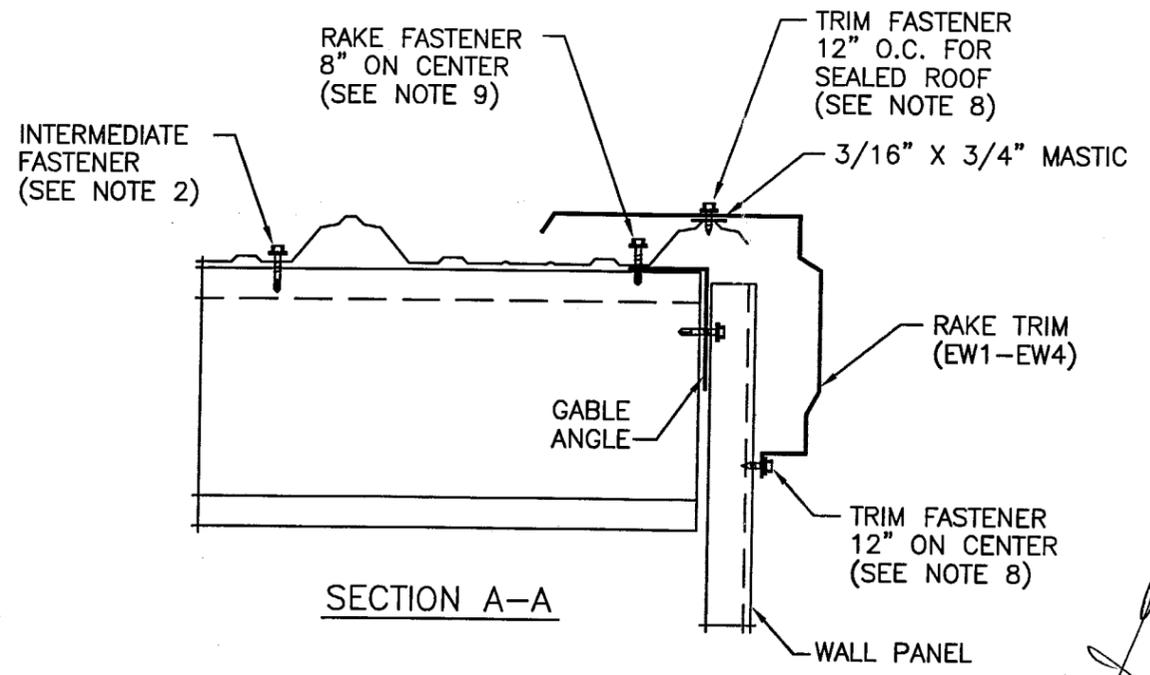
Ceco Building Systems
A Robertson Ceco Company

MAP ROOF PANEL RIDGE FLASHING	DATE: 07/07/04
DRAWING NUMBER FLMAPROOF01	SHEET NO. 6 OF 8

PEAK DETAIL
(MAP ROOF)
(WITH RIDGE PANEL)



Approved as complying with the
Florida Building Code
Date 07/29/2004
NOA# 04-0122.1B
Miami Dade Product Control
Division
By Helmut A. Miller



Helmut A. Miller
7-7-04

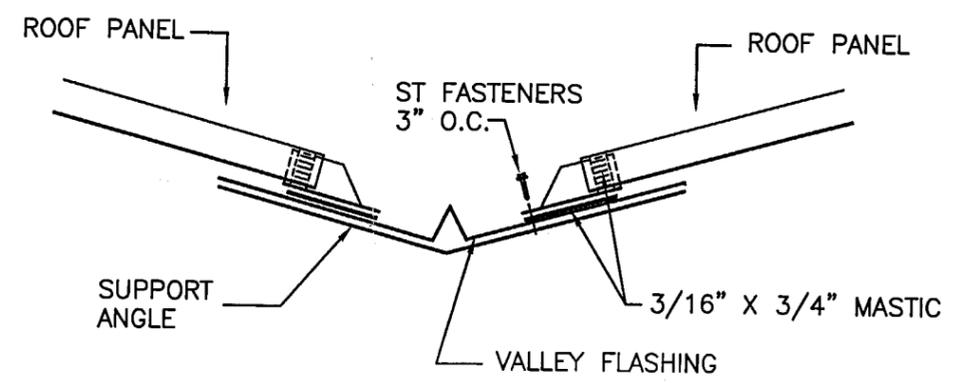
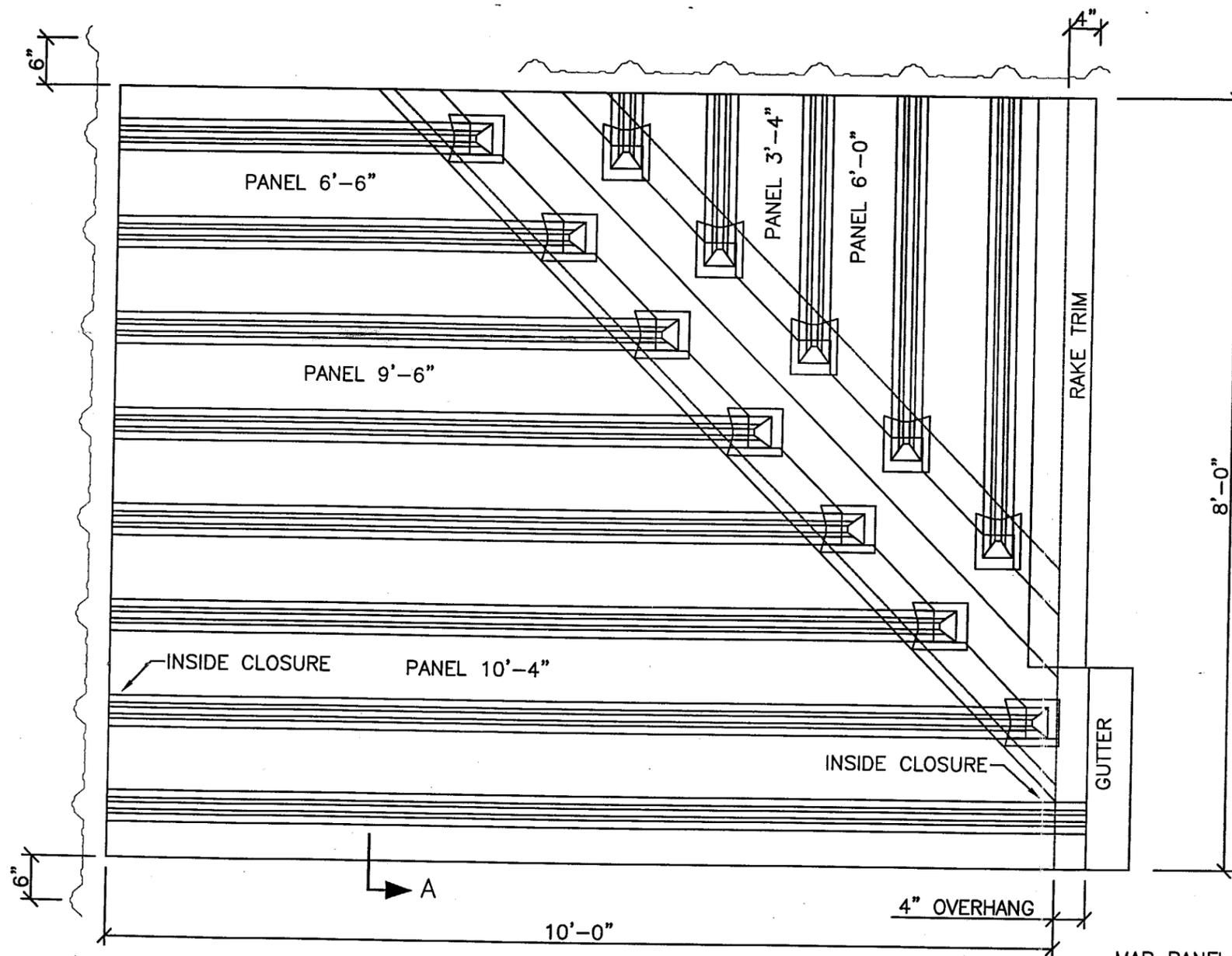
REVISIONS	BY	DATE

NOTES:
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MAP PANEL MANUFACTURED WITH
TOOLING FROM "A.S.C. MACHINE
TOOLS, INC." SPOKANE, WASHINGTON
MARCH 30, 1995.

DRAWN BY	DATE
CHECKED BY	DATE
APPROVED BY	DATE

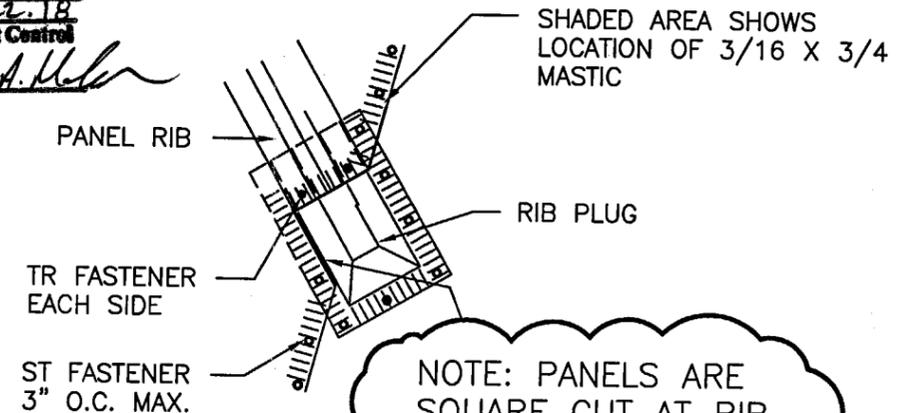
Ceco Building Systems
A Robertson Ceco Company

MAP ROOF PANEL PEAK AND RAKE	DATE: 07/07/04
DRAWING NUMBER FLMAPROOF01	SHEET NO. 7 OF 8

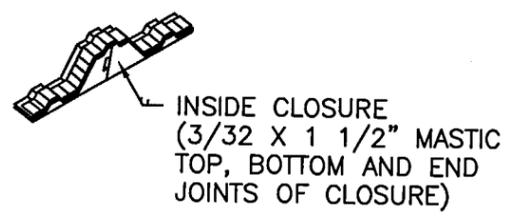


SECTION THRU VALLEY

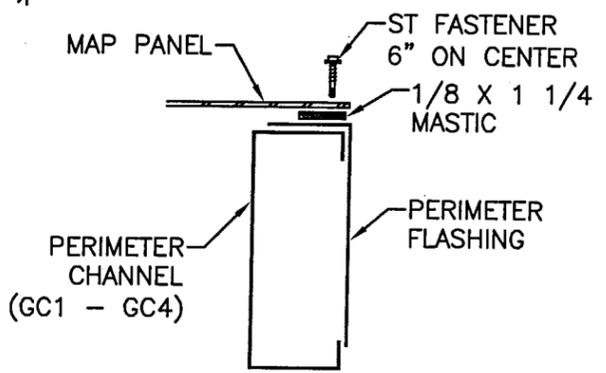
Approved as complying with the
 Florida Building Code
 Date 07/29/2004
 NOAH 04-0122-18
 Miami Dade Product Control
 Division
 By *Helmut A. Heller*



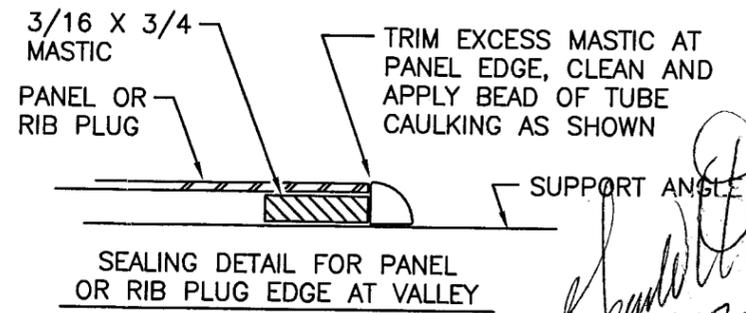
NOTE: PANELS ARE SQUARE CUT AT RIB PLUGS ADD STITCH SCREW EACH SIDE OF PLUG



- NOTE:
- 1 FASTENERS ONE PER FOOT ADJACENT TO MAJOR RIB AT PURLINS (Z1 AND Z2)
 - 2 STITCH FASTENERS 15" ON CENTER
 - 3 MASTIC AT ALL SIDELAPS



SECTION A



Handwritten signature and date: 7-7-04

REVISIONS	BY	DATE	NOTES:	DRAWN BY	DATE
			THIS DRAWING IS NOT TO SCALE. MAP PANEL MANUFACTURED WITH TOOLING FROM "A.S.C. MACHINE TOOLS, INC." SPOKANE, WASHINGTON MARCH 30, 1995.	CHECKED BY	DATE
				APPROVED BY	DATE



MAP ROOF PANEL VALLEY	DATE: 07/07/04
DRAWING NUMBER FLMAPROOF01	SHEET NO. 8 OF 8