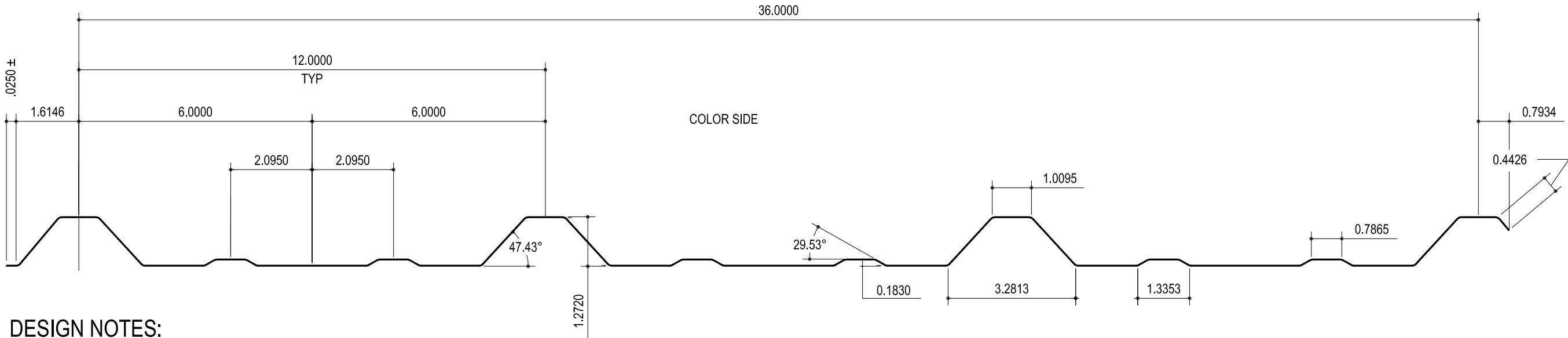




DESIGN NOTES:

- THIS ROOF PANEL IS DESIGNED FOR SPANS UP TO 5'-0" MAXIMUM
- THE R-PANEL (RPR24), WHEN UTILIZED AS A ROOF PANEL, IS COMPLIANT WITH THE FLORIDA BUILDING CODE 2023 EDITION.
- DEFLECTION SHALL BE LIMITED TO L/180.
- THIS ROOF PANEL IS APPROVED FOR GRAVITY (POSITIVE) PRESSURE OF 85.8 PSF.
- THIS ROOF PANEL IS APPROVED FOR UPLIFT (NEGATIVE) PRESSURE AS SHOWN IN THE TABLE BELOW. FOR PANEL SPANS BETWEEN 2'-0" AND 5'-0" MAXIMUM UPLIFT PRESSURE CAN BE DETERMINED BY INTERPOLATION.

MAXIMUM PANEL SPAN	MAXIMUM UPLIFT PRESSURE (Psf)
5'-0"	63.7
4'-6"	75.1
4'-0"	84.5
3'-6"	96.6
3'-0"	112.7
2'-6"	135.2
2'-0"	169.0

GENERAL NOTES

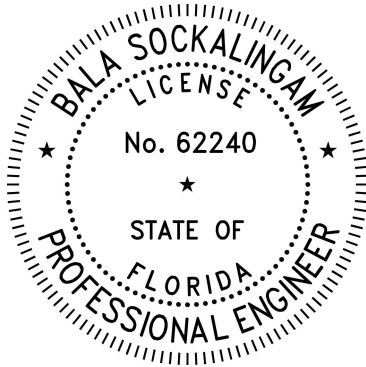
- ALL DIMENSIONS ARE $\pm 1/32"$ (U.N.) EXCEPT TOLERANCE DIMENSIONS.
- ALL ANGLES $\pm 2^\circ$ (U.N.)
- COIL WIDTH = 42.75".
- MATERIAL = 24 GA., (0.023" MIN.) MINIMUM YIELD 80 KSI (TESTED 109.8 KSI)
- MINIMUM ALLOWABLE ROOF SLOPE 1/2 TO 12

Tolerance Standards for Thickest Metal:
* Accumulation— (+ or -) 1/16 in.
Depth— (+ or -) 1/32 in.
Radii— (+ or -) 0.02 in.
Angles— (+ or -) 2 degrees
Camber— 1/8 in. in 10 ft.
Ski— 1/8 in. in 10 ft.
Dive— 1/8 in. in 10 ft.
*Net Variation for Combined Dimensions

This item has been digitally signed and sealed by Bala Sockalingam, PE, on the date indicated.

Printed copies of this document are not considered signed and sealed and this signature must be verified on any electronic copies.

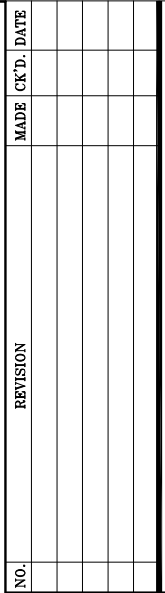
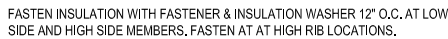
[Handwritten Signature]



2024.12.20
10:27:06 -06'00'

R-PANEL CROSS-SECTION

REVISION		MADE	CK'D.	DATE
No.				
R-PANEL				
ENGINEER'S NAME:		BALA SOCKALINGAM Ph.D., P.E.		
ENGINEER'S STATE REGISTRATION NUMBER:		FL 62240		
SCALE: NOT TO SCALE	DATE	12-09-24		
DRAWN BY: BSS	CHECKED BY: SLP	12-09-24		
DESIGN APP'D. BY:	ISSUED DATE:			
NUCOR BUILDING SYSTEMS		200 WHETSTONE RD. SWANSEA, SC 29160 PHONE: (803) 568-2100 FAX: (803) 568-2121		
DRAWING #: D2857		Pg. 1 of 5		REVISION NUMBER 0



DOWN SLOPE

1"

4"

ROOF STRUCTURAL FASTENER(S)

1-1/2" MASTIC AT PANEL LAP

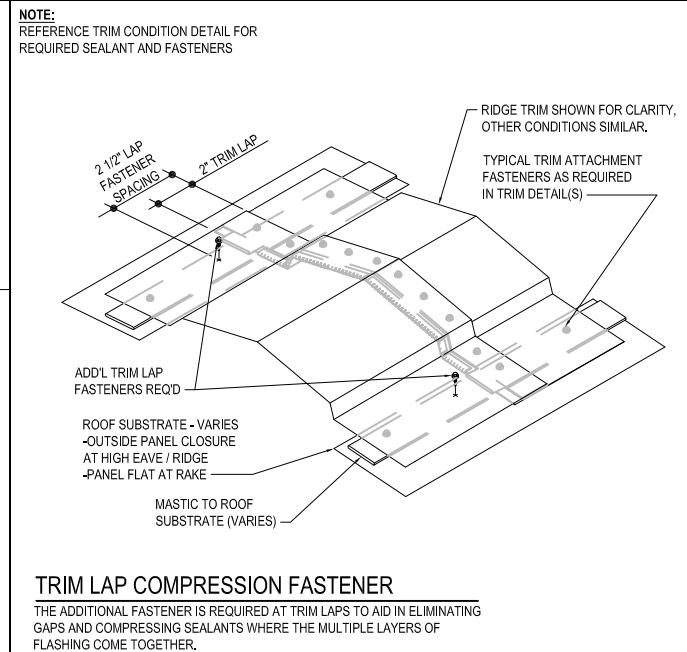
UTYL CENTERED MASTIC AS SHOWN

1/2" MASTIC CONTINUOUS UPSLOPE

1/2"

1 1/2" END LAP TAPE MASTIC

DETAIL B



STRUCT FASTENER (SEE THE ROOF STRUCTURAL FASTENER SPACING DETAIL)

5 1/4"

3/4" TAPE MASTIC CONTINUOUS

R-PANEL ROOF

INSIDE PANEL CLOSURE WITH 3/4" TAPE MASTIC TOP AND BOTTOM

TOP OF EAVE

2"

TOP OF PANEL TO EAVE

LOW EAVE FLASH W/ STITCH FASTENERS @ 1'-4" O.C. (2" LAP WITH H3152 POLYURETHANE CAULK)

ROOF INSULATION (NOT BY MBS)

EAVE MEMBER

WALL INSULATION (NOT BY MBS)

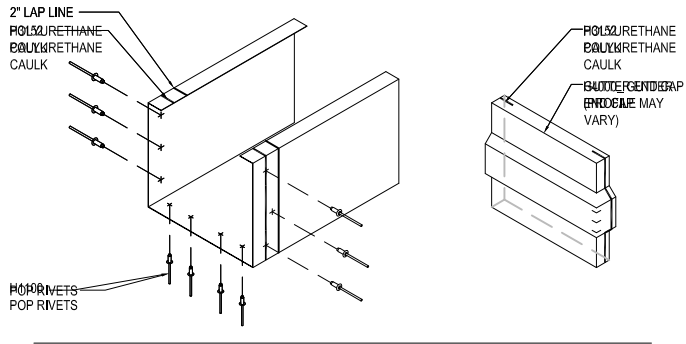
WALL PANEL

BASIC EAVE DETAIL

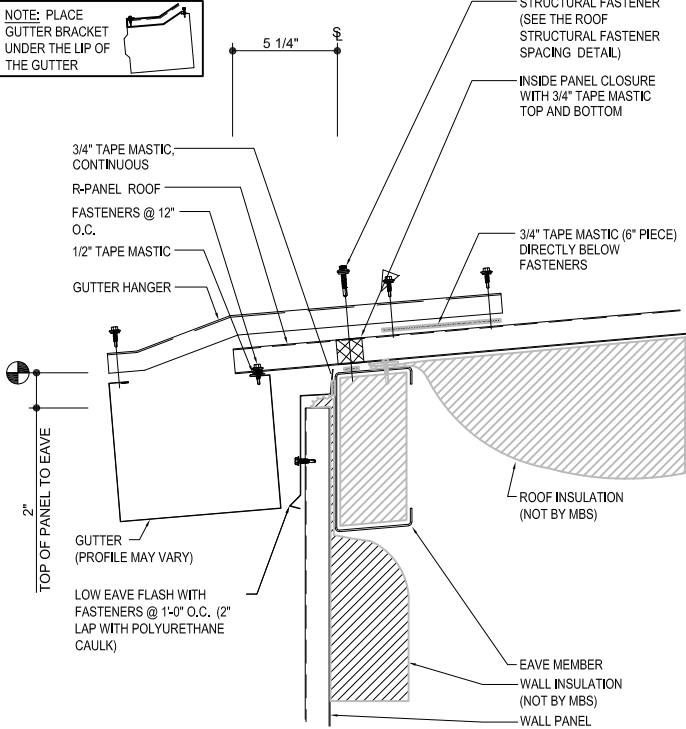
BASIC EAVE DETAIL

R-PANEL ROOF
SEE WALL SHEETING ERECTION NOTES
FOR WALL PANEL FASTENER LOCATIONS

APPLY BEAD OF POLYURETHANE CAULK 1" FROM END OF TRIM AND LAP SECTIONS 2" AND FASTEN AS SHOWN. TO TERMINATE THE GUTTER APPLY POLYURETHANE CAULK TO THREE SIDES OF END CAP AND TOP RETURN AREA AS SHOWN AND INSERT INTO THE GUTTER LEAVING 1/2" EXPOSED. ATTACH WITH RIVETS SAME AS END LAP.

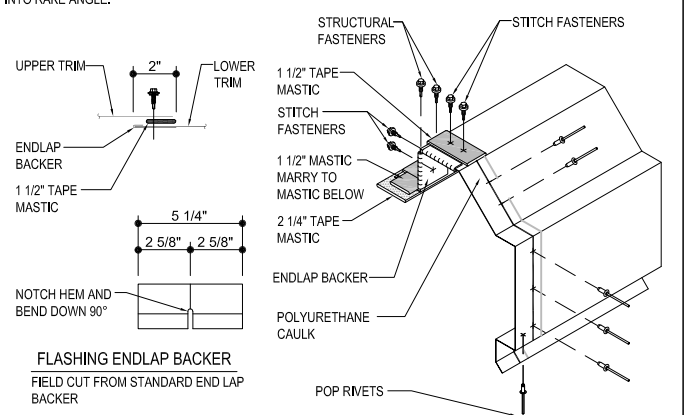


NOTE: PLACE
GUTTER BRAC
UNDER THE LI
THE GUTTER



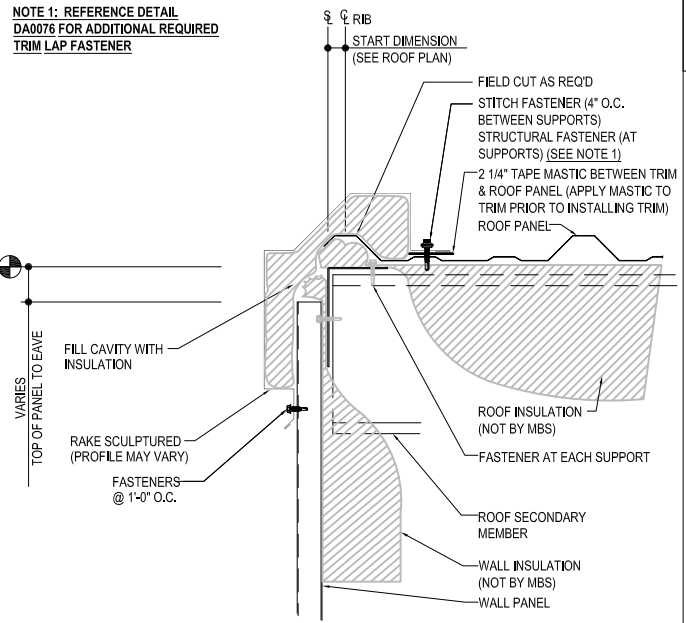
EAVE GUTTER DETAIL w/ WALL PANELS
SEE WALL SHEETING ERECTION NOTES FOR WALL PANEL FASTENER LOCATIONS

SLIDE FIELD CUT SECTION OF FLASHING ENLAP BACKER ONTO THE LOWER TRIM PIECE AS SHOWN BELOW. PLACE TAPE MASTIC NEXT TO HEM OF THE BACKER (NOT ON TOP OF HEM). APPLY CONTINUOUS BEAD OF CAULK 1" FROM END OF TRIM DOWN PROFILE OF TRIM. FASTEN LAP WITH STITCH FASTENERS AND POP RIVETS AS SHOWN. ROOF STRUCTURAL FASTENERS SHOULD BE USED TO FASTEN THROUGH PANEL FLAT INTO RAKE ANGLE.

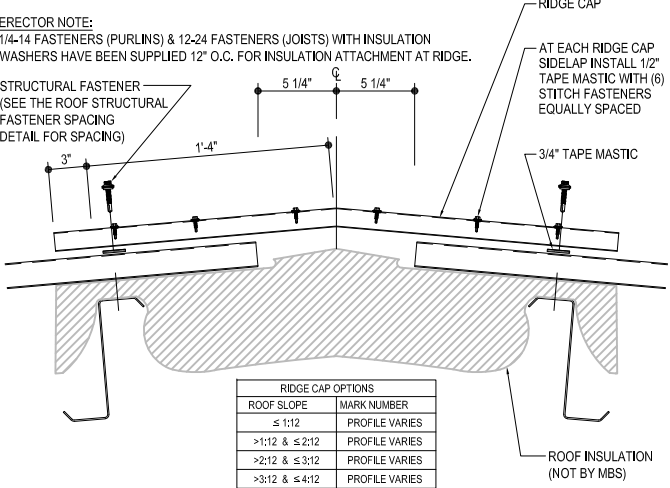


FLASHING ENDLAP BACKER
FIELD CUT FROM STANDARD END L
BACKER

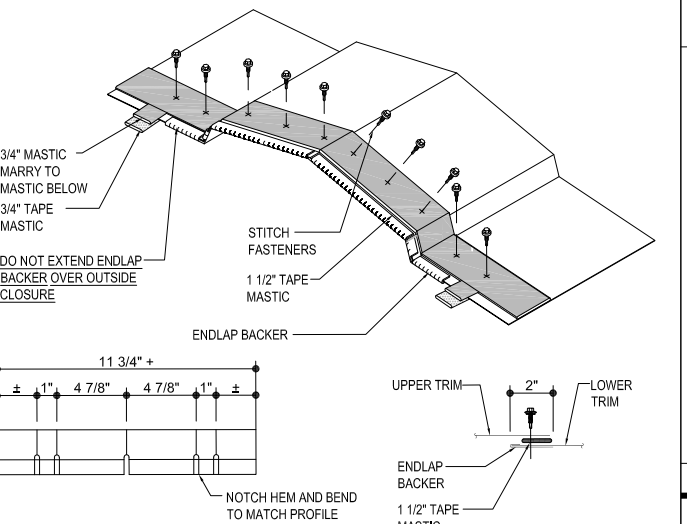
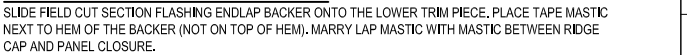
**NOTE 1: REFERENCE DETAIL
DA0076 FOR ADDITIONAL REQUIRED
TRIM LAP FASTENER**



R-Panel ROOF w/ SCULPTURED RAKE DETAIL w/ WALL PANELS SEE WALL SHEETING
ERECTION NOTES FOR WALL PANEL FASTENER LOCATIONS



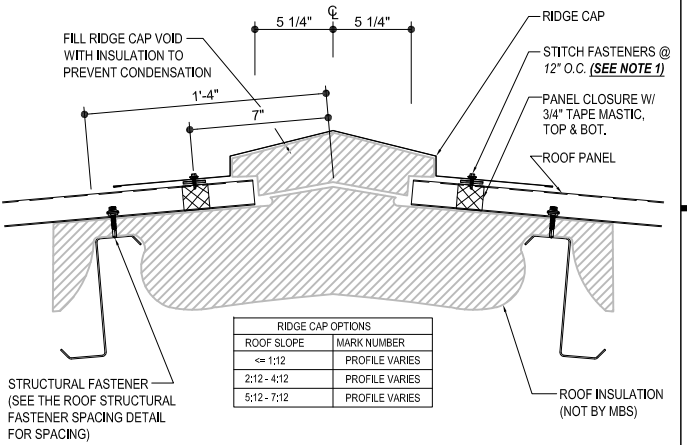
R-Panel ROOF
WITH $\leq 60^{\circ}$ -0" PANEL RUN AND $\leq 4:12$ ROOF SLOPE



FIELD CUT FROM STANDARD END LAP BACKER

ERECTOR NOTE: 1/4-14 FASTENERS (PURLINS) & 12-24 FASTENERS (JOISTS) WITH INSULATION WASHERS HAVE BEEN SUPPLIED 12" O.C. FOR INSULATION ATTACHMENT AT RIDGE.	NOTE 1: REFERENCE DETAIL <u>DA0076 FOR ADDITIONAL</u> <u>REQUIRED TRIM LAP FASTENER</u>
---	---

**NOTE 1: REFERENCE DETAIL
DA0076 FOR ADDITIONAL
REQUIRED TRIM LAP FASTENER**



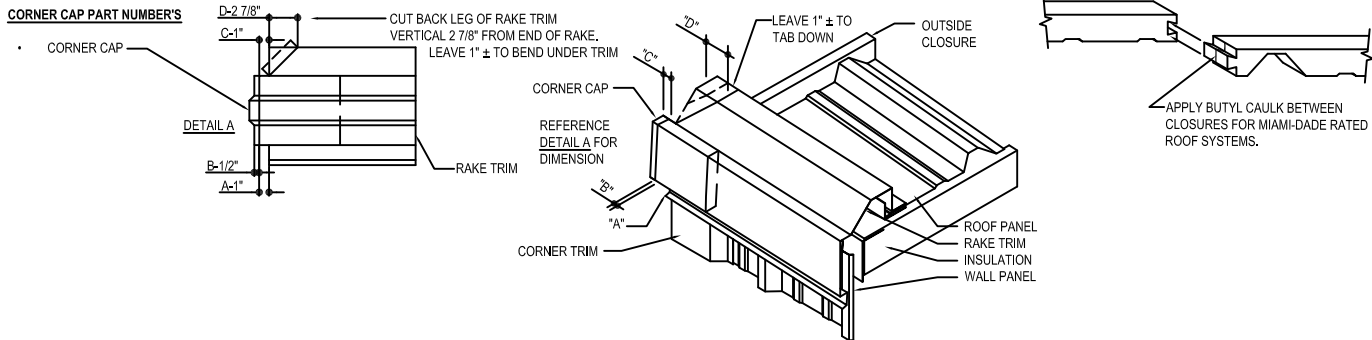
R-Panel ROOF WITH > 60'-0" PANEL RUN AND/OR > 4:12 ROOF SLOPE

SCALE: NOT TO SCALE		DATE	ENGINEER'S NAME:	
DRAWN BY:	BSS	12-09-24	BALA SOCKALINGAM	
CHECKED BY:	SIF	12-09-24	Ph.D., P.E.	
DESIGN APP'D. BY:			ENGINEER'S STATE REGISTRATION NUMBER:	
ISSUED DATE:			FL 62240	
NUCOR BUILDING SYSTEMS			200 WHETSTONE RD. SWANSEA, SC 29160 PHONE: (803) 568-2100 FAX: (803) 568-2121	
DRAWING #: D2857		Pg. 3 of 5		REVISION NUMBER 0

RAKE TRIM PREPARATION FOR SCULPTURED HIGH EAVE TRIM INSTALLATION

STEP 1

FIELD COPE THE UPPER SECTION OF THE RAKE TRIM BACK AS SHOWN. COPE THE "SLOPED" FACE OF THE RAKE TRIM BACK AT AN ANGLE AS SHOWN BEFORE INSTALLING THE HIGH EAVE TRIM, **APPLY POLYURETHANE TUBE CAULK** AROUND THE **PERIMETER OF THE CORNER CAP (MK. VARIES)**. SLIDE THE CAP INTO THE END OF THE STANDARD RAKE TRIM, LEAVING 1/2" EXPOSED AS SHOWN BELOW.



SCULPTURED HIGH EAVE TRIM INSTALLATION

STEP 2

LAY THE **HIGH EAVE TRIM** OVER THE OUTSIDE CLOSURE AND FASTEN WITH (4) TRIM-COLORED SELF-DRILLING SCREWS. **NOTE:** THE HIGH EAVE TRIM MUST BE PROPERLY POSITIONED BEFORE TOUCHING THE MASTIC. REMOVE THE PAPER BACKING ONLY AS WORK PROGRESSES.

FIELD COPE THE HIGH EAVE TRIM SIMILAR TO THE RAKE TRIM EXCEPT DO NOT CUT THE SLOPED FACE. INSTEAD, FOLD THE SLOPED FACE OVER THE SLOPED FACE OF THE RAKE TRIM. APPLY 2 1/4" TAPE MASTIC TO FLAT PORTION OF RAKE TRIM. APPLY 3/4" TAPE MASTIC TO SLOPING EDGE OF TRIM, MAKE SURE MASTIC SEALS AT ALL LOCATIONS OF TRIM INTERSECTIONS AND FASTEN WITH (3) POP RIVETS.

SCULPTURED HIGH EAVE TRIM

- SCULPTURED HE TRIM 121 x 10'-1" LENGTH
- SCULPTURED HE TRIM 242 x 20'-2" LENGTH

Diagram 1: Installation to Rake Trim

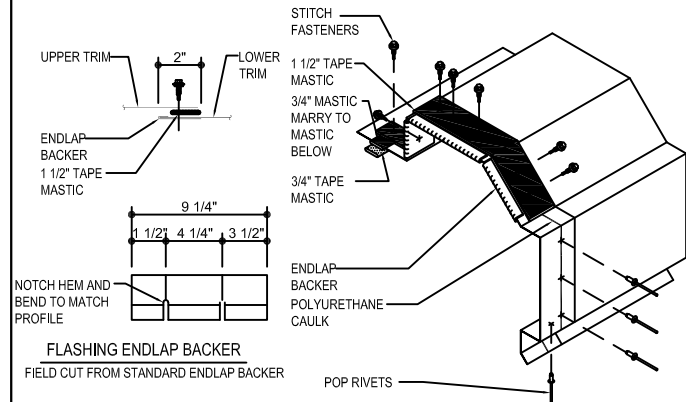
- CORNER CAP. FASTEN WITH POP RIVETS AS SHOWN.
- 1/2" REVEAL AT CORNER.
- POP RIVETS
- RAKE TRIM
- CORNER TRIM
- 3/4" TAPE MASTIC
- (3) POP RIVETS
- FASTEN TO RAKE TRIM WITH (4) STITCH FASTENERS AS SHOWN.

Diagram 2: Installation to High Eave Trim

- 2 1/4" TAPE MASTIC
- (2) POP RIVETS
- 3/4" TAPE MASTIC
- TAB HE TRIM AGAINST RAKE TRIM
- HIGH EAVE TRIM WITH (1) STITCH FASTENER PER HIGH RIB.

DETAIL SHOWN WITH ROOF AND WALL PANEL.

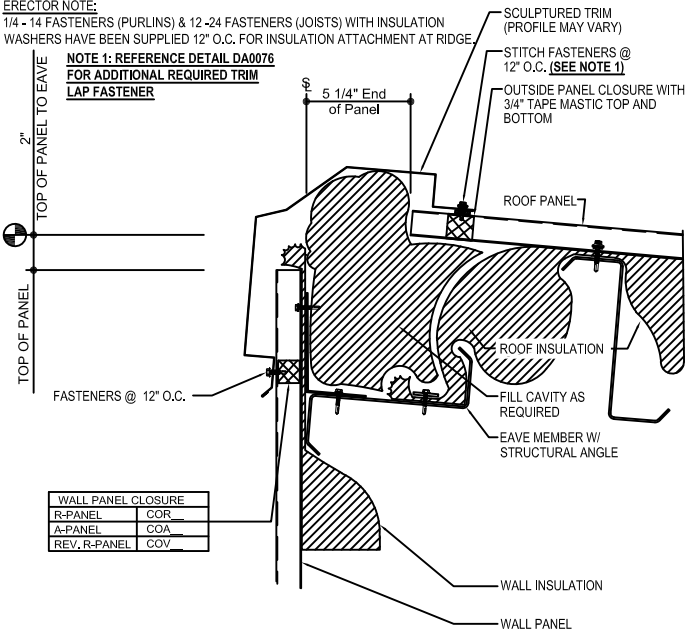
SLIDE FIELD CUT SECTION FLASHING ENDLAP BACKER ONTO THE LOWER TRIM PIECE. PLACE TAPE MASTIC NEXT TO HEM OF THE BACKER (NOT ON TOP OF HEM). APPLY CONTINUOUS BEAD OF CAULK 1" FROM END OF TRIM DOWN PROFILE OF TRIM. FASTEN LAP WITH STITCH FASTENERS AND POP RIVETS AS SHOWN.



ERECTOR NOTE:

1/4 - 14 FASTENERS (PURLINS) & 12-24 FASTENERS (JOISTS) WITH INSULATION
WASHERS HAVE BEEN SUPPLIED 12" O.C. FOR INSULATION ATTACHMENT AT RIDGE.

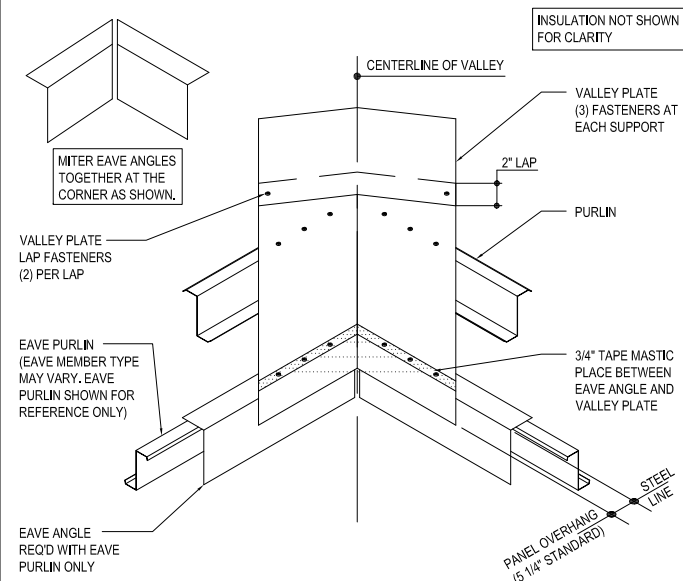
**NOTE 1: REFERENCE DETAIL DA0076
FOR ADDITIONAL REQUIRED TRIM
LAP FASTENER**



HIGH EAVE SCULPTURED DETAIL w/ R-Panel ROOF & WALL PANELS
SEE WALL SHEETING ERECTION NOTES FOR WALL PANEL FASTENER LOCATIONS

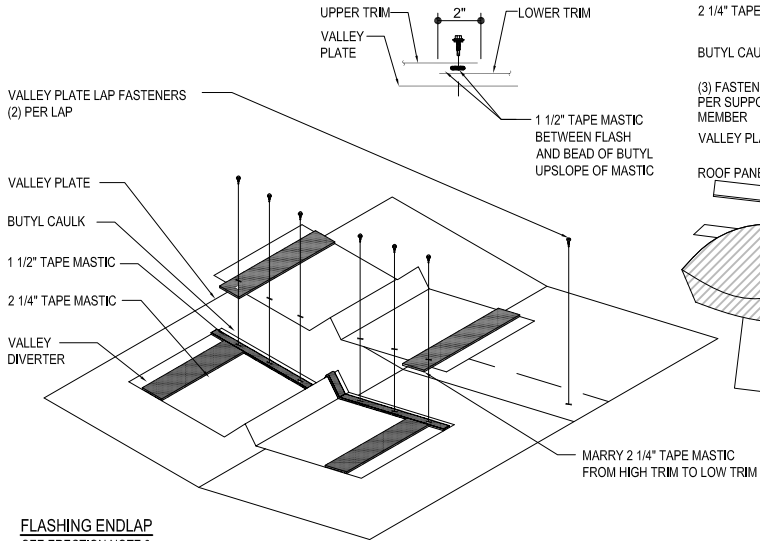
ENGINEER'S NAME: BALA SOCKALINGAM Ph.D., P.E.		ENGINEER'S STATE REGISTRATION NUMBER: FL 62240		R-PANEL	
SCALE: NOT TO SCALE		DATE			
DRAWN BY:	BSS	12-08-24			
CHECKED BY:	SLP	12-09-24			
DESIGN APP'D. BY:					
ISSUED DATE:					
NUCOR BUILDING SYSTEMS				200 WHETSTONE RD. SWANSEA, SC 29160 PHONE: (803) 568-2100 FAX: (803) 568-2121	
DRAWING #: D2857		Pg. 4 of 5		REVISION NUMBER 0	

- 1) IF BUILDING HAS INSULATION, INSTALL THE INSULATION AFTER THE PURLINS HAVE BEEN INSTALLED AT THE VALLEY. FASTEN THE INSULATION TO ALL PURLINS WITH FASTENERS AND INSULATION WASHERS.
- 2) AFTER INSTALLATION OF THE PURLINS AND THE INSULATION, INSTALL THE VALLEY PLATE ABOVE THE INSULATION. IF BUILDING DOES NOT HAVE INSULATION, SIMPLY PLACE THE VALLEY PLATE ON TOP OF THE PURLINS. NOTCH THE FIRST PIECE OF THE VALLEY PLATE AT EAVE AS REQUIRED. EXTEND THE VALLEY PLATE TO LINE UP WITH THE PANEL OVERHANG OF 5 1/4". FASTEN AT EACH SECONDARY MEMBER WITH (3) FASTENERS. LAP THE VALLEY PLATE 2" AND FASTEN WITH (2) FASTENERS.
- 3) PLACE DIVERter FLASH OVER THE VALLEY PLATE AND TEMPORARILY FASTEN WITH (1) AT OUTSIDE CORNERS OF THE VALLEY PLATE. (DO NOT USE THE VALLEY AS A WALKWAY OR A WORK PLATFORM). LAP DIVERter FLASH 2" AND INSTALL TAPE MASTIC BETWEEN THE LAPS AND A BEAD OF UPSLOPE OF MASTIC.
- 4) INSTALL 2 1/4" TAPE MASTIC ON THE DIVERter FLASH 7 1/2" FROM THE CENTERLINE OF THE VALLEY (AS SHOWN). ALSO APPLY A BEAD OF TUBE CAULK ALONG THE UPHILL SIDE OF THE TAPE MASTIC.
- 5) INSTALL THE ROOF PANELS, CUTTING ENDS AT THE REQUIRED ANGLE. CUT THE PANELS 7" FROM THE CENTERLINE OF THE VALLEY. (NOTE: KEEP METAL SHAVINGS OUT OF THE TAPE MASTIC). INSTALL FASTENERS 3" O.C. BETWEEN EACH MAJOR RIB, SEATED OVER THE 2 1/4" TAPE MASTIC AS SHOWN.
- 6) TO ENSURE A WEATHERTIGHT SEAL AROUND THE RIB COVER, PLACE 2 1/4" TAPE MASTIC AROUND THE PANEL RIB ON TOP OF VALLEY DIVERter AS DIMENSIONS SHOW IN ENLARGED VIEW. PLACE A BEAD OF BUTYL CAULK ALONG PANEL SIDELAP AT ALL RIB COVER LOCATIONS. COVER RIB AREA WITH 2 1/4" TAPE MASTIC. INSTALL RIB COVER WITH FASTENERS AT DIMPLE LOCATIONS ON RIB COVER.
- 7) ONCE MASTIC, RIB COVER AND FASTENERS ARE INSTALLED TRIM EXCESS MASTIC AND BUTYL AWAY FROM RIB COVER.
- 8) FIELD WORK THE HIGH AND LOW ENDS OF THE VALLEY AS REQUIRED TO ENSURE WEATHERTIGHTNESS.

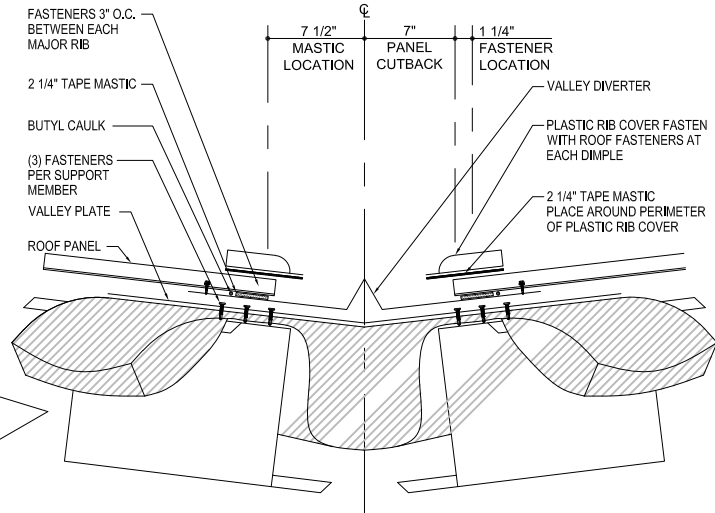


VALLEY PLATE DETAIL AT LOW EAVE CORNER
SEE ERECTION NOTES 1 AND 2

ERECTOR NOTE:
FASTENERS (PURLINS) WITH INSULATION WASHERS HAVE BEEN SUPPLIED FOR
INSULATION ATTACHMENT AT VALLEY.



FLASHING ENDLAP
SEE ERECTION NOTE 3



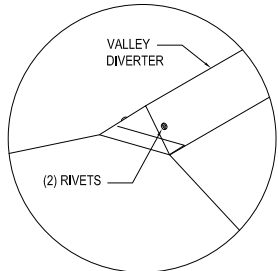
R-PANEL VALLEY CONDITION FINAL ASSEMBLY DETAIL
SEE ERECTION NOTES 3 AND 4

NO.	REVISION	MADE	CK'D.	DATE

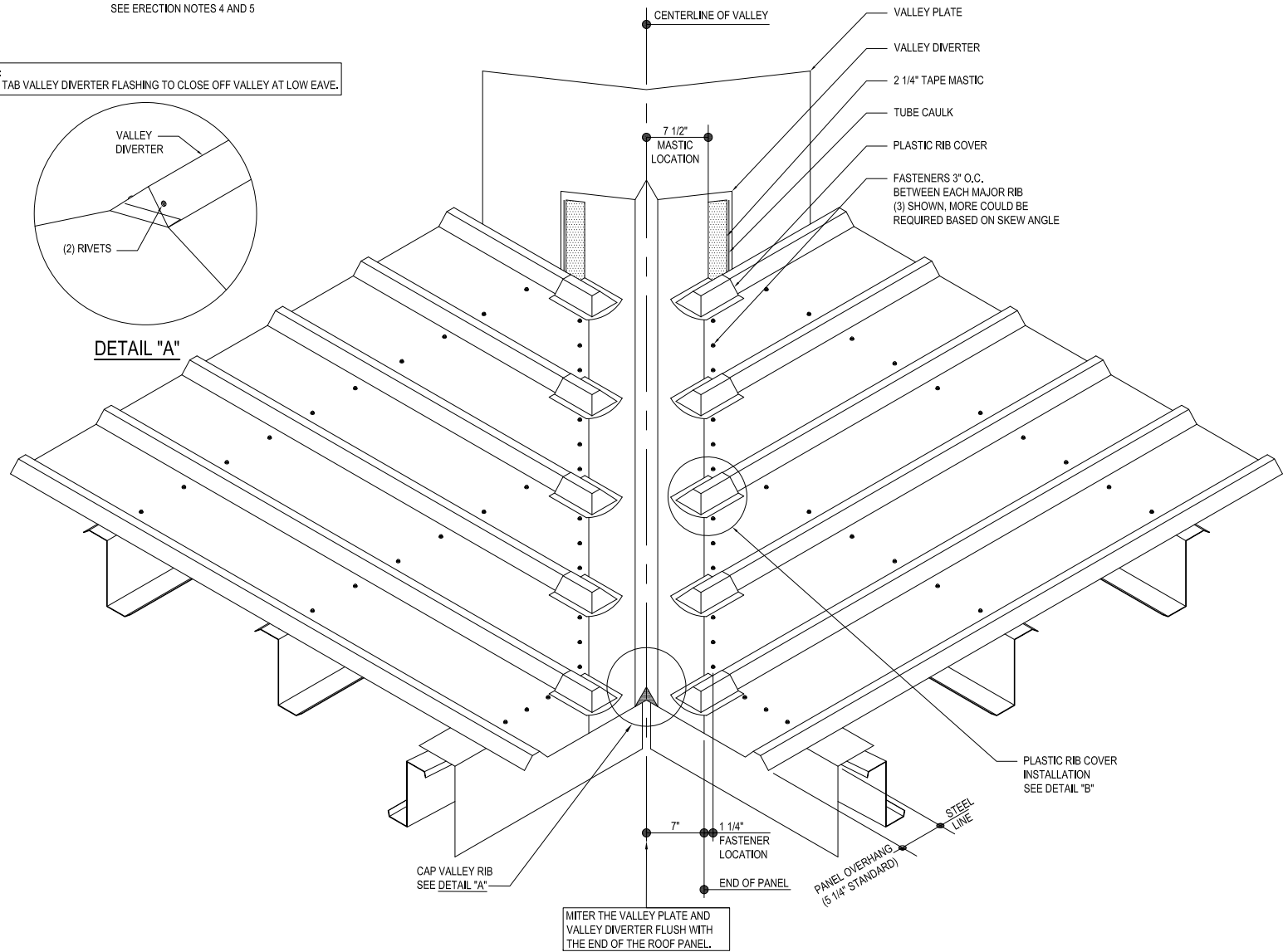
R-PANEL

SEE ERECTION NOTES 4 AND 5

NOTE:
FIELD TAB VALLEY DIVERTER FLASHING TO CLOSE OFF VALLEY AT LOW EAVE.

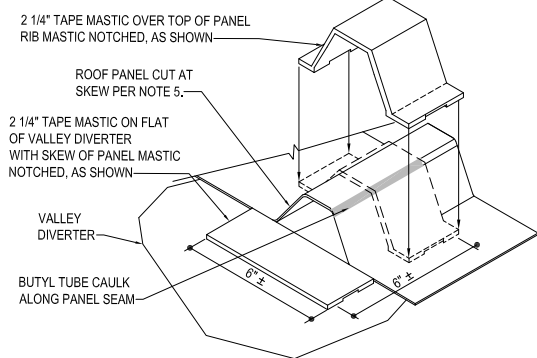


DETAIL "A"

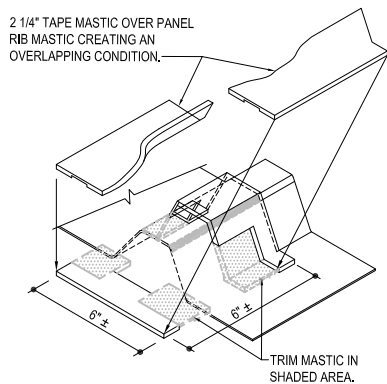


SEE ERECTION NOTES 6, 7, AND 8

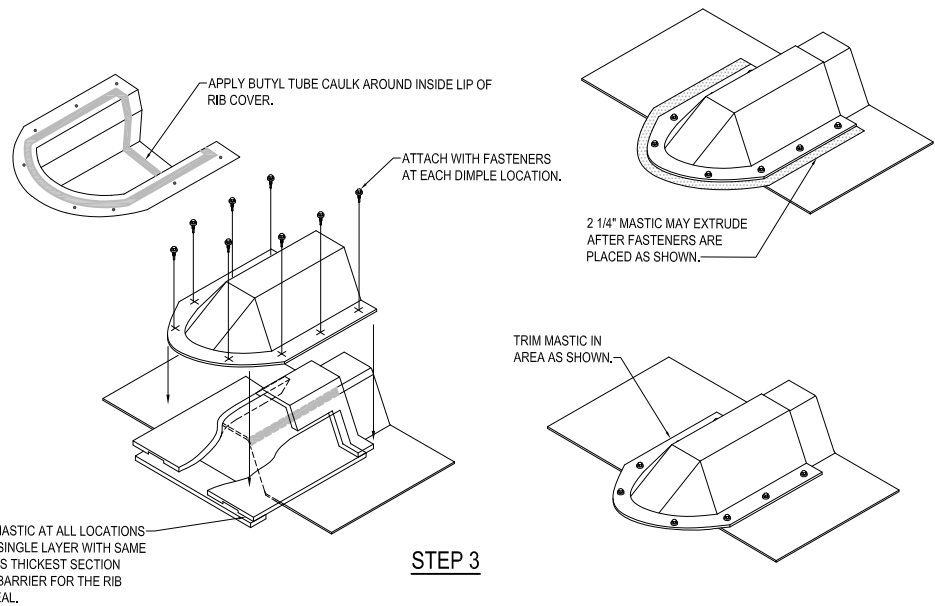
GENERAL RIB COVER NOTE:
TRACE RIB COVER IN ORDER TO KEEP 2 1/4"
MASTIC BEAD ALONG EDGE FOR PROPER SEAL



STEP 1



STEP 2



STEP 3

R-PANEL VALLEY CONDITION

SCALE: NOT TO SCALE	DATE	ENGINEER'S NAME:
DRAWN BY: BSS	12-09-24	BALA SOCKALINGAM
CHECKED BY: SILF	12-09-24	Ph.D., P.E.
DESIGN APP'D. BY:		ENGINEER'S STATE REGISTRATION NUMBER:
ISSUED DATE:		FL 62240
NUCOR BUILDING SYSTEMS 200 WHETSTONE RD. SWANSEA, SC 29160 PHONE: (803) 568-2100 FAX: (803) 568-2121		
DRAWING #: D2857	Pg. 5 of 5	REVISION NUMBER 0