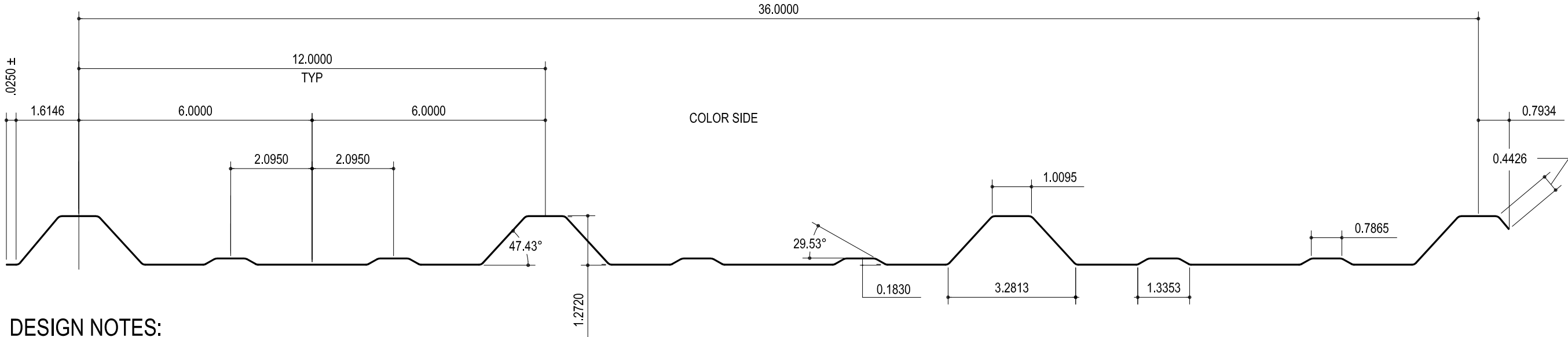




DESIGN NOTES:

1. THIS ROOF PANEL IS DESIGNED FOR SPANS UP TO 5'-0" MAXIMUM
2. THE R-PANEL (RPR24), WHEN UTILIZED AS A ROOF PANEL, IS COMPLIANT WITH THE FLORIDA BUILDING CODE 2023 EDITION.
3. DEFLECTION SHALL BE LIMITED TO L/180.
4. THIS ROOF PANEL IS APPROVED FOR GRAVITY (POSITIVE) PRESSURE OF 85.8 PSF.
5. 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

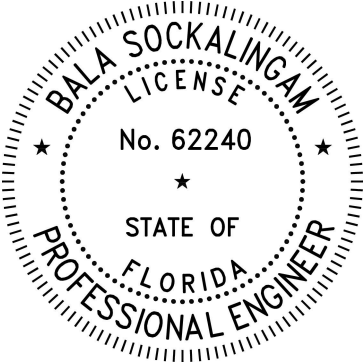
1. ALL DIMENSIONS ARE ± 1/32" (U.N.) EXCEPT TOLERANCE DIMENSIONS.
2. ALL ANGLES ±2° (U.N.)
3. COIL WIDTH = 42.75".
4. MATERIAL = 24 GA., (0.023" MIN.) MINIMUM YIELD 80 KSI (TESTED 109.8 KSI)
5. MINIMUM ALLOWABLE ROOF SLOPE 1/2 TO 12

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

R-PANEL CROSS-SECTION

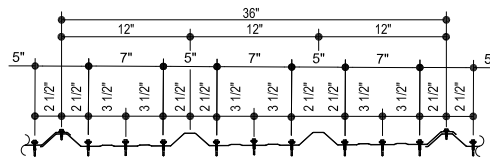
This item has been digitally signed and sealed by Bala Sockalingam, PE, on the date indicated.

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



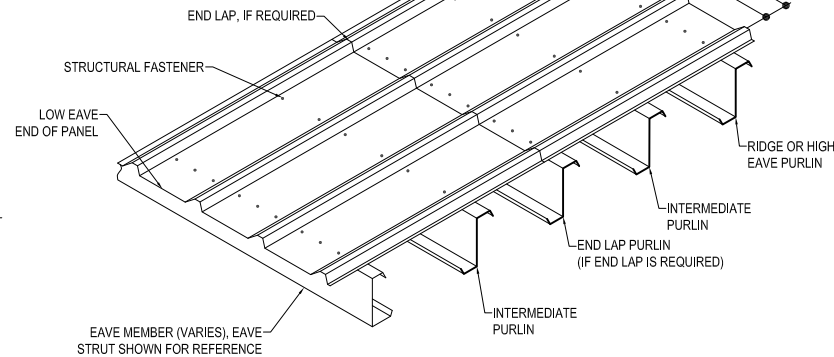
2025.03.22
13:24:42 -05'00'

SCALE: NOT TO SCALE DRAWN BY: BSS CHECKED BY: SLF DESIGN APP'D. BY: ISSUED DATE:				DATE 12-09-24 12-09-24				ENGINEER'S NAME: BALA SOCKALINGAM Ph.D., P.E. ENGINEER'S STATE REGISTRATION NUMBER: FL 62240				NO.				REVISION				MADE				CK'D				DATE			
AMERICAN BUILDINGS				200 WHETSTONE RD. SWANSEA, SC 29160 PHONE: (803) 568-2100 FAX: (803) 568-2121				R-PANEL																							
DRAWING #: D2889-4				Pg. 1 of 5				REVISION NUMBER				0																			

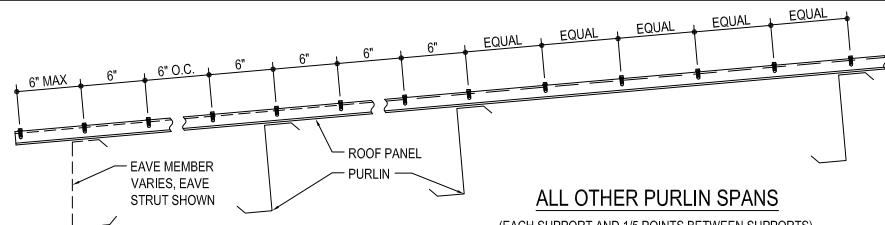


R-PANEL ROOF SEE WALL SHEETING ERECTION NOTES FOR WALL PANEL FASTENER LOCATIONS
MIAMI-DADE COUNTY REQUIREMENT

NOTE:
FIELD DRILLING AT LAPPED OR
NESTED PURLIN CONDITIONS
MAY BE REQUIRED FOR
STRUCTURAL FASTENERS

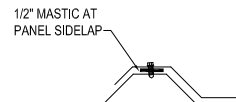


FASTEN INSULATION WITH FASTENER & INSULATION WASHER 12" O.C. AT LOW SIDE AND HIGH SIDE MEMBERS. FASTEN AT AT HIGH RIB LOCATIONS.



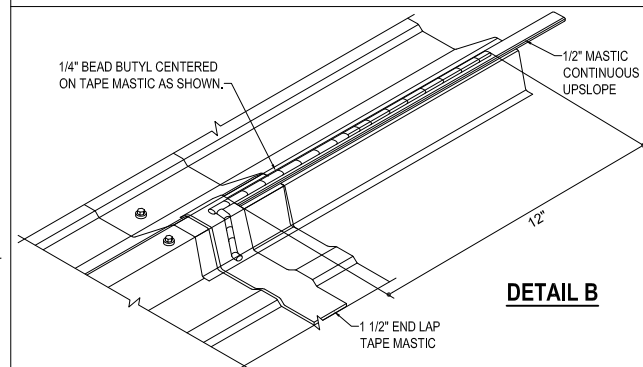
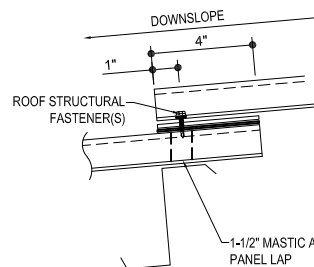
(EACH SUPPORT AND 6" ON CENTER BETWEEN SUPPORTS)

ALL OTHER PURLIN SPANS
(EACH SUPPORT AND 1/5 POINTS BETWEEN SUPPORTS)
NOT TO EXCEED 1'-0"

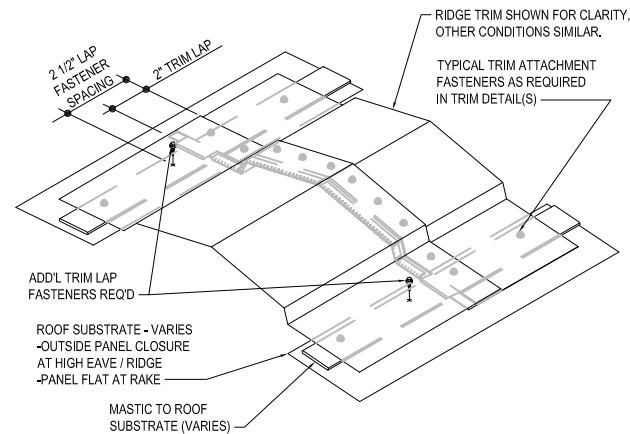


(AT FULL LENGTH OF ALL SIDE LAPS)

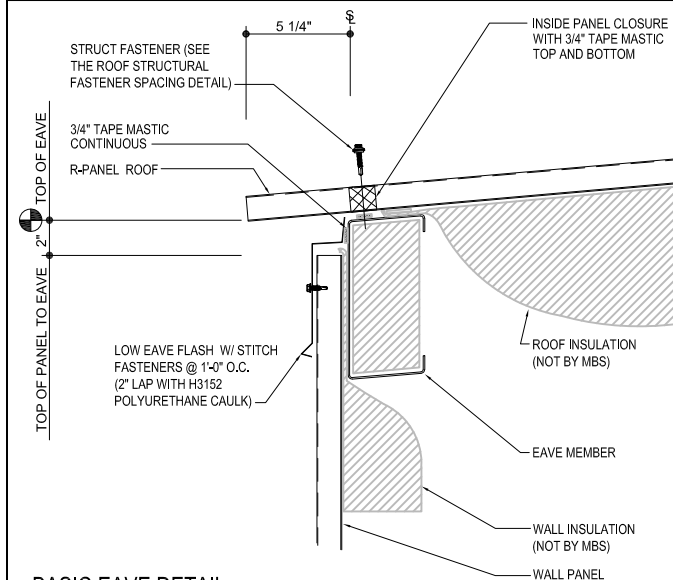
R-PANEL ROOF SEE WALL SHEETING ERECTION NOTES FOR WALL PANEL FASTENER LOCATIONS
MIAMI-DADE COUNTY REQUIREMENT



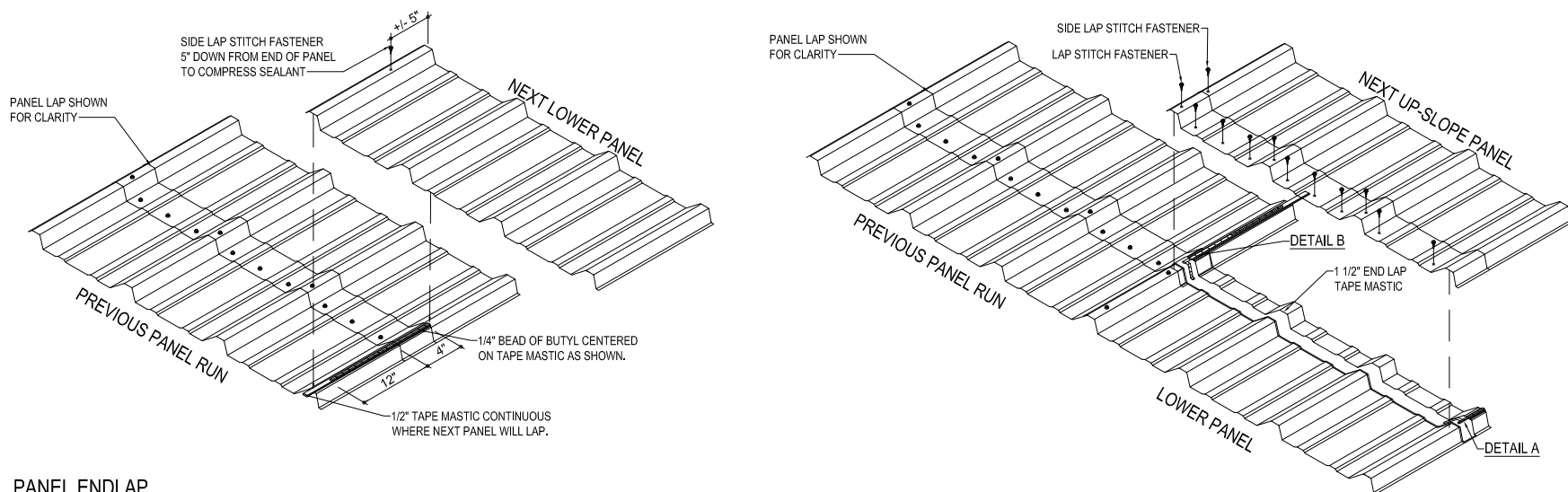
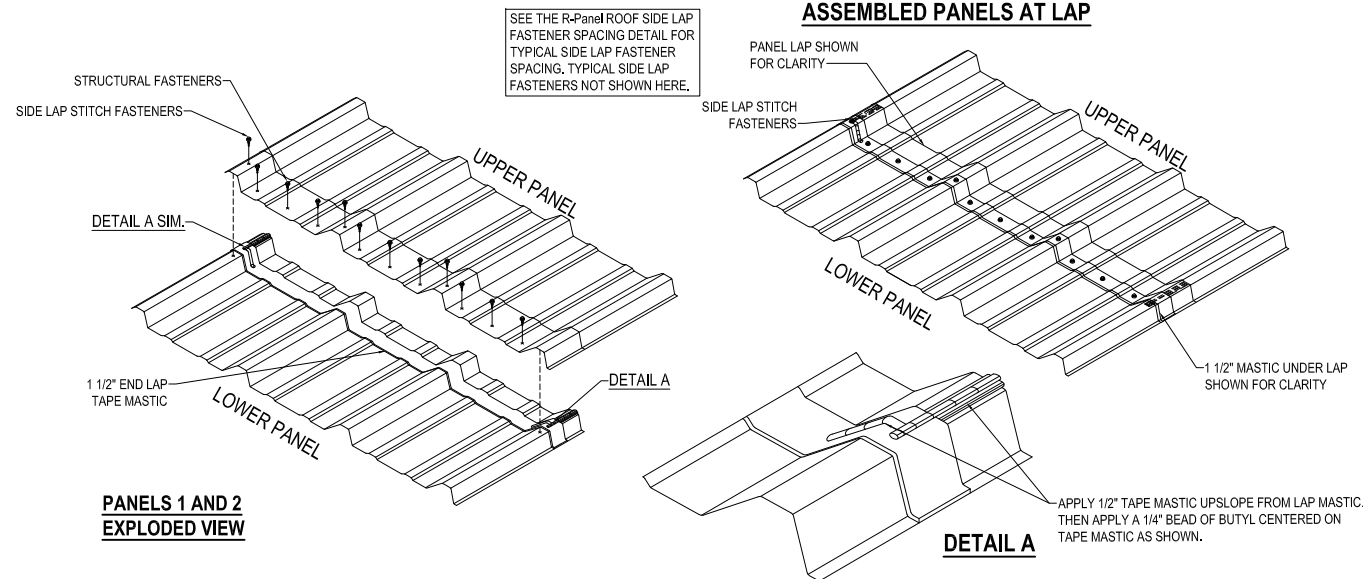
NOTE:
REFERENCE TRIM CONDITION DETAIL FOR
REQUIRED SEALANT AND FASTENERS



THE ADDITIONAL FASTENER IS REQUIRED AT TRIM LAPS TO AID IN ELIMINATING GAPS AND COMPRESSING SEALANTS WHERE THE MULTIPLE LAYERS OF FLASHING COME TOGETHER.



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



R-PANEL ROOF

NO.	REVISION	MADE	CK'D.	DATE

R-PANEL

ENGINEER'S NAME:
BALA SOCKALINGAM
Ph.D., P.E.

ENGINEER'S STATE REGISTRATION NUMBER:
FL 62240

200 WHETSTONE RD. SWANSEA, SC
29160 PHONE: (803) 568-2100 FAX:
(803) 568-2121

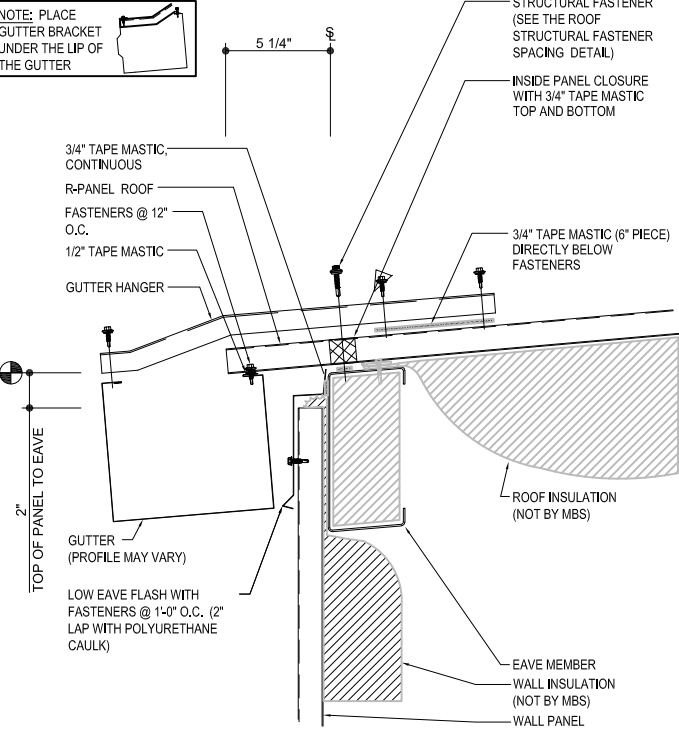
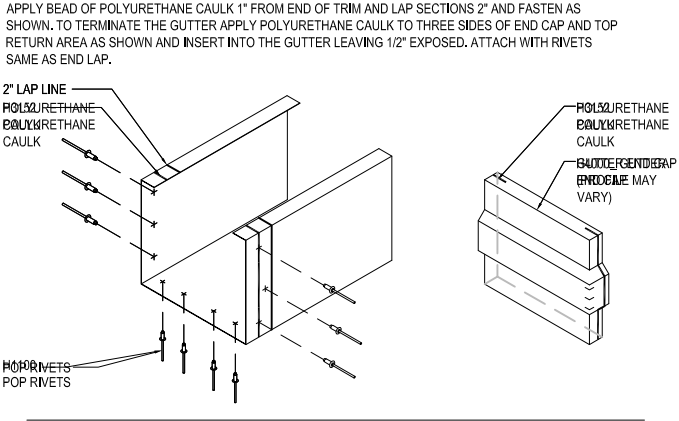
DRAWING #:	D2889-4	Pg. 2 of 5	REVISION NUMBER
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REVISION NUMBER

Page 2 of 5

DRAWING #: D2889-4

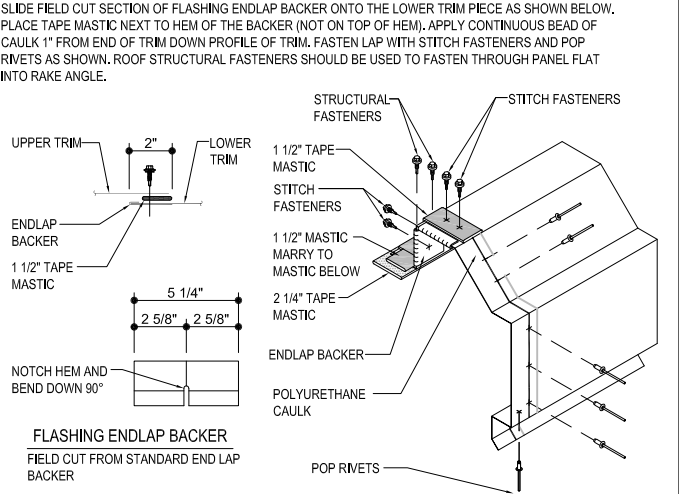
GUTTER LAP & END CAP



EAVE GUTTER DETAIL

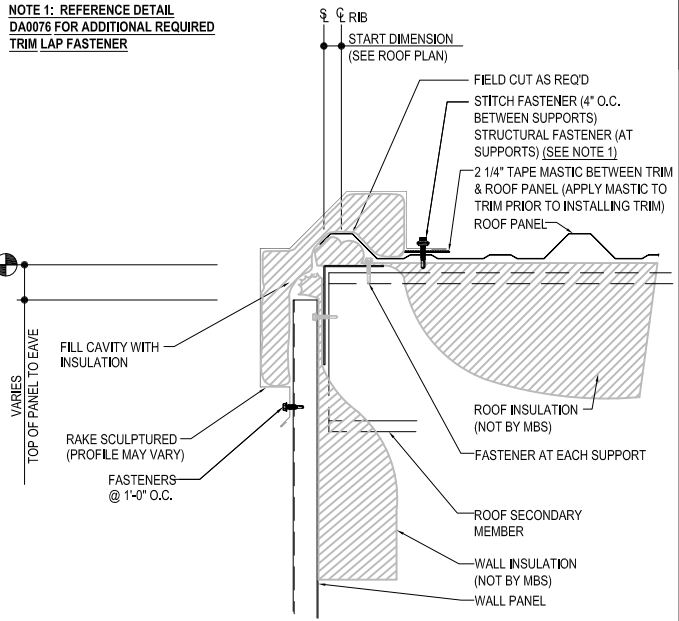
EAVE GUTTER DETAIL w/ WALL PANELS
SEE WALL SHEETING ERECTION NOTES FOR WALL PANEL FASTENER LOCATIONS

RAKE LAP & FLASHING BACKER



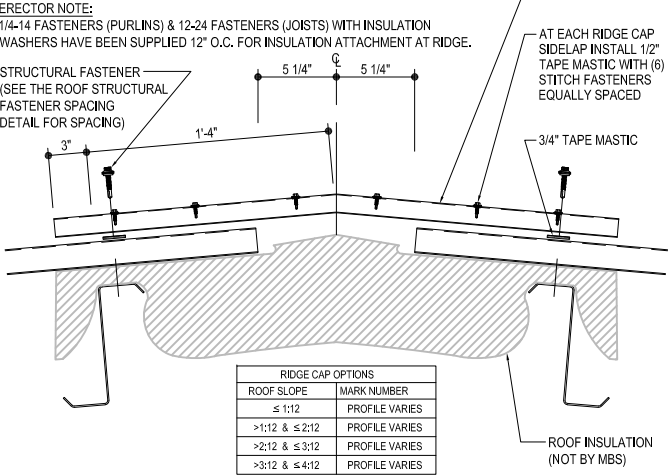
FLASHING ENDLAP BACKER
FIELD CUT FROM STANDARD END LAP BACKER

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



RAKE SCULPTURED DETAIL

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

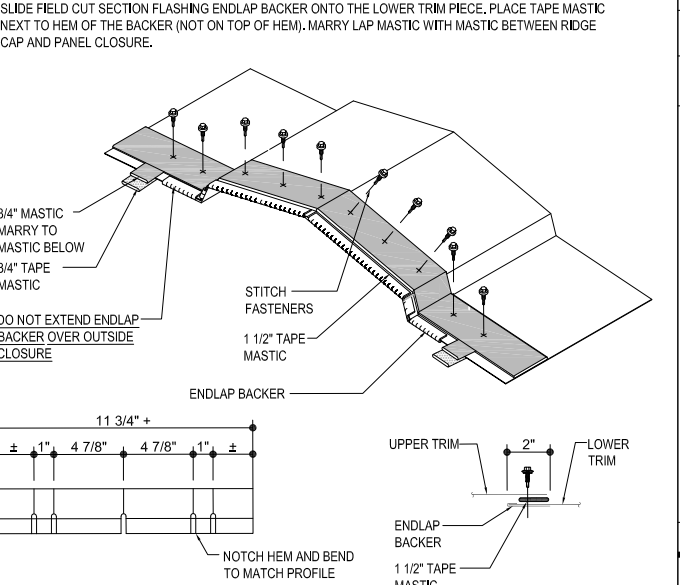


RIDGE CAP OPTIONS	
ROOF SLOPE	MARK NUMBER
≤ 1:12	PROFILE VARIES
>1:12 & ≤2:12	PROFILE VARIES
>2:12 & ≤3:12	PROFILE VARIES
>3:12 & ≤4:12	PROFILE VARIES

DIE-FORMED RIDGE CAP

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

RIDGE CAP LAP & FLASHING BACKER

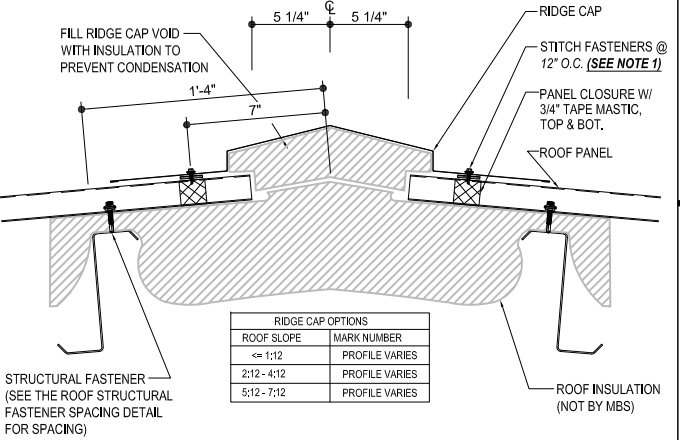


FLASHING ENDLAP BACKER

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
DA0076 FOR ADDITIONAL
REQUIRED TRIM LAP FASTENER



RIDGE CAP OPTIONS	
ROOF SLOPE	MARK NUMBER
≤ 1:12	PROFILE VARIES
2:12 - 4:12	PROFILE VARIES
5:12 - 7:12	PROFILE VARIES

LOW PROFILE RIDGE CAP

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

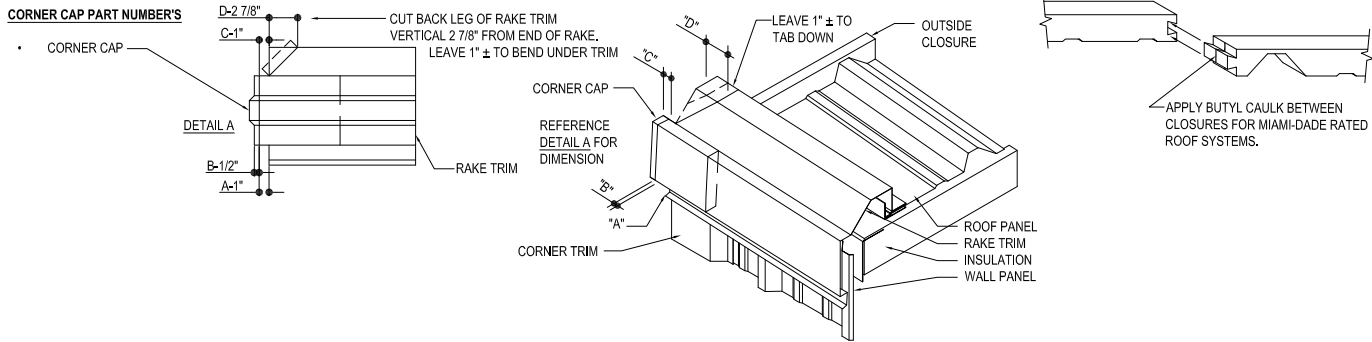
SCALE: NOT TO SCALE	DRAWN BY: BSS	CHECKED BY: SLF	DESIGN APP'D. BY:	ISSUED DATE:	DATE 12-09-24 12-09-24	ENGINEER'S NAME: BALA SOCKALINGAM Ph.D., P.E.	ENGINEER'S STATE REGISTRATION NUMBER: FL 62240	200 WHETSTONE RD. SWANSEA, SC 29160 PHONE: (803) 568-2100 FAX: (803) 568-2121	AMERICAN BUILDINGS	DRAWING #: D2889-4	Pg. 3 of 5	REVISION NUMBER 0	R-PANEL
NO.						REVISION		MADE CK'D. DATE					

SCULPTURED HIGH EAVE TO RAKE TRANSITION

RAKE TRIM PREPARATION FOR SCULPTURED HIGH EAVE TRIM INSTALLATION
STEP 1

EXTEND THE RAKE TRIM DIMENSION VARIES PAST THE OUTSIDE FACE OF THE WALL CORNER TRIM. FIELD COPE THE VERTICAL LEG OF THE RAKE TRIM FLUSH TO THE OUTSIDE FACE OF THE WALL CORNER TRIM.

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.



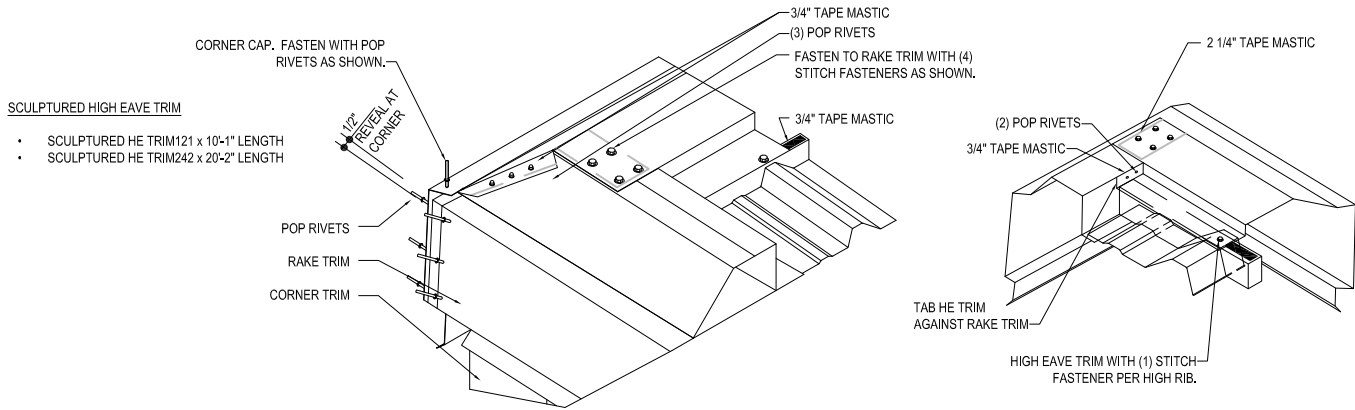
SCULPTURED HIGH EAVE TRIM INSTALLATION
STEP 2

FIELD CUT AN OUTSIDE CLOSURE LONG ENOUGH TO REACH BACK OF RAKE TRIM. APPLY 3/4" TAPE MASTIC CONTINUOUSLY ACROSS THE TOP AND BOTTOM OF THE CLOSURES.

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**.

FASTEN THE HIGH EAVE TRIM AND THE RAKE TRIM TO THE CORNER CAP WITH **POP RIVETS** FASTEN THE TOP LEG OF THE HIGH EAVE TRIM WITH (4) **TRIM- COLORED SELF DRILLING SCREWS**.

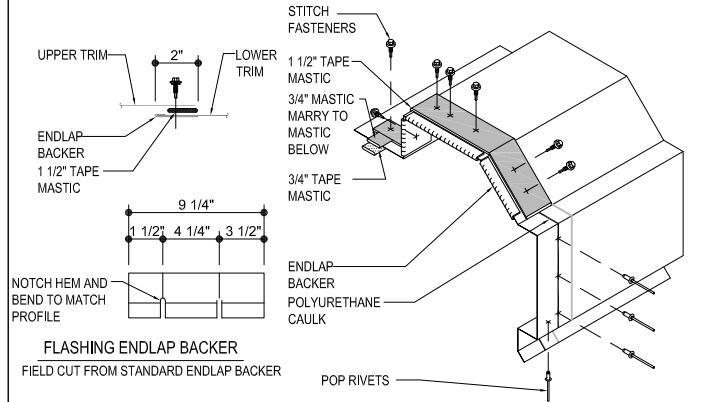


SCULPTURED HIGH EAVE AND RAKE INSTALLATION

DETAIL SHOWN WITH ROOF AND WALL PANEL.

HIGH EAVE LAP & FLASHING BACKER

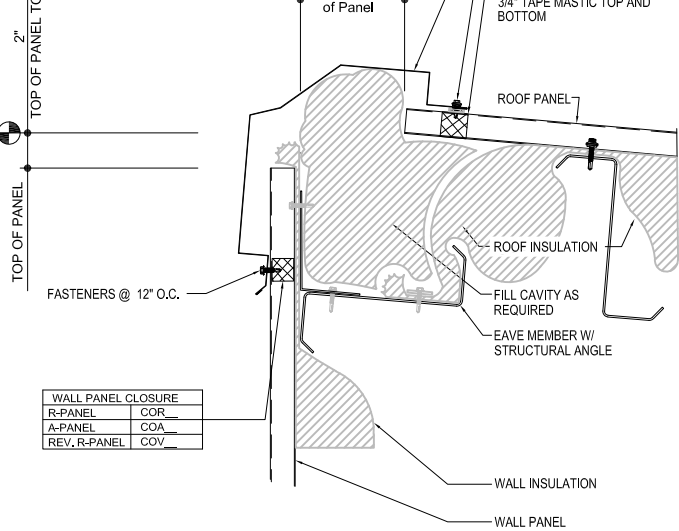
SLIDE FIELD CUT SECTION FLASHING ENDLAP BACKER ONTO THE LOWER TRIM PIECE. PLACE TAPE MASTIC NEXT TO HEM OF THE BACKER (NOT ON TOP OF HEM). APPLY CONTINUOUS BEAD OF CAULK 1" FROM END OF TRIM DOWN PROFILE OF TRIM. FASTEN LAP WITH STITCH FASTENERS AND POP RIVETS AS SHOWN.



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



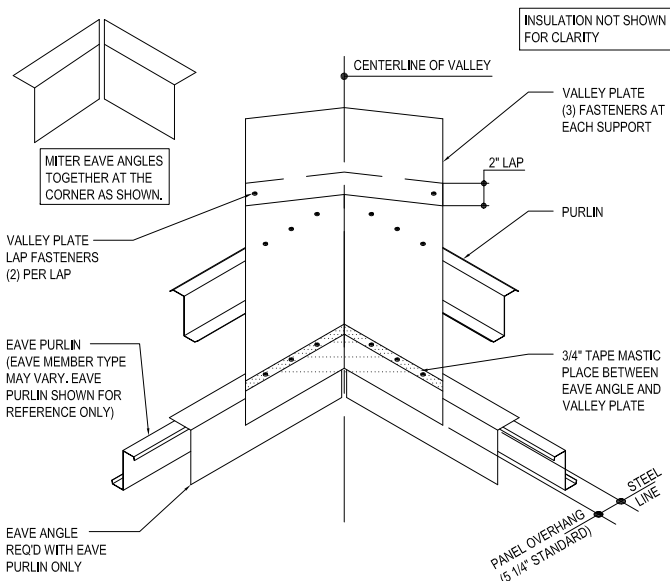
HIGH EAVE SCULPTURED DETAIL

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

SCALE: NOT TO SCALE	DATE	ENGINEER'S NAME:		ENGINEER'S STATE REGISTRATION NUMBER:	REVISION NUMBER
		NO.	REVISION	MADE	CK'D.
DRAWN BY: BSS	12-09-24				
CHECKED BY: SLF	12-09-24				
DESIGN APP'D. BY:					
ISSUED DATE:					
AMERICAN BUILDINGS		BALA SOCKALINGAM Ph.D., P.E.		FL 62240	
200 WHETSTONE RD. SWANSEA, SC 29160 PHONE: (803) 568-2100 FAX: (803) 568-2121		R-PANEL			
DRAWING #: D2889-4		Pg. 4 of 5		0	

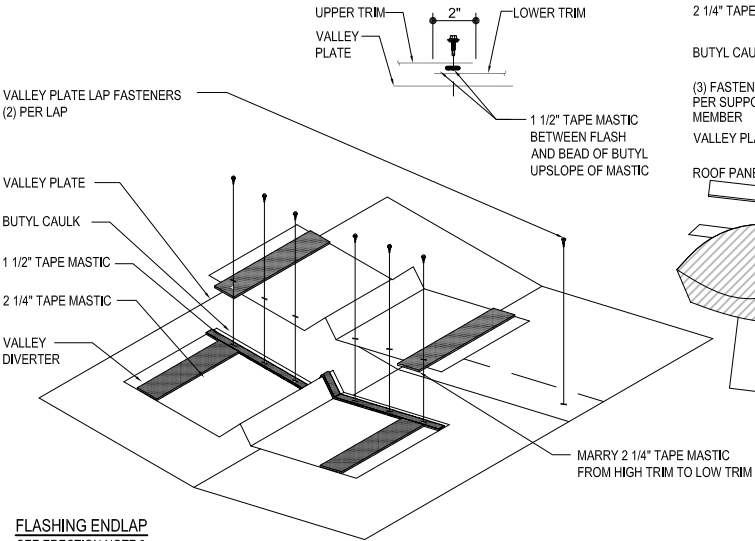
VALLEY CONDITION ERECTION NOTES:

- 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, CENTERED 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.

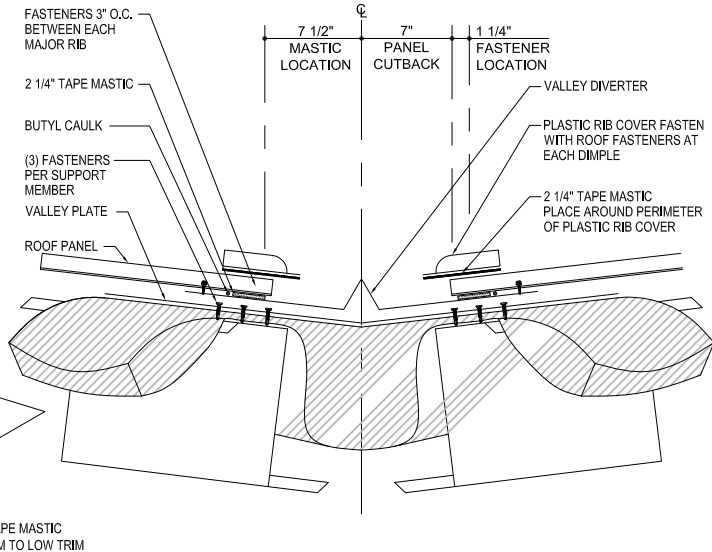


VALLEY PLATE DETAIL AT LOW EAVE CORNER
SEE ERECTION NOTES 1 AND 2

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



FLASHING ENDLAP
SEE ERECTION NOTE 3

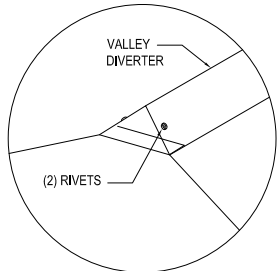


R-PANEL VALLEY CONDITION FINAL ASSEMBLY DETAIL
SEE ERECTION NOTES 3 AND 4

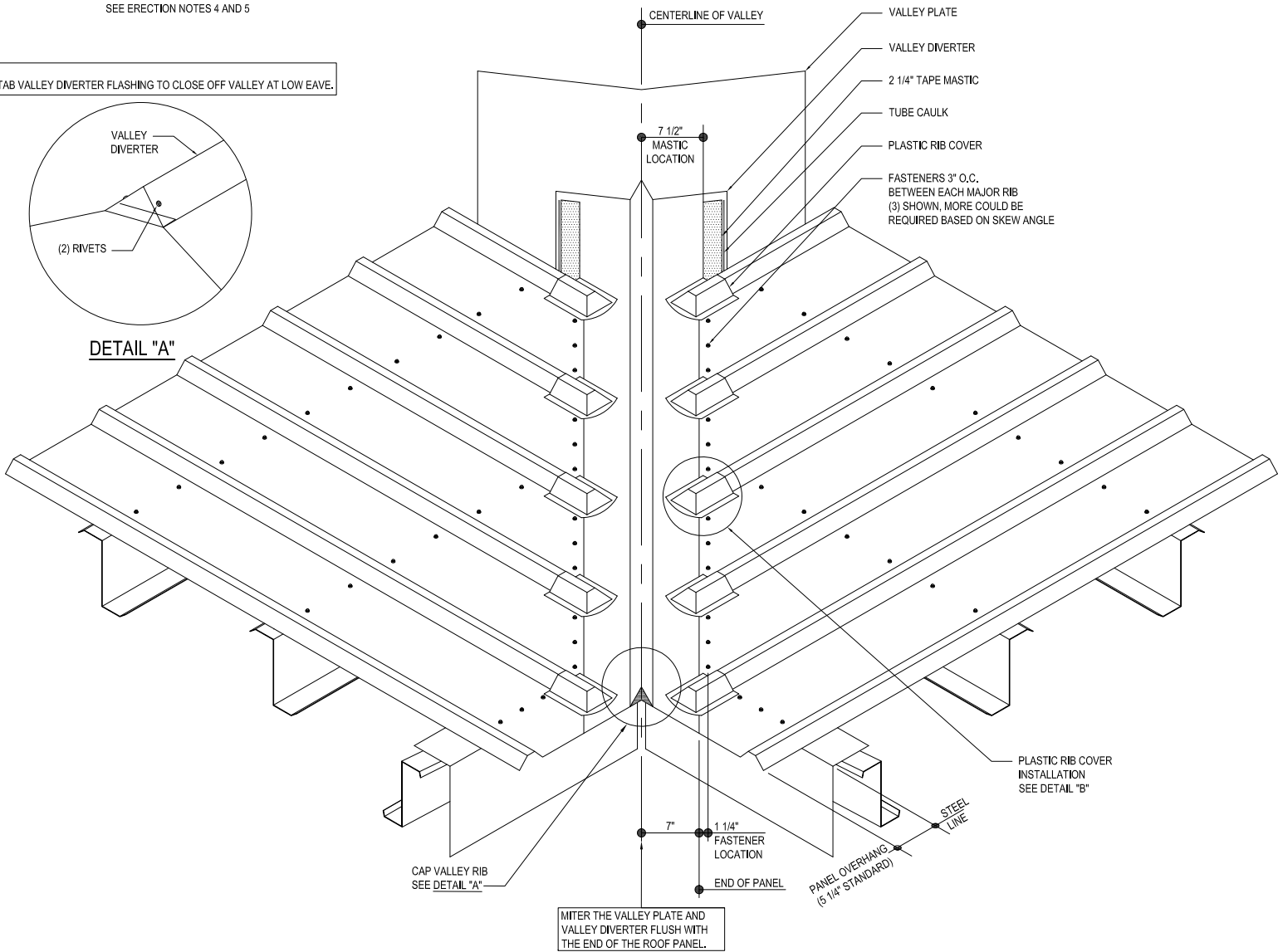
PLASTIC RIB COVER AND MASTIC PLACEMENT DETAIL

SEE ERECTION NOTES 4 AND 5

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



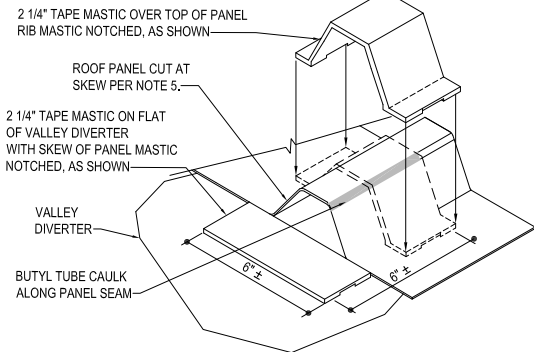
DETAIL "A"



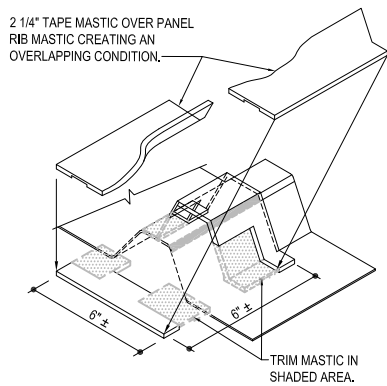
MASTIC AND RIB COVER DETAIL "B"

SEE ERECTION NOTES 6, 7, AND 8

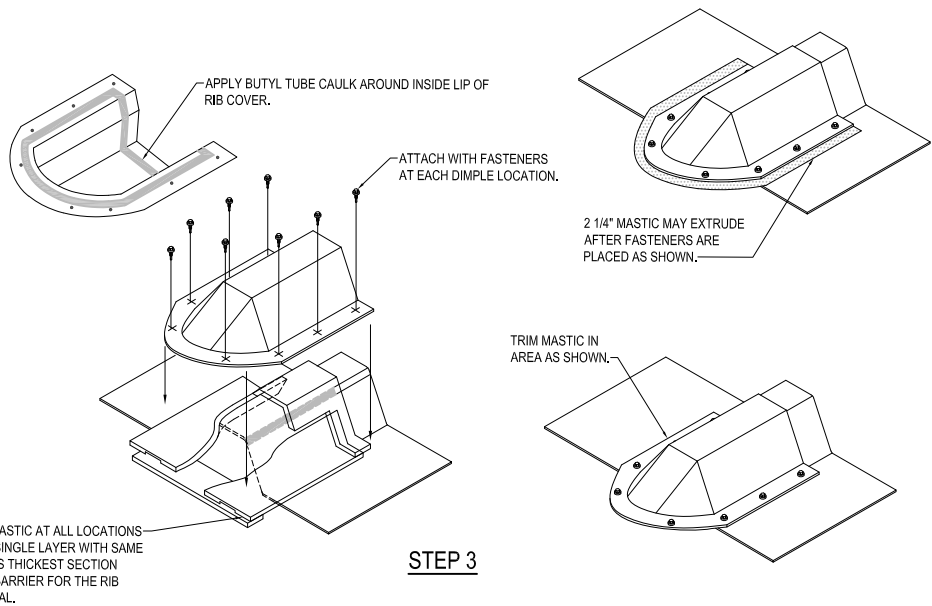
GENERAL RIB COVER NOTE:
TRACE RIB COVER INORDER TO KEEP 2 1/4" MASTIC BEAD ALONG EDGE FOR PROPER SEAL



STEP 1



STEP 2



STEP 3

R-PANEL VALLEY CONDITION

NO.	REVISION	DATE

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	200 WHETSTONE RD. SWANSEA, SC 29160 PHONE: (803) 568-2100 FAX: (803) 568-2121	
DRAWN BY: BSS	CHECKED BY: SLP	AMERICAN BUILDINGS	
DESIGN APP'D. BY:	ISSUED DATE:	DRAWING #: D2889-4	
Pg. 5 of 5			REVISION NUMBER 0