

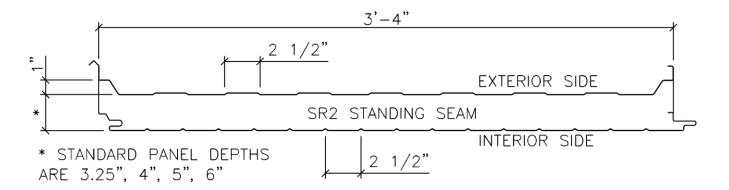
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SR2 INSULATED STANDING SEAM ROOF SYSTEM

The SR2 insulated standing seam roof system panel is available as a component of one of Valley Steel Building Systems' Standard Roof Systems.





Information about the available panel thickness options, R and U factors, exterior and interior colors and finishes, available panel lengths, performance and testing information, and much more is available at the Valley Steel Building Systems website at the below links.

SR2 Insulated Standing Seam Roof Panel

SR2 Insulated Standing Seam Roof Panel - Seaming Manual

The following pages outline span capacities for a typical panel configuration as well as provide Valley Steel standard details for this roof system.

SR2 INSULATED STANDING SEAM SPAN TABLES

3-1 /4" PANEL THICKNESS – STANDARD (2) FASTENERS

3- ¹ / ₄ " SR2	2 Insulate	d Standing	Seam Ro	of Panel		auge Exte steners pe		or		
2 Equal Spans										
Span (ft.)	Gravity (psf)	Deflection L/240		Uplift (Capacity (psf) per Sı	upport Thi	ckness		
(11.)	(psi)	L/240	0.060	0.067	0.075	0.089	0.099	0.105	0.120	



4	90	n/c	35	40	45	59	69	75	81	
4.5	79	n/c	31	35	40	52	61	66	72	
5	70	n/c	28	32	36	47	55	60	64	
5.5	62	n/c	25	29	33	43	50	54	58	
6	56	n/c	23	26	30	39	46	50	54	
7	46	n/c	20	22	26	33	39	42	46	
3 Equal Spans										
Span (ft.)	Gravity (psf)	Deflection L/240		Uplift (Capacity (psf) per Sı	upport Thi	ckness		
(11.)	(691)	L/240	0.060	0.067	0.075	0.089	0.099	0.105	0.120	
4	90	n/c	40	45	52	67	78	85	90	
4.5	79	n/c	35	40	46	60	69	75	79	
5	70	n/c	32	36	41	54	62	68	70	
5.5	62	n/c	29	33	37	49	57	62	62	
6	56	n/c	26	30	34	45	52	56	56	
7	46	n/c	22	26	29	38	44	46	46	

Insulated roof panel deflections are held to L/240. Contact the engineering team for minimum panel lengths, span capacities with different exterior or interior panel thicknesses, or fastener configurations.

LAST REVISION



3-1 /4" PANEL THICKNESS - OPTIONAL (3) FASTENERS

3- ¹ /4" SR2	2 Insulate	d Standing	Seam Ro	of Panel	26 Gauge Exterior/Interior3 Fasteners per Clip						
2 Equal	Spans										
Span	Gravity	Deflection L/240		Uplift (Capacity (psf) per Si	upport Thi	ckness			
(ft.)	(psf)	L/240	0.060	0.067	0.075	0.089	0.099	0.105	0.120		
4	90	n/c	52	60	68	81	81	81	81		
4.5	79	n/c	46	53	61	72	72	72	72		
5	70	n/c	42	42 48 54 64 64 64 64							
5.5	62	n/c	38	43	49	58	58	58	58		
6	56	n/c	35	40	45	54	54	54	54		
7	46	n/c	30	34	39	46	46	46	46		
3 Equal	Spans										
Span	Gravity	Deflection		Uplift (Capacity (psf) per Si	upport Thi	ckness			
(ft.)	(psf)	L/240	0.060	0.067	0.075	0.089	0.099	0.105	0.120		
4	90	n/c	60	68	78	90	90	90	90		
4.5	79	n/c	53	60	69	79	79	79	79		
5	70	n/c	48	54	62	70	70	70	70		
5.5	62	n/c	43	49	56	62	62	62	62		
6	56	n/c	40	45	52	56	56	56	56		
7	46	n/c	34	39	44	46	46	46	46		

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Insulated roof panel deflections are held to L/240. Contact the engineering team for minimum panel lengths, span capacities with different exterior or interior panel thicknesses, or fastener configurations.

4" PANEL THICKNESS - STANDARD (2) FASTENERS

4" SR2 Ir	sulated S	Standing Sea	am Roof I	Panel	– 26 Gauge Exterior/Interior– 2 Fasteners per Clip					
2 Equal	Spans									
Span	Gravity	Deflection		Uplift (Capacity (psf) per Si	upport Thi	ckness		
(ft.)	(psf)	L/240	0.060	0.067	0.075	0.089	0.099	0.105	0.120	
4	112	n/c	35	40	45	59	69	75	81	
4.5	98	n/c	31	35	40	52	61	66	72	
5	87	n/c	28	32	36	47	55	60	64	
5.5	78	n/c	25	29	33	43	50	54	58	
6	71	n/c	23	26	30	39	46	50	54	
7	59	n/c	20	22	26	33	39	42	46	
3 Equal	Spans									
Span	Gravity	Deflection L/240	Uplift Capacity (psf) per Support Thickness							
(ft.)	(psf)	L/240	0.060 0.067 0.075 0.089 0.099 0.105 0.120							
4	112	n/c	40	45	52	67	78	85	92	

LAST REVISION



4.5	98	n/c	35	40	46	60	69	75	81
5	87	n/c	32	36	41	54	62	68	73
5.5	78	n/c	29	33	37	49	57	62	66
6	71	n/c	26	30	34	45	52	56	61
7	59	n/c	22	26	29	38	44	48	52

Insulated roof panel deflections are held to L/240. Contact the engineering team for minimum panel lengths, span capacities with different exterior or interior panel thicknesses, or fastener configurations.

4" PANEL THICKNESS - OPTIONAL (3) FASTENERS

4" SR2 In	sulated S	Standing Sea	m Roof Panel – 26 Gauge Exterior/Interior – 3 Fasteners per Clip								
2 Equal	Spans										
Span	Gravity	Deflection		Uplift (Capacity (psf) per S	upport Thi	ckness			
(ft.)	(psf)	L/240	0.060 0.067 0.075 0.089 0.099 0.105								
4	112	n/c	52 60 68 81 81 81 81								
4.5	98	n/c	46 53 61 72 72 72 72								
5	87	n/c	42	48	54	64	64	64	64		
5.5	78	n/c	38	43	49	58	58	58	58		
6	71	n/c	35	40	45	54	54	54	54		
7	59	n/c	30	34	39	46	46	46	46		
3 Equal	Spans										
Span			Uplift Capacity (psf) per Support Thickness								

LAST REVISION



(ft.)	Gravity (psf)	Deflection L/240	0.060	0.067	0.075	0.089	0.099	0.105	0.120
4	112	n/c	60	68	78	92	92	92	92
4.5	98	n/c	53	60	69	81	81	81	81
5	87	n/c	48	54	62	73	73	73	73
5.5	78	n/c	43	49	56	66	66	66	66
6	71	n/c	40	45	52	61	61	61	61
7	59	n/c	34	39	44	52	52	52	52

Insulated roof panel deflections are held to L/240. Contact the engineering team for minimum panel lengths, span capacities with different exterior or interior panel thicknesses, or fastener configurations.

5" PANEL THICKNESS - STANDARD (2) FASTENERS

5" SR2 In	sulated S	standing Sea	am Roof F	Panel		auge Exte steners pe	rior/Interi er Clip	or			
2 Equal	Spans										
Span	Gravity	Deflection L/240		Uplift Capacity (psf) per Support Thickness							
(ft.)	(psf)	L/240	0.060	0.067	0.075	0.089	0.099	0.105	0.120		
4	142	n/c	35	40	45	59	69	75	81		
4.5	125	n/c	31	35	40	52	61	66	72		

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5	111	n/c	28	32	36	47	55	60	64
5.5	100	n/c	25	29	33	43	50	54	58
6	90	n/c	23	26	30	39	46	50	54
7	75	n/c	20	22	26	33	39	42	46
3 Equal	Spans								
Span	Gravity	Deflection		Uplift (Capacity (psf) per Si	upport Thi	ckness	
(11.)	ft.) (psf) L/240	0.060	0.067	0.075	0.089	0.099	0.105	0.120	
4	142	n/c	40	45	52	67	78	85	92
4.5	125	n/c	35	40	46	60	69	75	81
5	111	n/c	32	36	41	54	62	68	73
5.5	100	n/c	29	33	37	49	57	62	66
6	90	n/c	26	30	34	45	52	56	61
7	75	n/c	22	26	29	38	44	48	52

Insulated roof panel deflections are held to L/240. Contact the engineering team for minimum panel lengths, span capacities with different exterior or interior panel thicknesses, or fastener configurations.

<u>5" PANEL THICKNESS – OPTIONAL (3) FASTENERS</u>

5" SR2 In	sulated S	standing Sea	am Roof F	Panel	– 26 Gauge Exterior/Interior– 3 Fasteners per Clip					
2 Equal Spans										
Span (ft.)	Gravity	Deflection L/240	Uplift Capacity (psf) per Support Thickness							
(11.)	(psf)	L/240	0.060	0.067	0.075	0.089	0.099	0.105	0.120	

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4	142	n/c	52	60	68	81	81	81	81
4.5	125	n/c	46	53	61	72	72	72	72
5	111	n/c	42	48	54	64	64	64	64
5.5	100	n/c	38	43	49	58	58	58	58
6	90	n/c	35	40	45	54	54	54	54
7	75	n/c	30	34	39	46	46	46	46
3 Equal	Spans								
Span (ft.)	Gravity (psf)	Deflection L/240		Uplift (Capacity (psf) per Si	upport Thi	ckness	
(11.)	(psi)	L/240	0.060	0.067	0.075	0.089	0.099	0.105	0.120
4	142	n/c	60	68	78	92	92	92	92
4.5	125	n/c	53	60	69	81	81	81	81
5	111	n/c	48	54	62	73	73	73	73
5.5	100	n/c	43	49	56	66	66	66	66
6	90	n/c	40	45	52	61	61	61	61
7	75	n/c	34	39	44	52	52	52	52

Insulated roof panel deflections are held to L/240. Contact the engineering team for minimum panel lengths, span capacities with different exterior or interior panel thicknesses, or fastener configurations.

LAST REVISION



6" PANEL THICKNESS - STANDARD (2) FASTENERS

6" SR2 In	sulated S	Standing Sea	26 Gauge Exterior/Interior2 Fasteners per Clip							
2 Equal	Spans									
Span	Gravity	Deflection	Uplift Capacity (psf) per Support Thickness							
(ft.) (psf)	L/240	0.060	0.067	0.075	0.089	0.099	0.105	0.120		
4	172	n/c	35	40	45	59	69	75	81	
4.5	151	n/c	31	35	40	52	61	66	72	
5	135	n/c	28	32	36	47	55	60	64	
5.5	121	n/c	25	29	33	43	50	54	58	
6	110	n/c	23	26	30	39	46	50	54	
7	92	n/c	20	22	26	33	39	42	46	
3 Equal Spans										
Span Gravity Deflection			Uplift Capacity (psf) per Support Thickness							
(ft.) (psf)	osf) L/240	0.060	0.067	0.075	0.089	0.099	0.105	0.120		
4	172	n/c	40	45	52	67	78	85	92	
4.5	151	n/c	35	40	46	60	69	75	81	
5	135	n/c	32	36	41	54	62	68	73	
5.5	121	n/c	29	33	37	49	57	62	66	
6	110	n/c	26	30	34	45	52	56	61	
7	92	n/c	22	26	29	38	44	48	52	

LAST REVISION

DATE: 12/13/23 BY: <u>AAJ</u> CHK: <u>MDK</u>



Insulated roof panel deflections are held to L/240. Contact the engineering team for minimum panel lengths, span capacities with different exterior or interior panel thicknesses, or fastener configurations.

6" PANEL THICKNESS – OPTIONAL (3) FASTENERS

6" SR2 Insulated Standing Seam Roof Panel					26 Gauge Exterior/Interior3 Fasteners per Clip				
2 Equal	Spans								
Span	Gravity		Uplift Capacity (psf) per Support Thickness						
(ft.)	(psf)	L/240	0.060	0.067	0.075	0.089	0.099	0.105	0.120
4	172	n/c	52	60	68	81	81	81	81
4.5	151	n/c	46	53	61	72	72	72	72
5	135	n/c	42	48	54	64	64	64	64
5.5	121	n/c	38	43	49	58	58	58	58
6	110	n/c	35	40	45	54	54	54	54
7	92	n/c	30	34	39	46	46	46	46
3 Equal Spans									
Span (ft.)	Gravity		Uplift Capacity (psf) per Support Thickness						
(ft.)	(psf)	L/240	0.060	0.067	0.075	0.089	0.099	0.105	0.120
4	172	n/c	60	68	78	92	92	92	92

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DATE: 12/13/23 BY: AAJ CHK: <u>MDK</u>



4.5	151	n/c	53	60	69	81	81	81	81
5	135	n/c	48	54	62	73	73	73	73
5.5	121	n/c	43	49	56	66	66	66	66
6	110	n/c	40	45	52	61	61	61	61
7	92	n/c	34	39	44	52	52	52	52

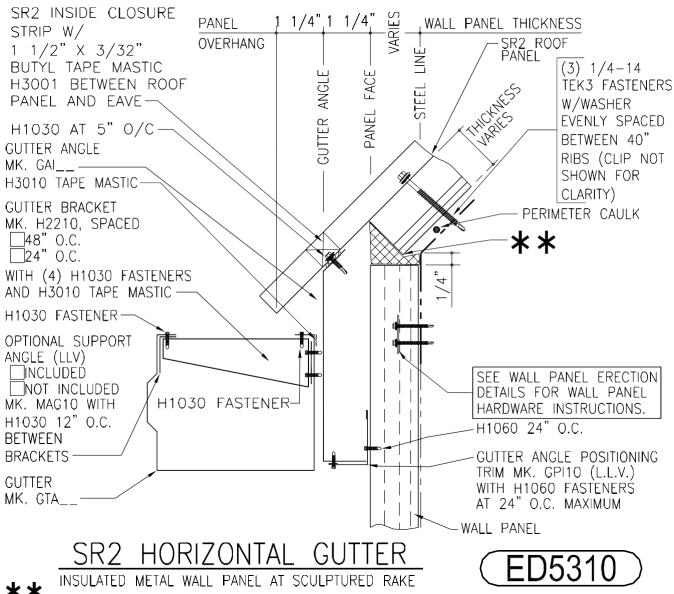
Insulated roof panel deflections are held to L/240. Contact the engineering team for minimum panel lengths, span capacities with different exterior or interior panel thicknesses, or fastener configurations.

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STANDARD DETAILS

ED5310PE - HORIZONTAL GUTTER



* *= PANEL NOTCH WILL NOT LINE UP WITH EAVE LINE. THIS POINT WILL VARY DEPENDING ON THE ROOF SLOPE AND THICKNESS OF PANEL. FIELD FILL GAPS WITH SPRAY-IN-PLACE OR BATT INSULATION.

Horizontal gutter is provided as the standard.



T E E L PRODUCT & ENGINEERING MANUAL

LAST REVISION
DATE: 02/16/15
BY: AK EGB

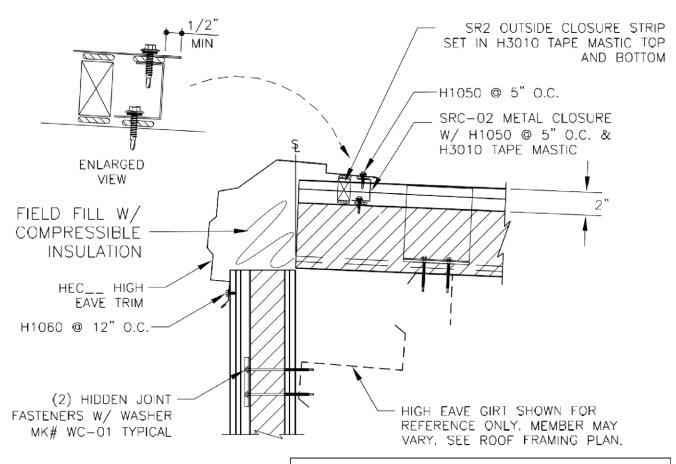
NAME IF ED5310PE.dwg

EH5006 - HIGH EAVE SCULPTURED

LAST REVISION <u>DETAIL</u>
DATE: 02/23/15

BY: AK CHK: EGB





PANEL THICKNESS	HIDDEN FASTENER
2"	#14 X 2 SDHH
2 1/2"	#14 X 3 SDHH
3"	#14 X 3 SDHH
4"	#14 X 4 SDHH

NOTE: DO NOT OVER DRIVE FASTENERS. IF THE METAL AT THE EDGE OF THE PANEL IS DEFORMED OUT OF PLANE, THE ADJACENT PANEL WILL BE DIFFICULT TO ENGAGE AND WILL NOT SEAM. AFTER SR CLIP HAS BEEN INSTALLED IN PLACE OVER MALE LEG OF STANDING SEAM PANEL, PRE-CRIMP, USING 1/2" HAND CRIMPING TOOL SUPPLIED.

HIGH SIDE EAVE

SR2 INSULATED PANEL

SEE INSULATED WALL PANEL ERECTION NOTES FOR ASSEMBLY METHOD

EH5006

LAST REVISION DETAIL

DATE: <u>02/</u>23<u>/15</u>

BY: AK CHK: EGB

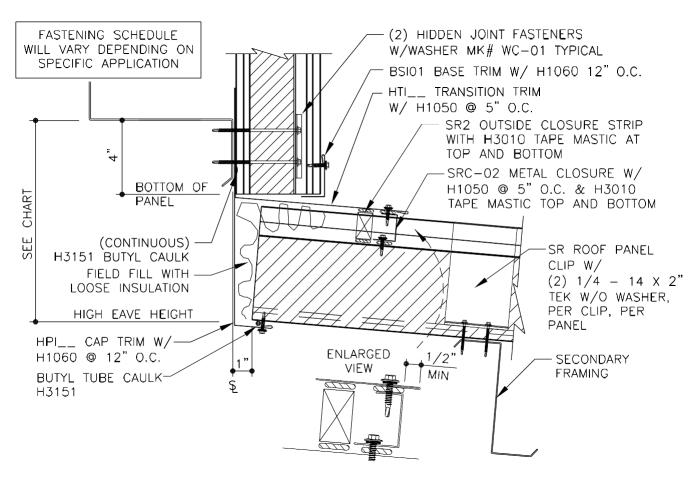
APPLICABLE



• The profile of the high eave sculptured trim matches the profile of the sculptured rake trim so that they can be mitered together.

NAME IF EH5006.dwg

EI5010 - HIGH EAVE PARAPET



LAST REVISION <u>DETAIL</u>

DATE: <u>02/</u>23<u>/15</u> BY: AK CHK: EGB <u>APPLICABLE</u>



PANEL THICKNESS	
2"	X 2
2	X 3
1/2" 3"	#14 #14 #14 × 3 #14
	4

ROOF PANEL THICKNESS	DIM.
3	
1/4"	1/4"
4"	0'-10"
5"	0'-11"
6"	1'-0"

HIGH EAVE PARAPET DETAIL
SR2 INSULATED PANEL

NAME IF

EI5010.dwg

LAST REVISION **DETAIL**

DATE: <u>02/</u>23<u>/15</u> BY: <u>AK</u> CHK: <u>EGB</u>

APPLICABLE



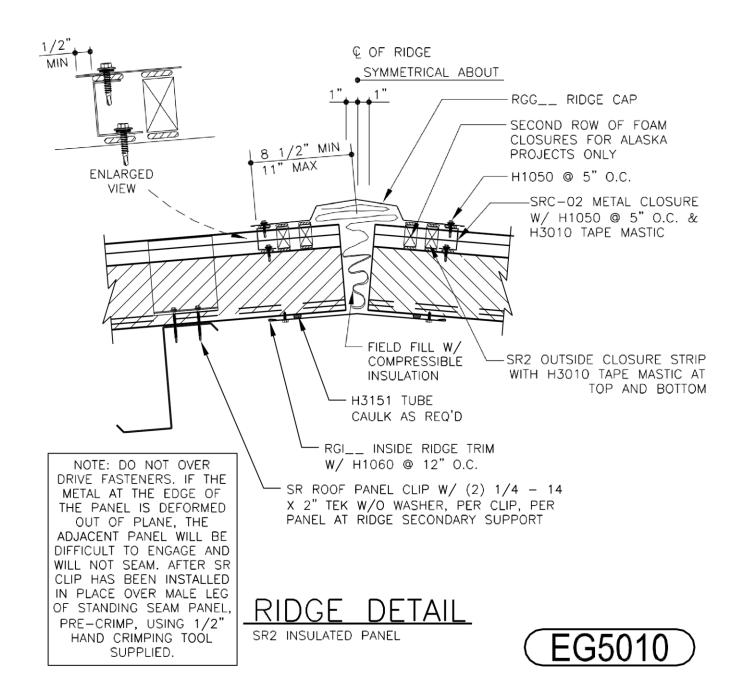
T E E L PRODUCT & ENGINEERING MANUAL

EG5010 - STANDARD RIDGE

LAST REVISION

DATE: <u>02/</u>23/15 BY: <u>AK</u> CHK: <u>EGB</u> DETAIL APPLICABLE





LAST REVISION

DETAIL APPLICABLE

DATE: <u>02/</u>23<u>/15</u> BY: <u>AK</u> CHK: <u>EGB</u>



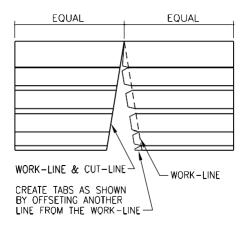
• The ridge cap is the same as the CFR low profile ridge cap.

NAME IF

EG5010.dwg

EG2100PE - FIELD

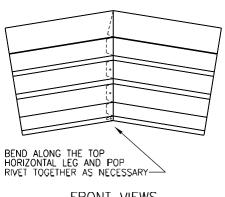
FABRICATED METAL PEAK BOX



IMPORTANT NOTE

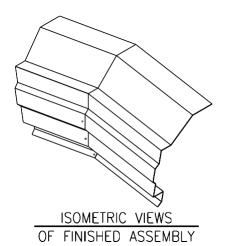
DO NOT ATTACH THE PEAK BOX TO THE RAKE TRIM OR THE ROOF PANEL. THE RAKE TRIM MUST BE ALLOWED TO FLOAT WITH THERMAL EXPANSION AND CONTRACTION, SEPARATE FROM THE PEAK BOX.

SEE THE ROOF SHEETING ERECTION MANUAL FOR ADDITIONAL PARTS REQUIRED AT THIS LOCATION.



FRONT VIEWS

OF ASSEMBLY PROCESS



FIELD-FABRICATED PEAK BOX INSTRUCTIONS

- The customer has the option of purchasing the metal peak boxes or field fabricating a metal peak box out of a piece of standard rake trim.
- The standard metal peak boxes work up through 6:12 roof slope, and only available in white.

DETAIL APPLICABLE



- The standard CAD detail for the field fabricated metal peak box shows a lot more information on how to fabricate this.
- The metal peak box, as shown in the detail, allows the rake trim to slide as it is designed to. Field mitering the rake trim together at the peak with sliding clips is not recommended. It takes anywhere from 30-60 minutes to field fabricate one of these metal beak boxes.

NAME IF EG2100PE.dwg

EA5021 - END LAP

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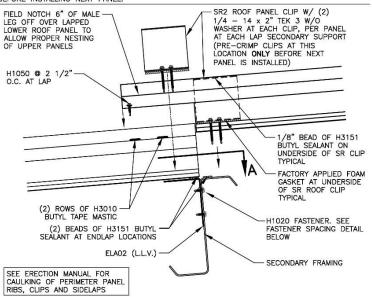
DATE: 02/23/15

BY: AK CHK: EGB

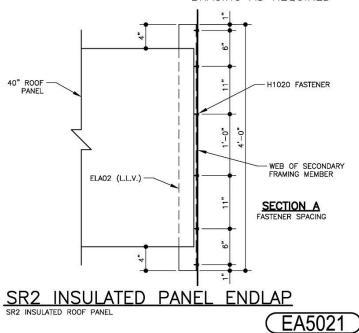
DETAIL APPLICABLE



NOTE: DO NOT OVER DRIVE FASTENERS. IF THE METAL AT THE EDGE OF THE PANEL IS DEFORMED OUT OF PLANE, THE ADJACENT PANEL WILL BE DIFFICULT TO ENGAGE AND WILL NOT SEAM. AFTER SR CLIPS AT THE PANEL LAP AREA HAVE BEEN INSTALLED IN PLACE OVER MALE LEG OF STANDING SEAM PANEL, PRE-CRIMP USING HAND CRIMPING TOOL SUPPLIED IN THE SEAMER KIT. IT IS RECOMMENDED TO CRIMP CLIP TO MALE RIB USING CRIMPER SUPPLIED WITH IMP ACCESSORIES BEFORE INSTALLING NEXT PANEL.



ERECTOR NOTE: FIELD DRILL/NOTCH LAP ANGLE AT PURLIN LAP BOLTS AND PURLIN BRACING AS REQUIRED



• Insulation and interior metal skin is removed from portion of exterior skin that will be lapped onto the lower panel.

DETAIL APPLICABLE



 Sealant is field applied. NAME I 	•	Sealant	is field	applied.	NAME	IF
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LAST REVISION DATE:

BY: SAA **EA5021.dwg**

LAST REVISION

DATE: 02/23/15

BY: AK CHK: EGB

DETAIL APPLICABLE