

IRONRIDGE XR FLUSH MOUNT PHOTOVOLTAIC PANEL RACKING SYSTEM WITH QUICKMOUNT L-MOUNT ROOF ATTACHMENTS

GENERAL NOTES:

- THIS SYSTEM MEETS ALL OF THE REQUIREMENTS OF THE 7TH EDITION (2020) FLORIDA BUILDING CODE, INCLUDING THE HVHZ PROVISIONS.
- THIS SYSTEM HAS BEEN TESTED PER TAS 100(A) AND ASTM D7147. IT IS NOT A PART OF THE BUILDING ENVELOPE, AND IMPACT RESISTANCE IS NOT REQUIRED.
- THIS SYSTEM SHALL BE INSTALLED PER THE IRONRIDGE XR FLUSH MOUNT INSTALLATION MANUAL.
- THE PV PANELS ARE BY OTHERS AND ARE NOT A PART OF THIS APPROVAL.
- RAIL SPACING TO BE AS SPECIFIED BY THE PV PANEL MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- THE DESIGN OF THE ROOF SUBSTRATE IS THE RESPONSIBILITY OF THE ENGINEER OF RECORD OR OTHER SPECIALTY ENGINEER, AND IS NOT A PART OF THIS APPROVAL. THE SUBSTRATE MUST SAFELY TRANSMIT THE LOADS APPLIED TO THIS SYSTEM TO THE BUILDING STRUCTURE.
- FIRE RATINGS OR FIRE RESISTANCE IS NOT A PART OF THIS REVIEW.
- ALL ANCHORS SECURING THE SYSTEM TO PRESSURE TREATED WOOD SHALL BE CAPABLE OF RESISTING CORROSION CAUSED BY THE CHEMICALS IN THE WOOD.
- MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL BE PROTECTED PER FBC REQUIREMENTS.
- NO INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS PRODUCT. Cd=1.6 WAS USED FOR WOOD SCREWS ONLY.

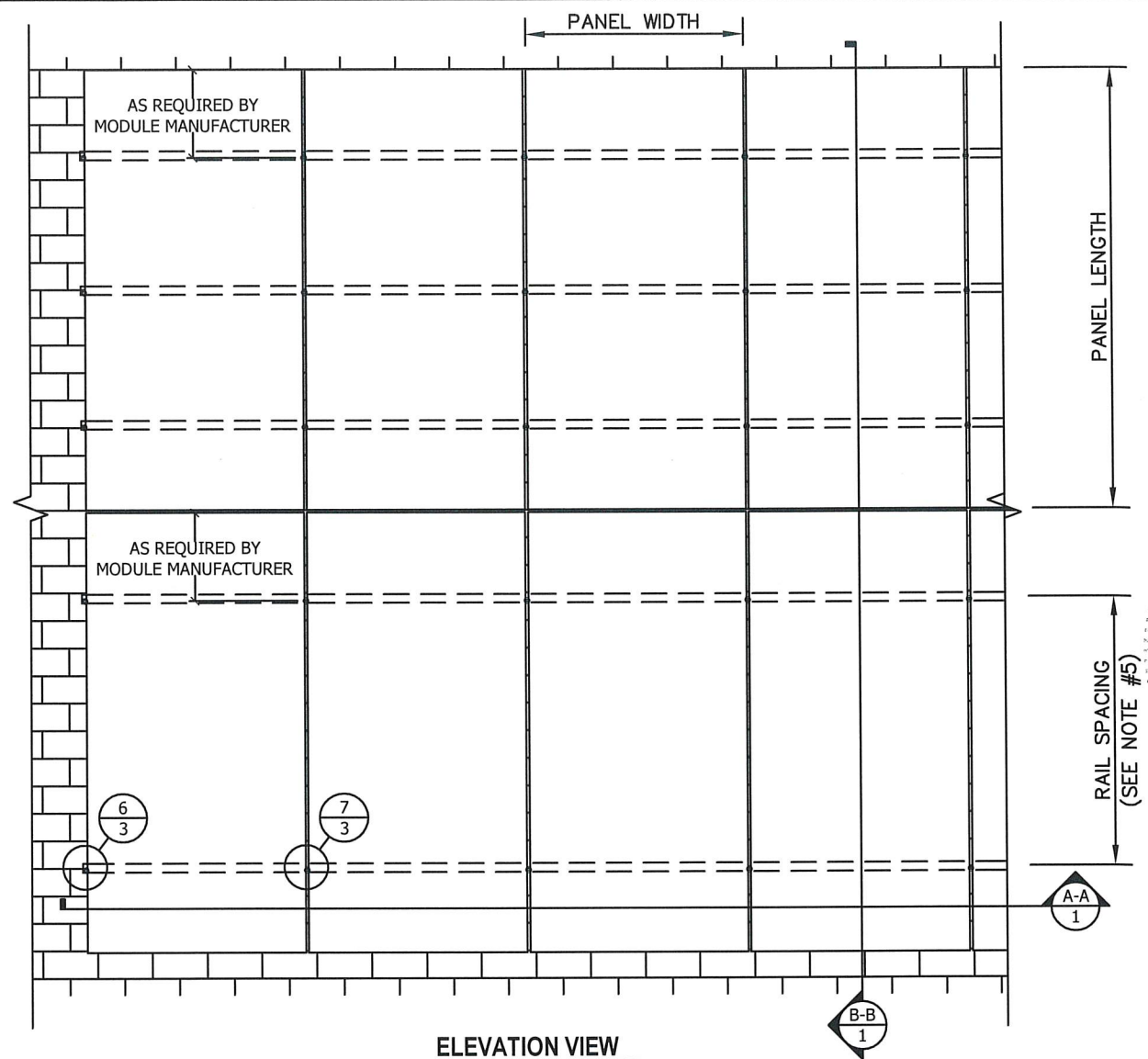
WINDLOAD NOTES:

- DESIGN WINDLOADS MUST BE CALCULATED BY A LICENSED PROFESSIONAL ENGINEER OR ARCHITECT FOR EACH PROJECT, PER ASCE 7-16 SECTION 29.4.4. DESIGN WINDLOADS MAY NOT EXCEED THE ALLOWABLE WINDLOADS SHOWN IN THIS CHART.
- PANEL SYSTEM LOCATION, HEIGHT, AND SPACING MUST MEET THE REQUIREMENTS OF ASCE 7-16 SECTION 29.4.4. WINDLOADS ACT NORMAL TO THE SURFACE OF THE PV PANEL SYSTEM.
- OTHER CONFIGURATIONS REQUIRE PROJECT SPECIFIC ANALYSIS BY A LICENSED PROFESSIONAL ENGINEER OR ARCHITECT.
- ALLOWABLE WINDLOADS ARE BASED ON ANCHORING IN WOOD RAFTERS WITH S.G.=0.45 MIN.

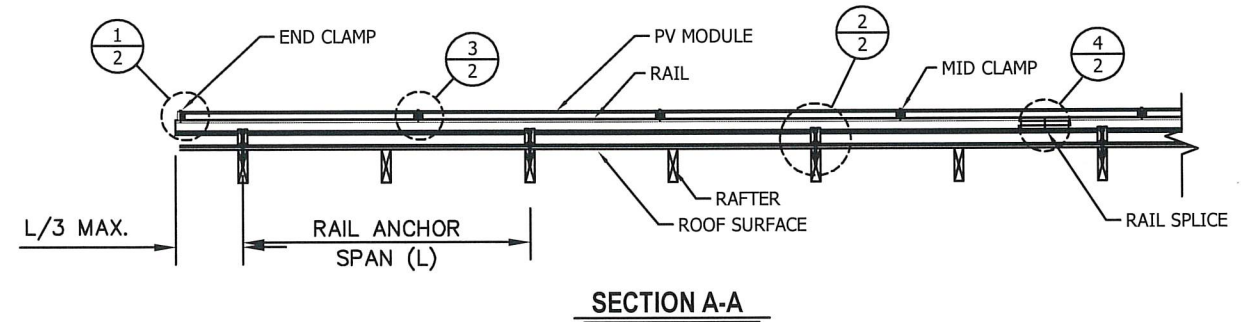
ALLOWABLE WINDLOADS												
TWO RAIL SYSTEM						THREE RAIL SYSTEM						
PANEL WIDTH (in)	PANEL LENGTH (in)	ANCHOR SPAN (L) (in)	XR-10 RAIL (+/- psf)	XR-100 RAIL (+/- psf)	XR-1000 RAIL (+/- psf)	PANEL WIDTH (in)	PANEL LENGTH (in)	ANCHOR SPAN (L) (in)	XR-10 RAIL (+/- psf)	XR-100 RAIL (+/- psf)	XR-1000 RAIL (+/- psf)	
45	67 1/2	16	90	90	90	45	67 1/2	16	135.0	135.0	135.0	
		24	65.4	90	90			24	98.1	135.0	135.0	
		32	56.1	90	90			32	84.2	135.0	135.0	
		36	49.9	90	90			36	74.9	135.0	135.0	
		48	37.4	85.6	90			48	56.1	128.4	135.0	
		64	28.1	64.2	68.4			64	42.2	96.3	102.6	
	72	23.7	54	59.5	72		35.6	81.0	89.3			
	80	16	75.9	75.9	75.9		80	16	113.9	113.9	113.9	
		24	55.2	75.9	75.9			24	82.8	113.9	113.9	
		32	47.3	75.9	75.9			32	71.0	113.9	113.9	
		36	42.1	75.9	75.9			36	63.2	113.9	113.9	
		48	31.6	72.2	75.9			48	47.4	108.3	113.9	
		64	23.7	54.2	57.7			64	35.6	81.3	86.6	
	86	72	20	45.6	50.2		72	30.0	68.4	75.3		
		16	70.6	70.6	70.6		86	16	105.9	105.9	105.9	
		24	51.3	70.6	70.6			24	77.0	105.9	105.9	
		32	44	70.6	70.6			32	66.0	105.9	105.9	
		36	39.1	70.6	70.6			36	58.7	105.9	105.9	
		48	29.4	67.2	70.6			48	44.1	100.8	105.9	
	64	22	50.4	53.7	64			33.0	75.6	80.6		
	92 1/2	72	18.6	42.4	46.7		72	27.9	63.6	70.1		
		16	65.7	65.7	65.7		92 1/2	16	98.6	98.6	98.6	
		24	47.7	65.7	65.7			24	71.6	98.6	98.6	
		32	40.9	65.7	65.7			32	61.4	98.6	98.6	
36		36.4	65.7	65.7	36	54.6		98.6	98.6			
48		27.3	62.5	65.7	48	41.0		93.8	98.6			
64	20.5	46.9	49.9	64	30.8	70.4		74.9				
LANDSCAPE LAYOUT:	45	92 1/2	16	65.7	65.7	65.7	45	92 1/2	16	98.6	98.6	98.6
			24	52.9	65.7	65.7			24	79.4	98.6	98.6
			32	40.8	65.7	65.7			32	61.2	98.6	98.6
			36	36	65.7	65.7			36	54.0	98.6	98.6
			48	24.2	55	65.7			48	36.3	82.5	98.6
			64	20.5	46.9	65.7			64	30.8	70.4	98.6
72	18.2	41.7	65.7	72	27.3	62.6	98.6					

THREE RAIL SYSTEM:

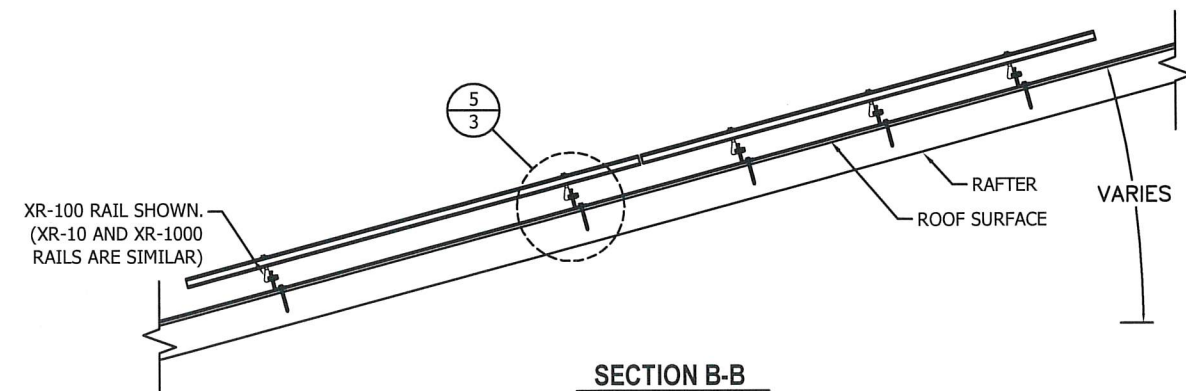
TWO RAIL SYSTEM:



ELEVATION VIEW



SECTION A-A



SECTION B-B

XR-100 RAIL SHOWN.
(XR-10 AND XR-1000
RAILS ARE SIMILAR)

DATE: 12/19/22

REV.#

ISSUED FOR PRINTS

DATE OF SUBMITTAL: 12/19/2022

SCOTT WOLTERS
FL PE# 62354

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(561) 225-1982

DWG: XR-LF

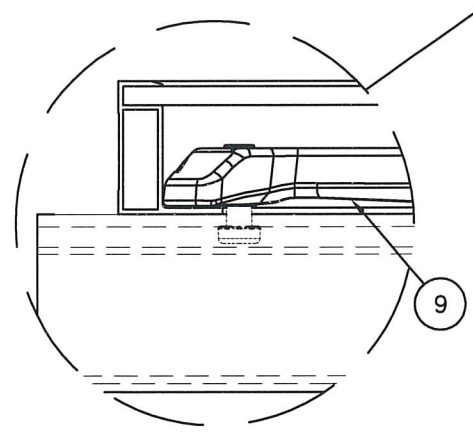
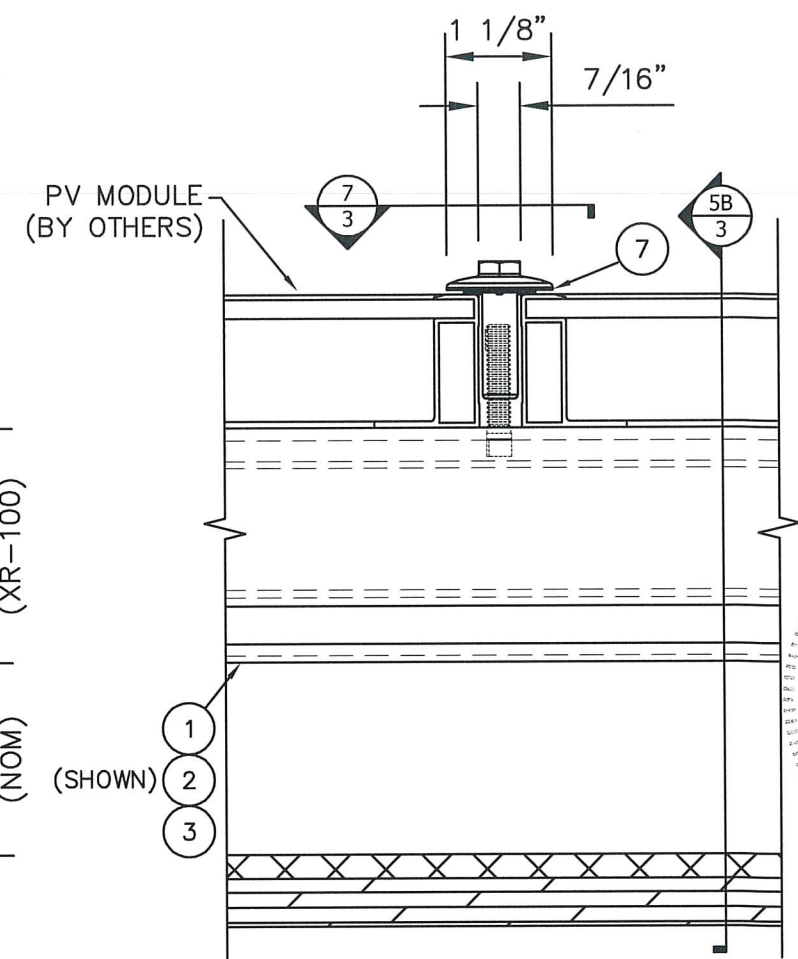
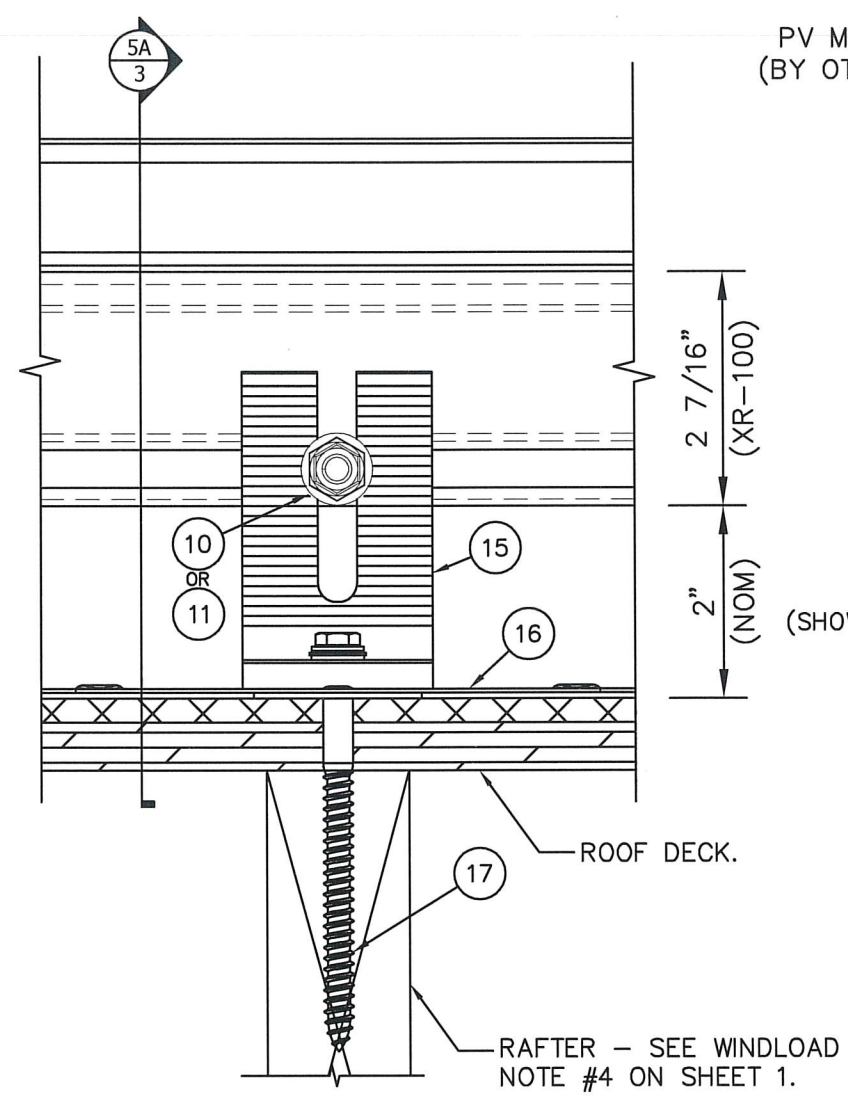
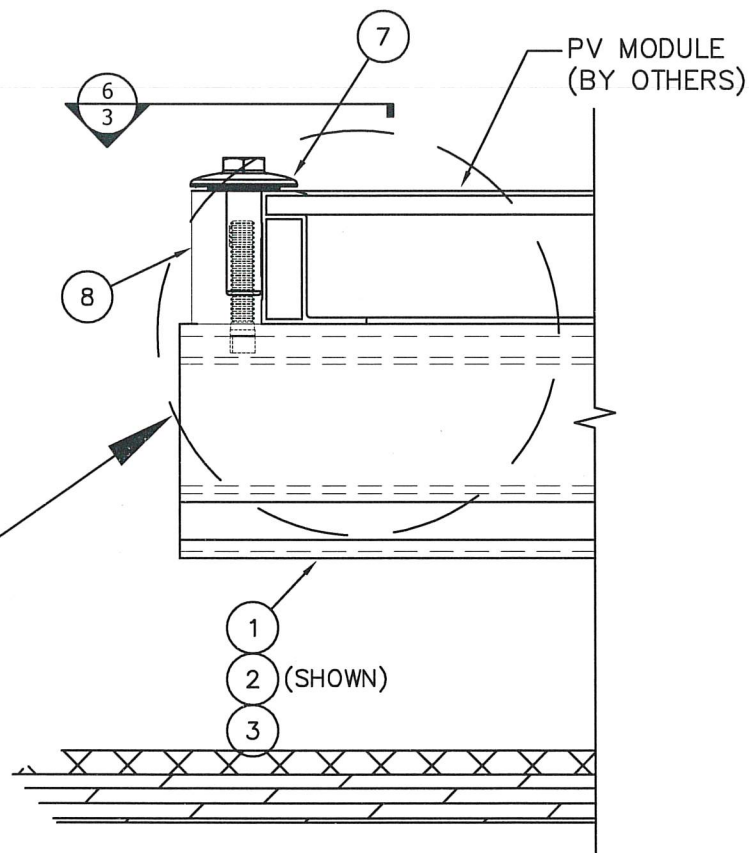
SHEET: 1/6

IRONRIDGE

28357 INDUSTRIAL BLVD.
HAYWARD, CA 94545

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WITH QUICKMOUNT L-MOUNT ROOF ATTACHMENTS**

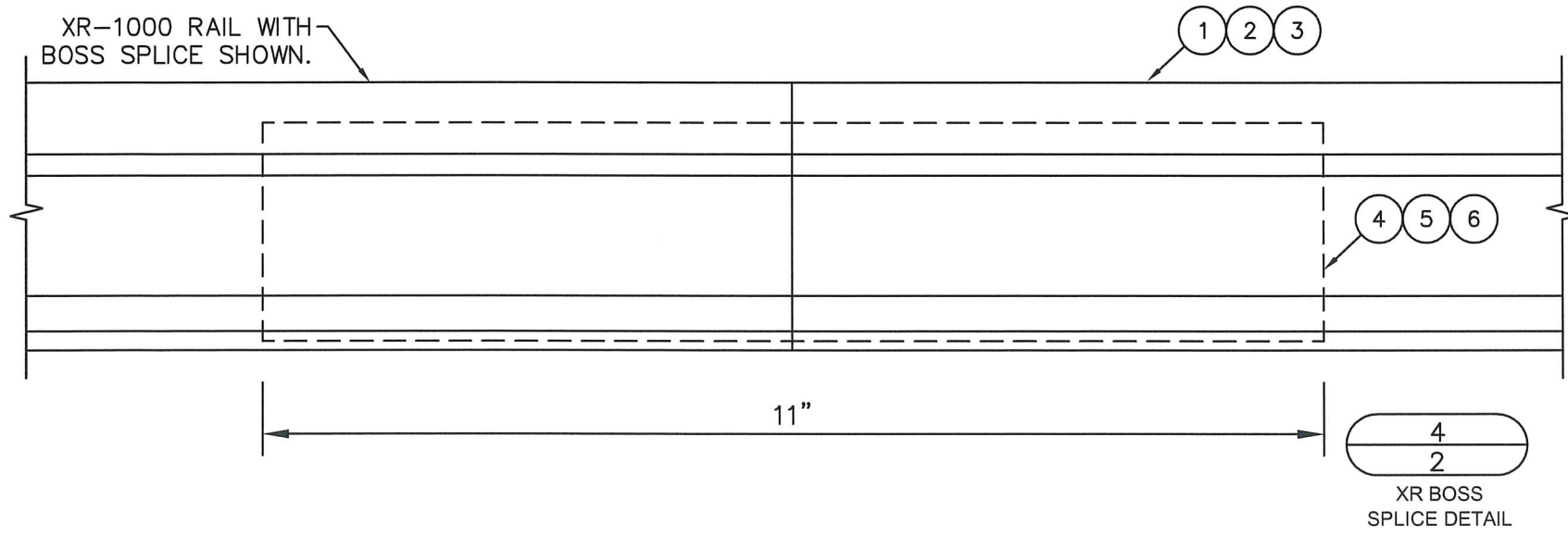


1B
2
ALTERNATE CAMO
END-CLAMP DETAIL

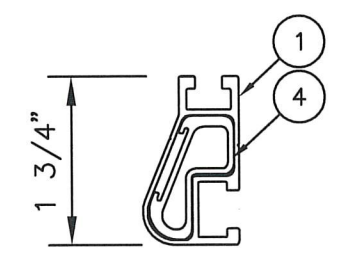
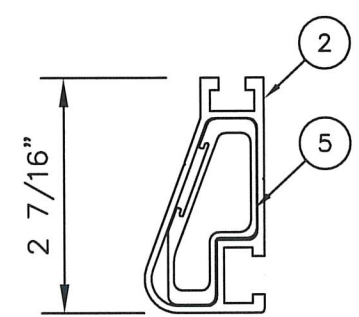
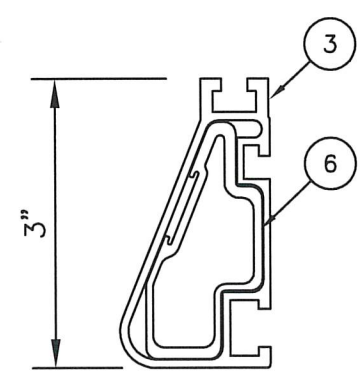
1
2
UFO END-CLAMP
WITH STOPPER SLEEVE

2
2
L-MOUNT DETAIL

3
2
IRONRIDGE UFO
MID-CLAMP DETAIL



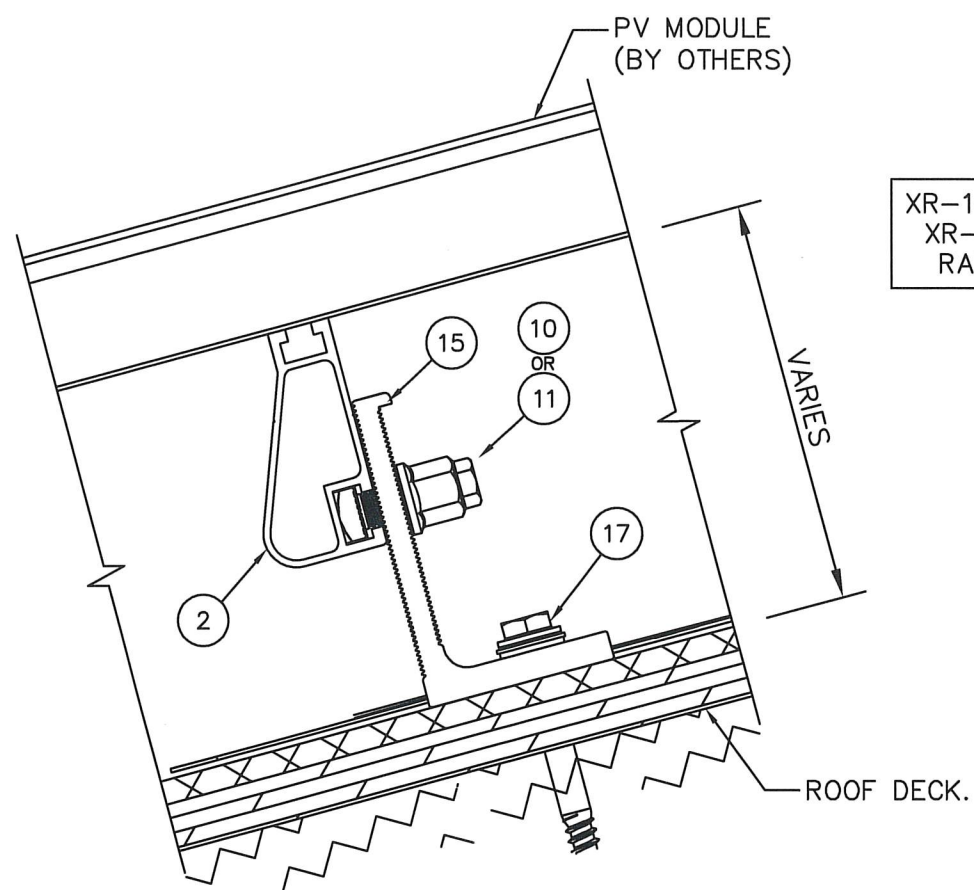
4
2
XR BOSS
SPLICE DETAIL



SPLICE MAY NOT BE
LOCATED IN A CANTILEVER.

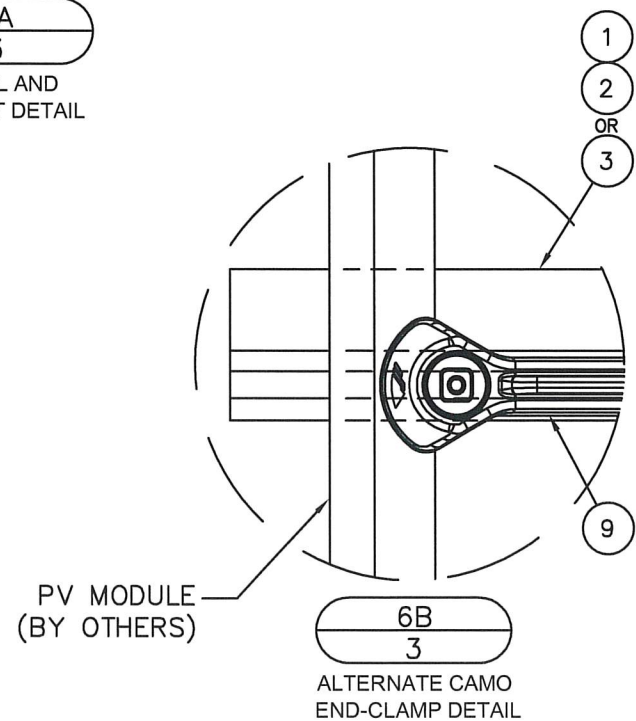
	28357 INDUSTRIAL BLVD. HAYWARD, CA 94545	PHONE: (800) 227-9523 info@ironridge.com	DWG: XR-LF SHEET: 2/6	SEAL:	1ST SUBMITTAL	REV.#	DATE
							12/19/22

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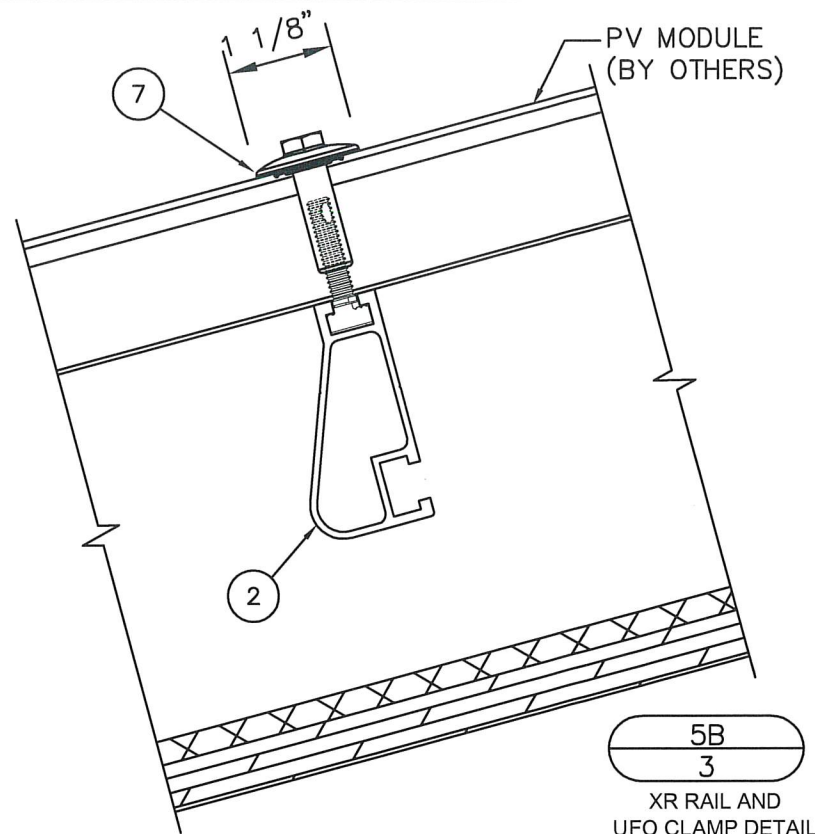


XR-100 RAIL IS SHOWN.
XR-10 AND XR-1000
RAILS ARE SIMILAR.

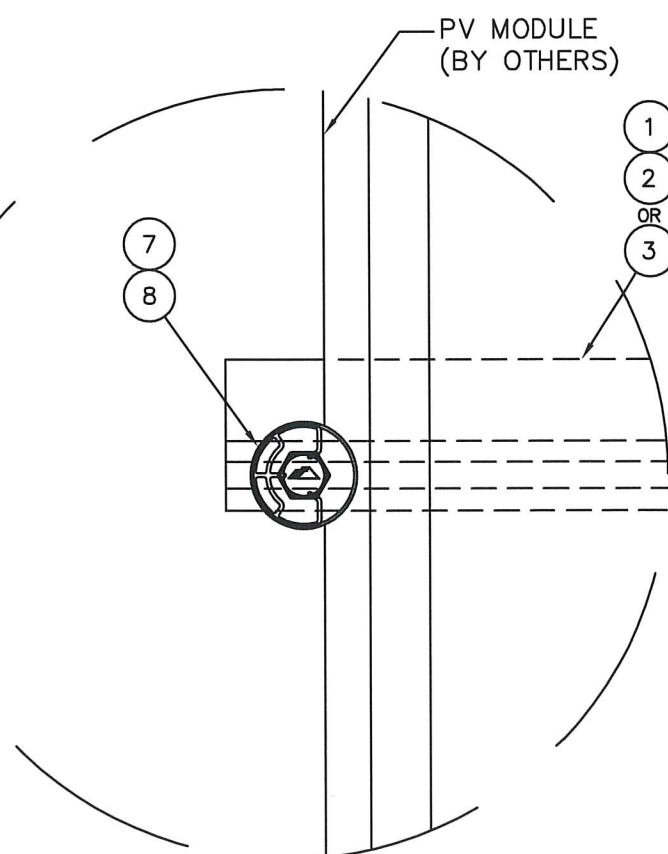
5A
3
XR RAIL AND
L-MOUNT DETAIL



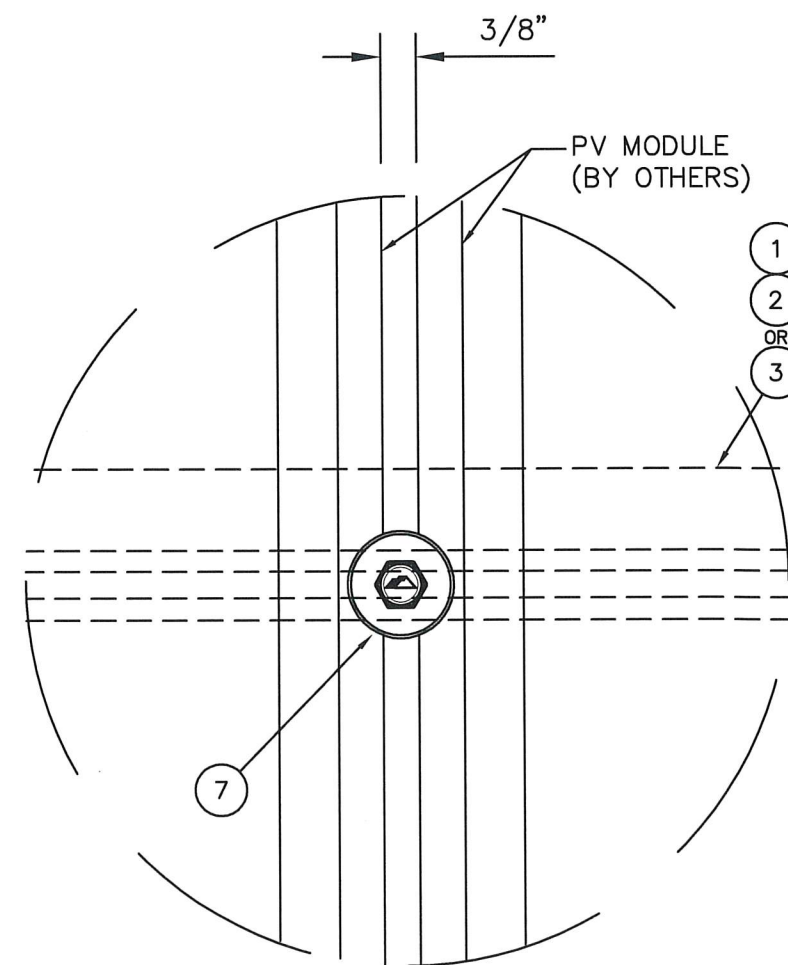
6B
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ALTERNATE CAMO
END-CLAMP DETAIL



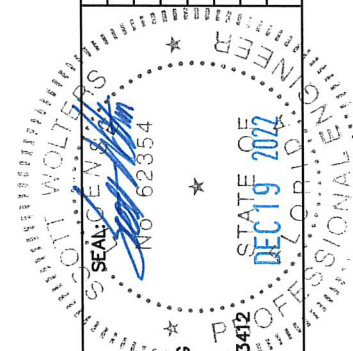
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XR RAIL AND
UFO CLAMP DETAIL



6
3
UFO END-CLAMP WITH
STOPPER SLEEVE DETAIL



7
3
IRONRIDGE UFO
MID-CLAMP DETAIL



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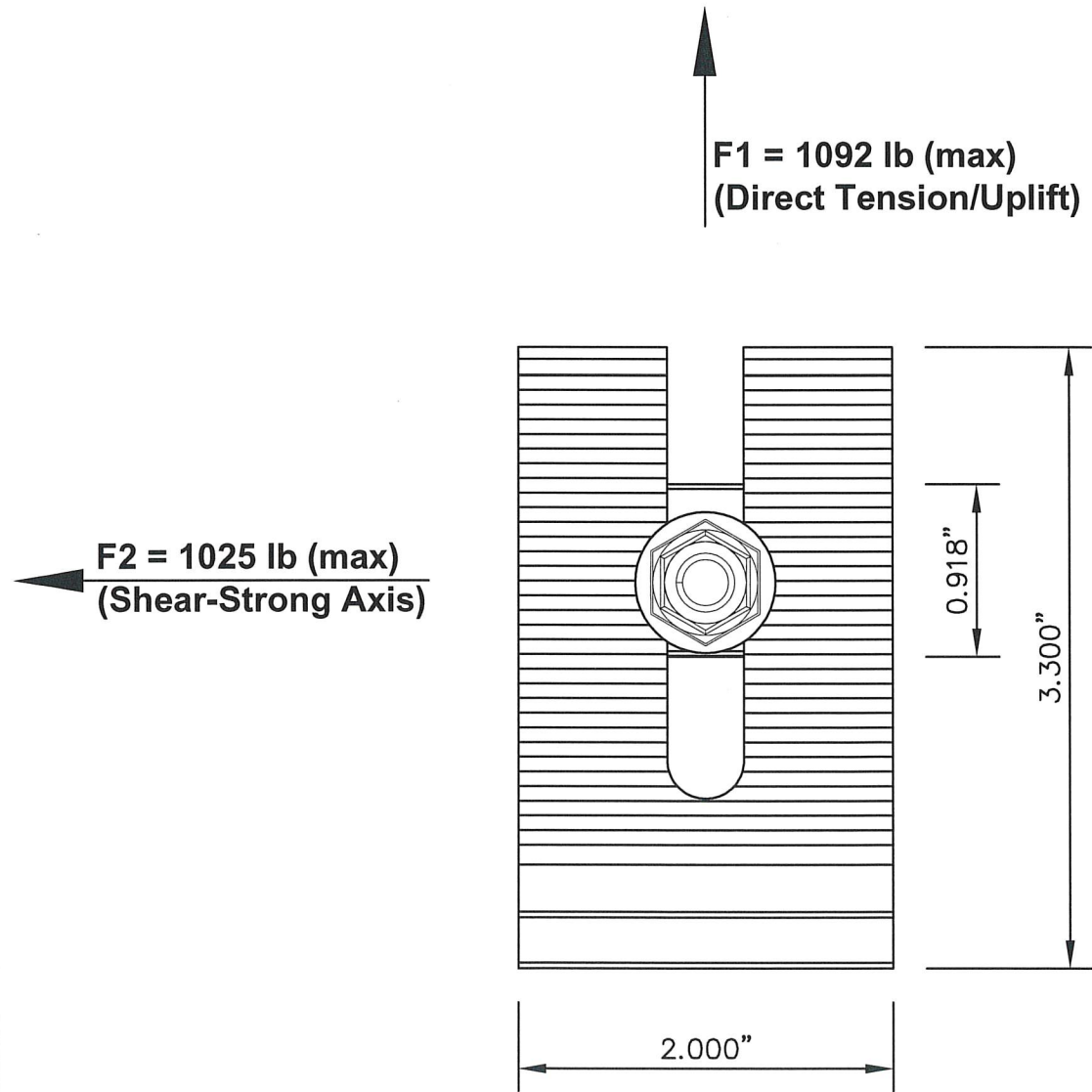
DWG: XR-LF
SHEET: 3/6

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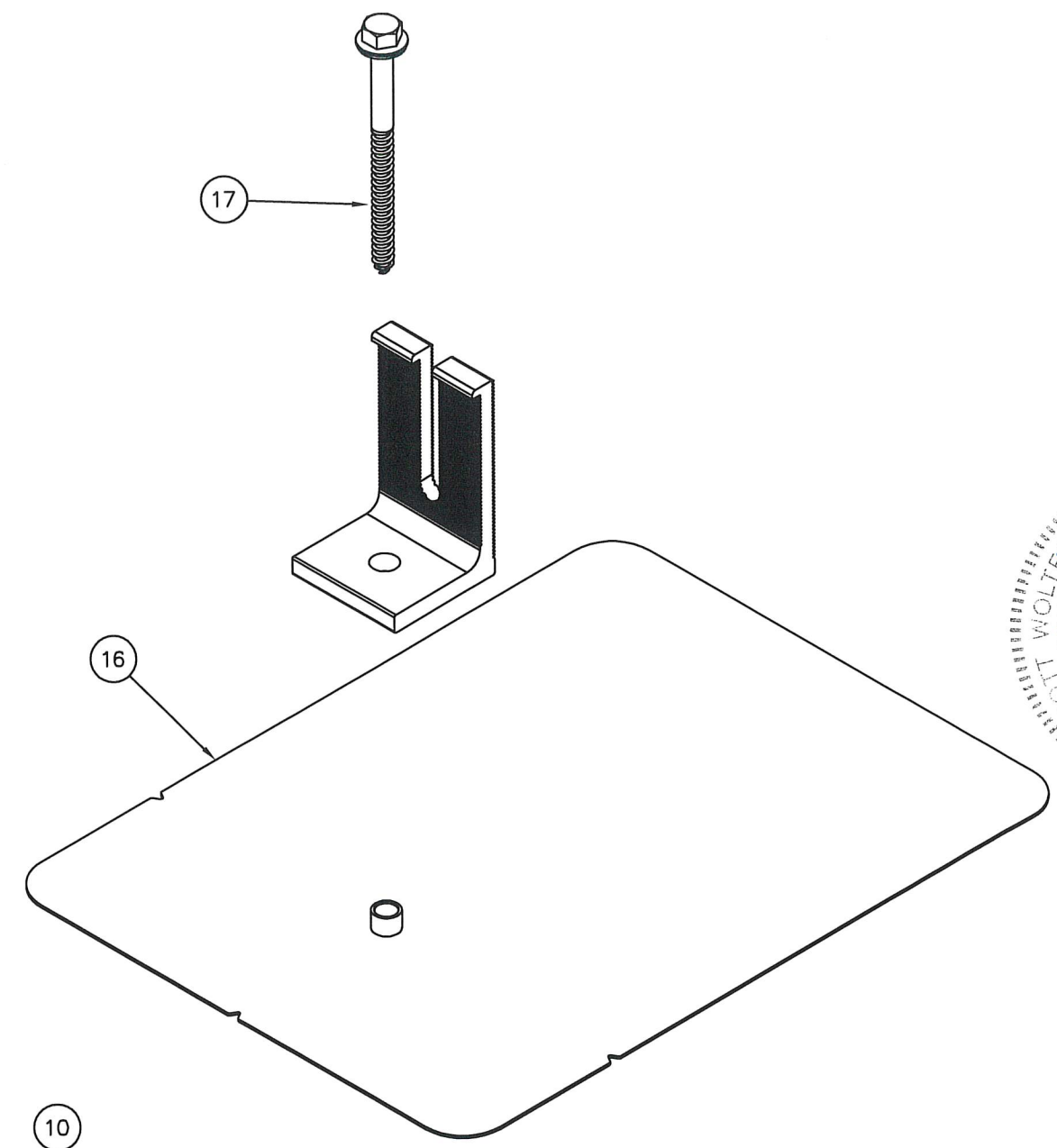
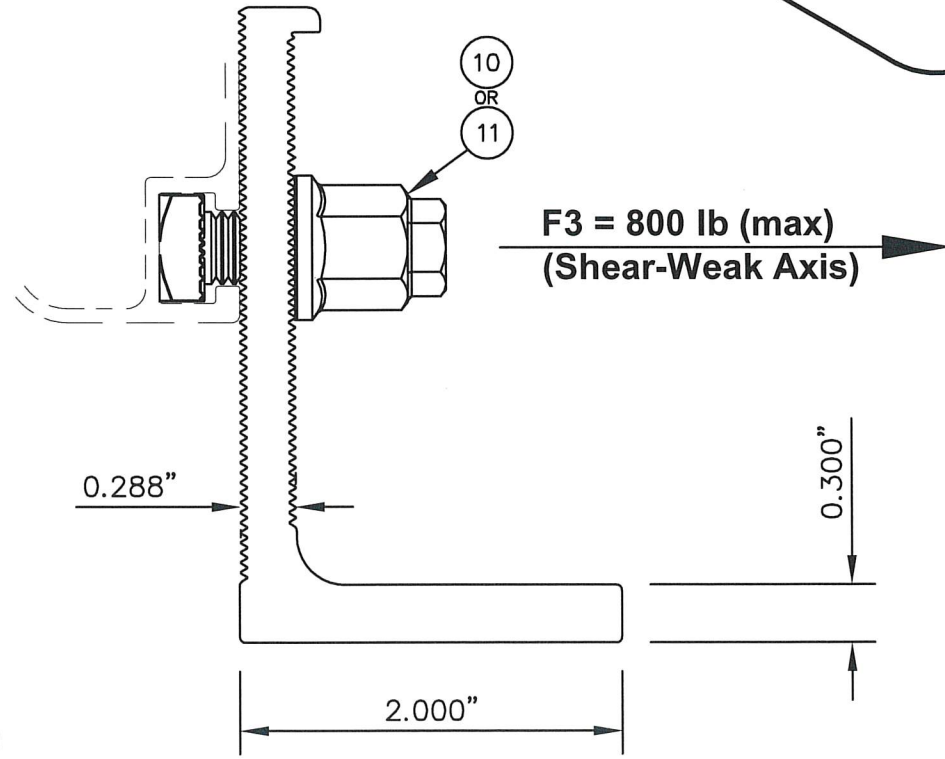
1ST SUBMITTAL
PRINTS ISSUED FOR

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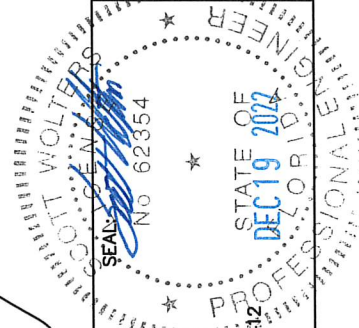
BILL OF MATERIALS- QuickMount L-Mount		
#	DESCRIPTION	MATERIALS/NOTES
15	OPEN SLOT L-FOOT, MILL OR BLACK	6000 SERIES AL
16	QM FLASHING, MILL OR BLACK	5000 SERIES AL
17	5/16" X 4" HEX HEAD LAG SCREW WITH EPDM WASHER	300 SERIES SS & EPDM



15



ANCHOR CAPACITY:
ANCHOR CAPACITIES LISTED ARE
PER FLPA# 29846.



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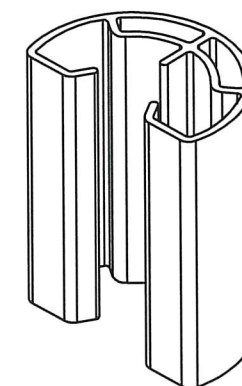
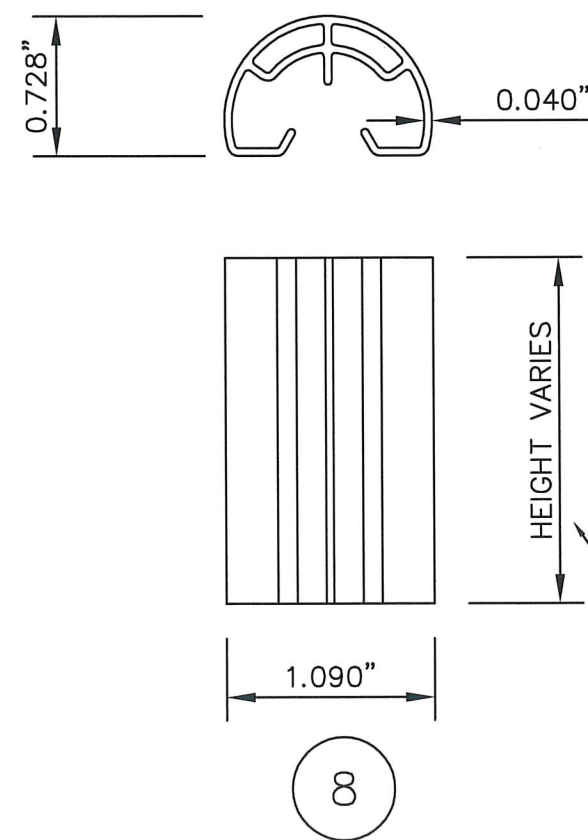
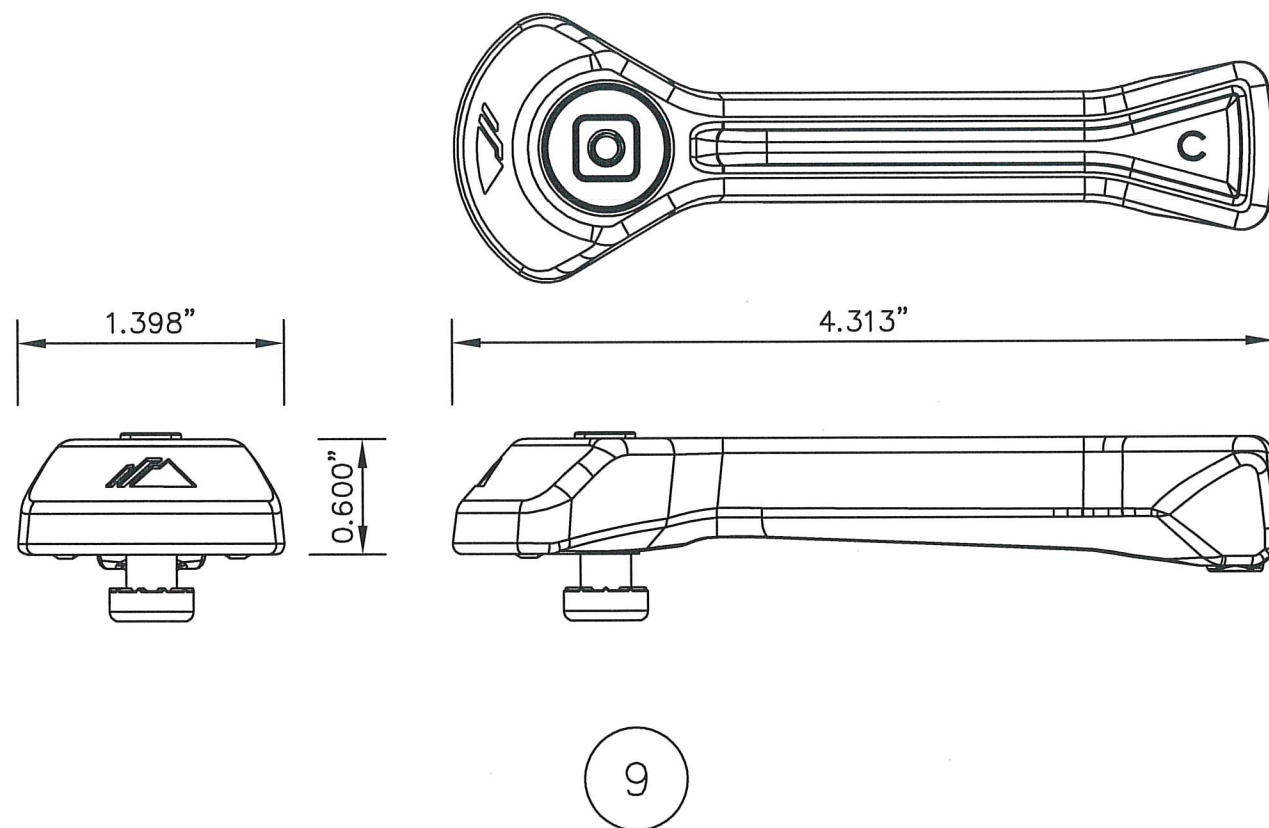
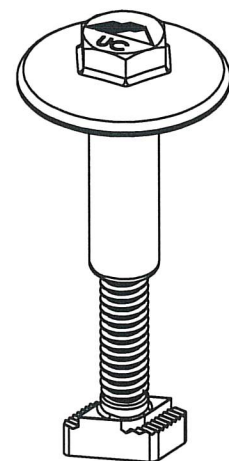
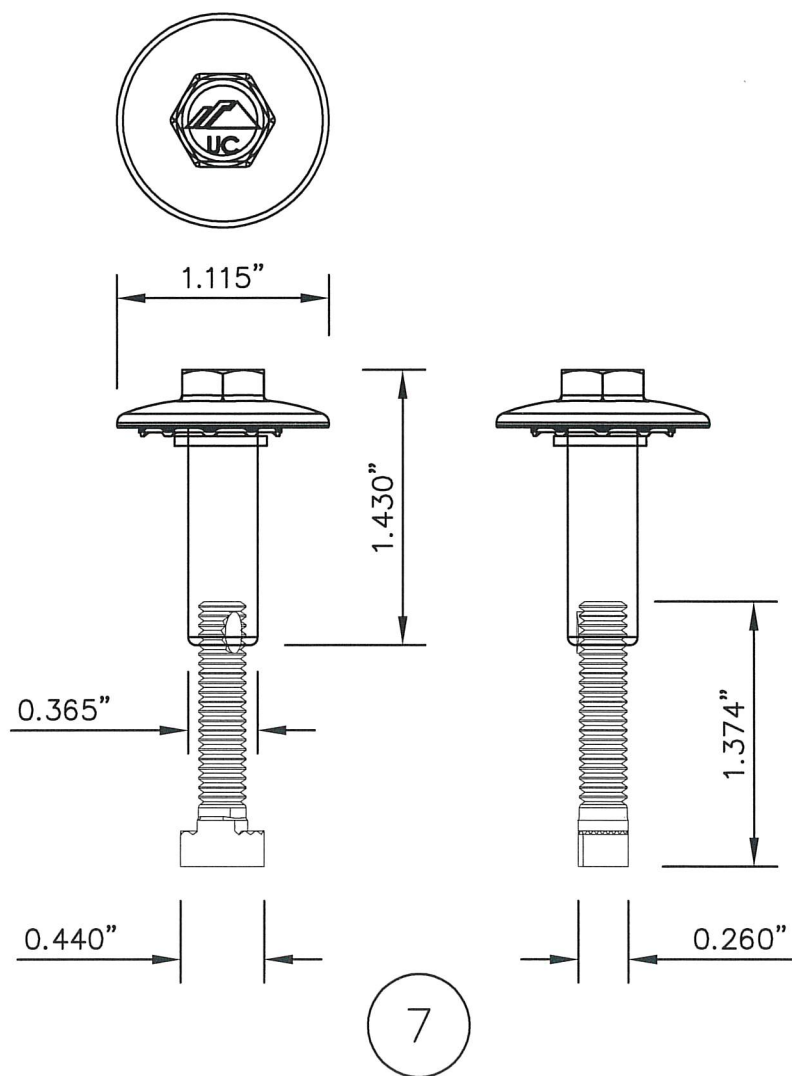
DWG: XR-LF
SHEET: 4/6

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IRONRIDGE XR FLUSH MOUNT PHOTOVOLTAIC PANEL RACKING SYSTEM WITH QUICKMOUNT L-MOUNT ROOF ATTACHMENTS

BILL OF MATERIALS- XR System		
#	DESCRIPTION	MATERIALS/NOTES
1	XR-10 RAIL	6000 SERIES AL
2	XR-100 RAIL	6000 SERIES AL
3	XR-1000 RAIL	6000 SERIES AL
4	XR-10 BOSS SPLICE	6000 SERIES AL & 300 SERIES SS
5	XR-100 BOSS SPLICE	6000 SERIES AL & 300 SERIES SS
6	XR-1000 BOSS SPLICE	6000 SERIES AL & 300 SERIES SS
7	UFO UNIVERSAL MODULE CLAMP	300 SERIES SS
8	STOPPER SLEEVE	6000 SERIES AL
9	CAMO HIDDEN END CAM	300 SERIES AL & 300 SERIES SS
10	3/8" X 1" SQUARE BOLT BONDING HARDWARE	300 SERIES SS
11	3/8" X 1" T-BOLT BONDING HARDWARE	300 SERIES SS
12	XR-10 RAIL END CAP (OPTIONAL)	POLYMERIC
13	XR-100 RAIL END CAP (OPTIONAL)	POLYMERIC
14	XR-1000 RAIL END CAP (OPTIONAL)	POLYMERIC

FOR 6000 SERIES EXTRUSIONS $F_{UT}=38$ ksi min, $F_Y=34$ ksi min.
FOR 300 SERIES STAINLESS STEEL $F_Y=65$ ksi min.



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SEAL

NO. 62354

DEC 19 2022

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12/19/22

IRONRIDGE

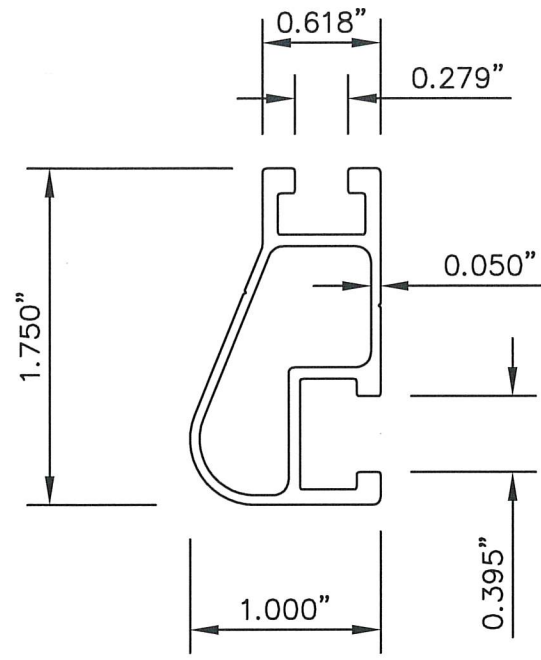
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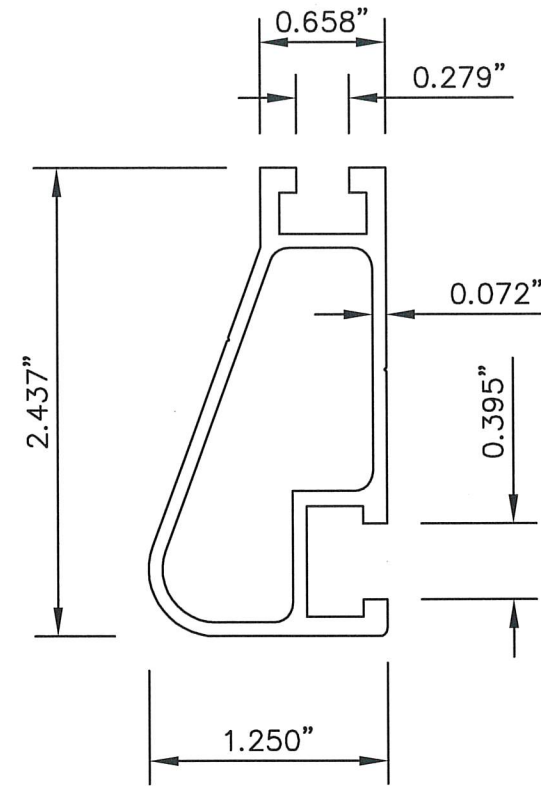
DWG: XR-LF

SHEET: 5/6

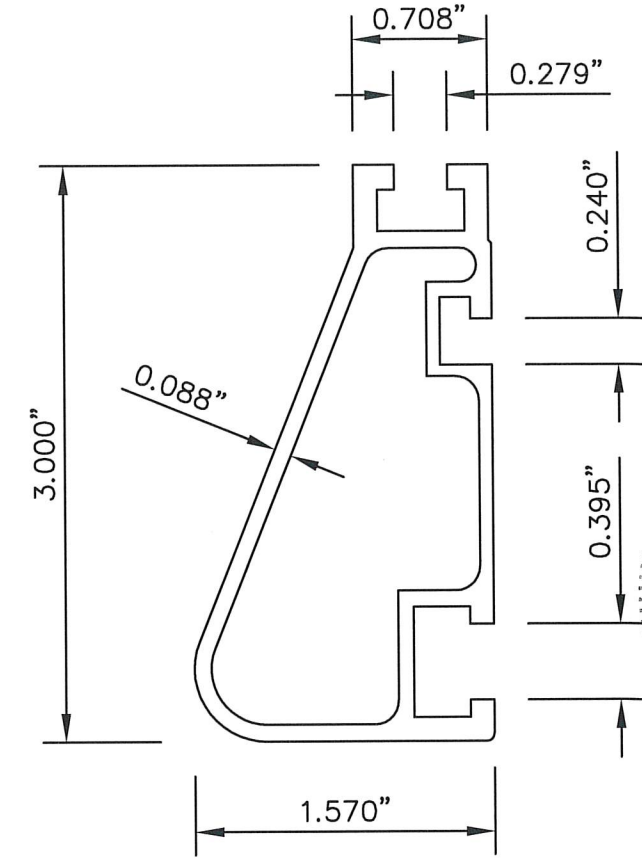
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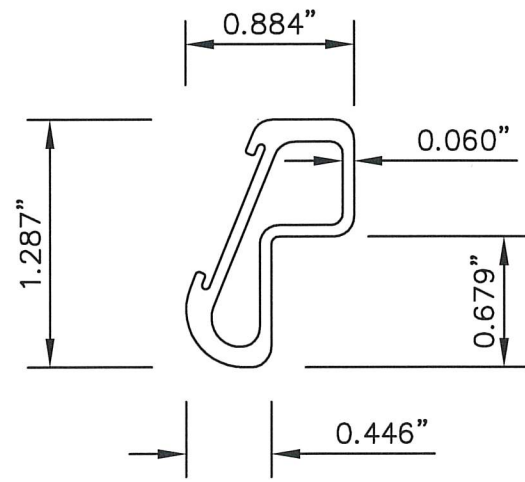
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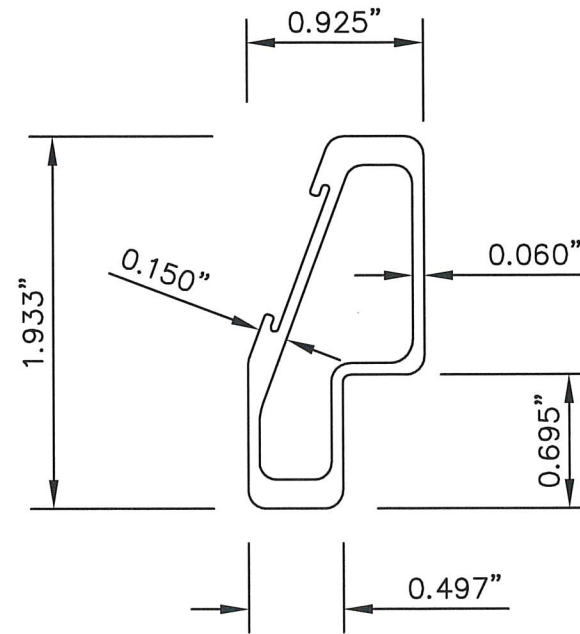
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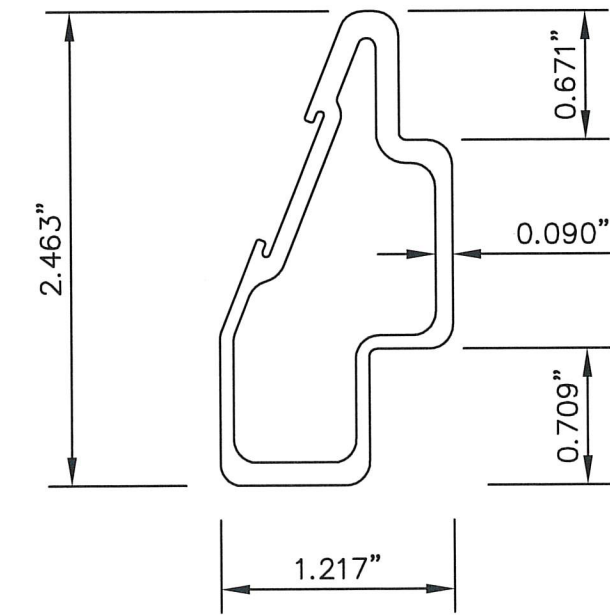
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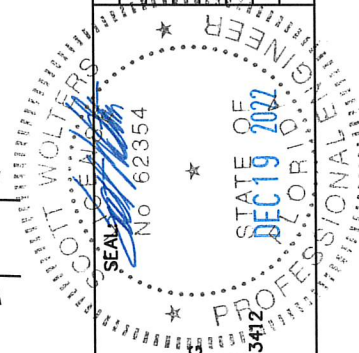
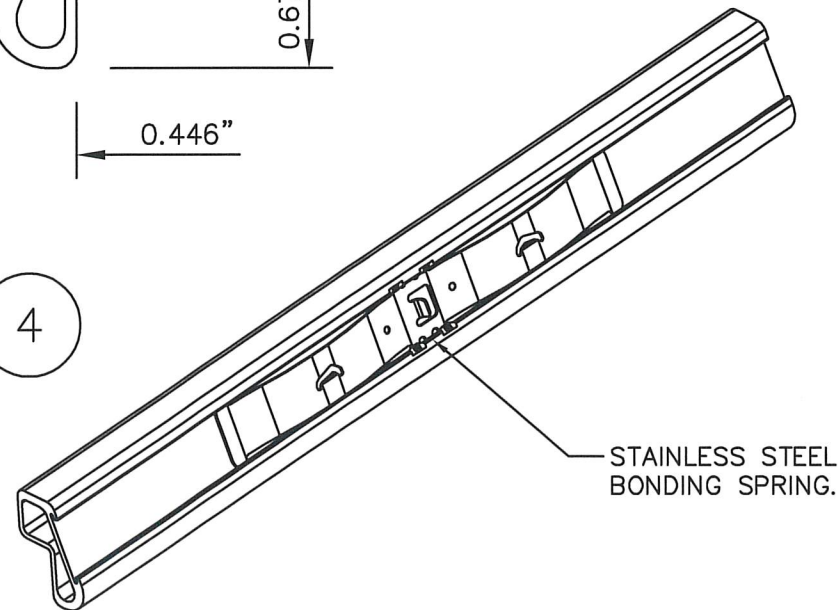
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6



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