

ECOFASTEN ROCKIT RAIL-LESS PHOTOVOLTAIC PANEL RACKING SYSTEM
WITH ROCKIT SMART SLIDE ROOF ATTACHMENTS

GENERAL NOTES:

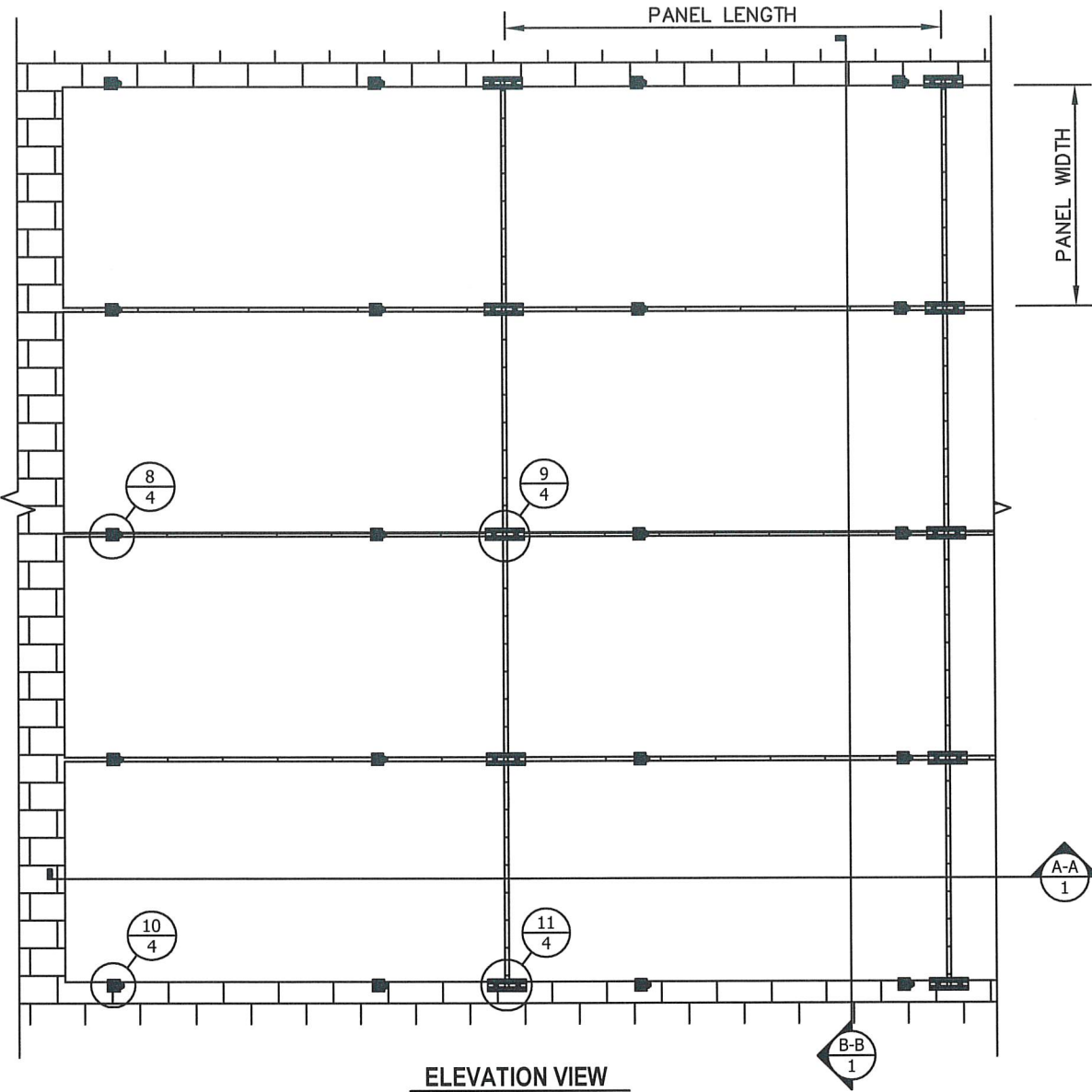
- 1. THIS SYSTEM MEETS ALL OF THE REQUIREMENTS OF THE 8TH EDITION (2023) FLORIDA BUILDING CODE, INCLUDING THE HVHZ PROVISIONS.
- 2. THIS SYSTEM HAS BEEN TESTED PER TAS 100(A) AND ASTM D7147. IT IS NOT A PART OF THE BUILDING ENVELOPE, AND IMPACT RESISTANCE IS NOT REQUIRED.
- 3. THIS SYSTEM SHALL BE INSTALLED PER THE ECOFASTEN ROCKIT INSTALLATION MANUAL.
- 4. THIS SYSTEM IS DESIGNED TO WORK WITH SEVERAL TYPES OF PV PANELS. THE DESIGN OF THE PANELS IS BY OTHERS AND IS NOT A PART OF THIS APPROVAL.
- 5. 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.
- 6. FIRE RATINGS OR FIRE RESISTANCE IS NOT A PART OF THIS REVIEW.
- 7. ALL ANCHORS SECURING THE SYSTEM TO PRESSURE TREATED WOOD SHALL BE CAPABLE OF RESISTING CORROSION CAUSED BY THE CHEMICALS IN THE WOOD.
- 8. MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL BE PROTECTED PER FBC REQUIREMENTS.
- 9. 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:

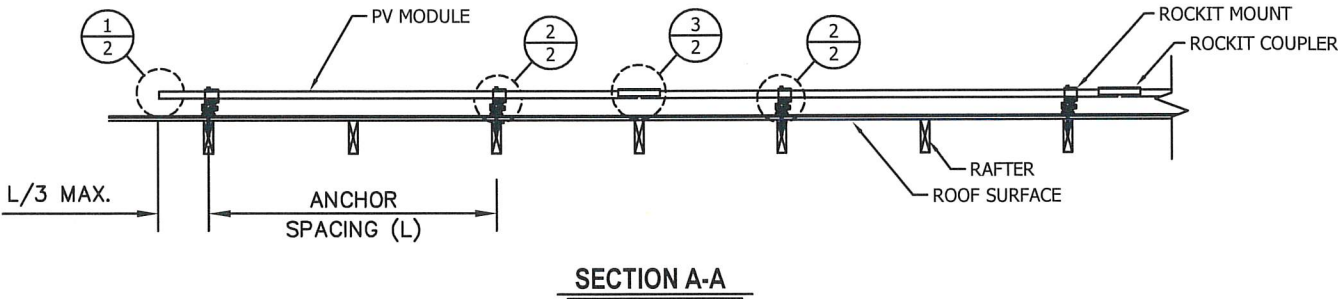
- 1. DESIGN WINDLOADS MUST BE CALCULATED BY A LICENSED PROFESSIONAL ENGINEER OR ARCHITECT FOR EACH PROJECT, PER ASCE 7-22 SECTION 29.4.4. (ASD) DESIGN WINDLOADS MAY NOT EXCEED THE ALLOWABLE WINDLOADS SHOWN IN THE CHART BELOW.
- 2. THE (ASD) ALLOWABLE LOADS FOR THE ROCKIT SYSTEM COMPONENTS ARE LISTED BELOW. THE ENGINEER OF RECORD (EOR) OR THE AUTHORITIES HAVING JURISDICTION (AHJ) MUST VERIFY THE PV PANELS USED WITH THIS PRODUCT WILL MEET THE LOAD REQUIREMENTS OF EACH PROJECT WHEN INSTALLED AS PART OF A RAIL-LESS SYSTEM.
- 3. PANEL SYSTEM LOCATION, HEIGHT, AND SPACING MUST MEET THE REQUIREMENTS OF ASCE 7-22 SECTION 29.4.4. WINDLOADS ACT NORMAL TO THE SURFACE OF THE PV PANEL SYSTEM.
- 4. ALLOWABLE WINDLOADS FOR FASTENER PATTERNS #1 & #2 ARE BASED ON EMBEDMENT IN WOOD RAFTERS WITH S.G.=0.42 MIN.

ALLOWABLE WINDLOADS								
PANEL WIDTH (in)	PANEL LENGTH (in)	ANCHOR SPAN (L) (in)	ROCKIT MOUNT WITH SMART SLIDE					
			FASTENER PATTERN #1 or #2 (psf)	FASTENER PATTERN #3				
				7/16" OSB (psf)	15/32" OSB (psf)	19/32" OSB (psf)		
LANDSCAPE LAYOUT:								
41.5	86	16	108.3	37.8	44.0	57.6		
		24	72.8	25.7	29.6	38.8		
		32	55.2	19.1	22.4	29.5		
		36	48.6	17.0	19.8	26.0		
		48	36.4	12.8	14.9	19.4		
		60	29.1	10.0	11.8	15.6		
		64	27.4	9.5	11.1	14.6		
		72	24.3	8.5	9.9	13.0		
		16	99.8	34.9	40.6	53.1		
		24	67.2	23.7	27.3	35.8		
		32	50.9	17.6	20.6	27.2		
		36	44.8	15.7	18.2	24.0		
		48	33.6	11.8	13.7	17.9		
		60	26.9	9.3	10.9	14.4		
45	92.5	64	25.3	8.8	10.2	13.4		
		72	22.4	7.8	9.1	12.0		
		PORTRAIT LAYOUT:						
		45	67.5	16	66.5	23.2	27.1	35.4
				24	44.8	15.8	18.2	23.9
				32	33.9	11.7	13.7	18.1
				36	29.8	10.4	12.1	16
48	22.4			7.9	9.2	11.9		
		16	56.1	19.6	22.8	29.9		
		24	37.8	13.3	15.4	20.1		
		32	28.6	9.9	11.6	15.3		
		36	25.2	8.8	10.2	13.5		
		48	18.9	6.6	7.7	10.1		
45	86	16	52.2	18.2	21.2	27.8		
		24	35.1	12.4	14.3	18.7		
		32	26.6	9.2	10.8	14.2		
		36	23.4	8.2	9.5	12.5		
		48	17.6	6.2	7.2	9.4		

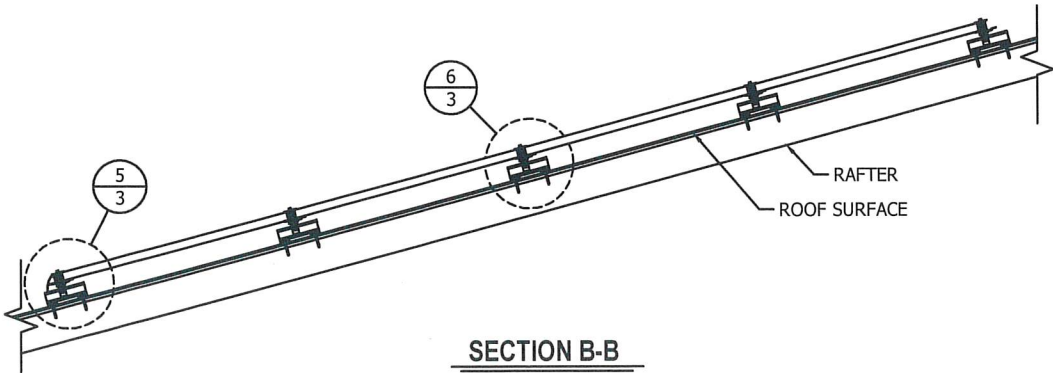
SEE SHEET 2/6 FOR FASTENER PATTERNS.



ELEVATION VIEW



SECTION A-A



SECTION B-B

REV.#	DATE	PRINTS ISSUED FOR
2	10/18/23	2023 CODE UPDATE
1	4/21/23	NAME REVISION
-	8/15/22	1ST SUBMITTAL

SCOTT WOLTERS
FL PE# 62354

WOLTERS ENGINEERING
(COA# 27194)
15211 97TH ROAD N
WEST PALM BEACH, FL 33412
(561) 225-1982

STATE OF FLORIDA
OCT 18 2023
PROFESSIONAL ENGINEER

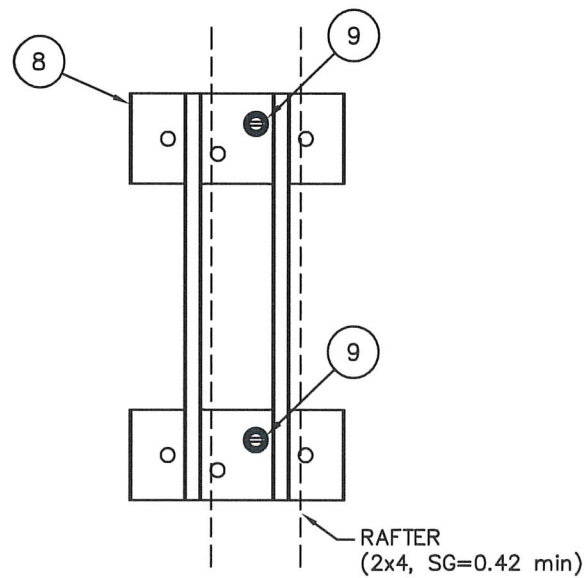
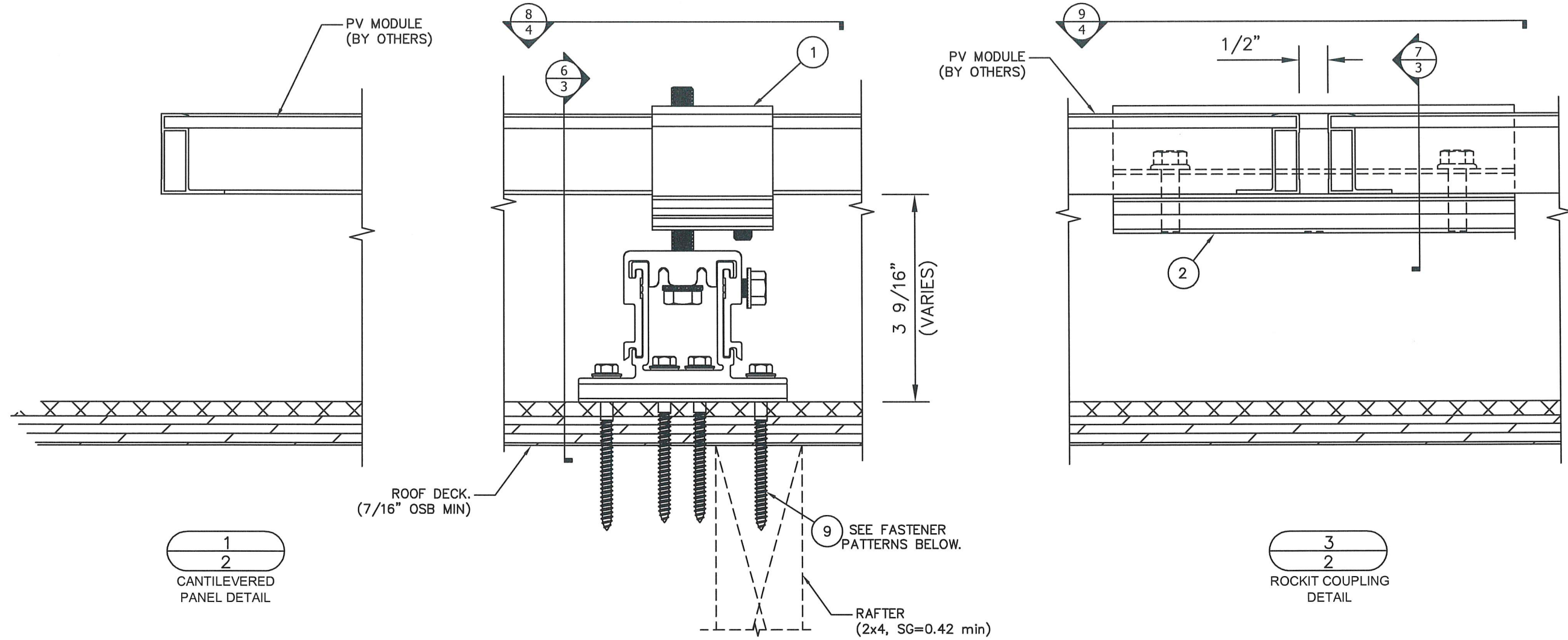
EcoFasten®
An Esdec Solar Group Company

4141 W VAN BUREN ST., SUITE 2
PHOENIX, AZ 85009

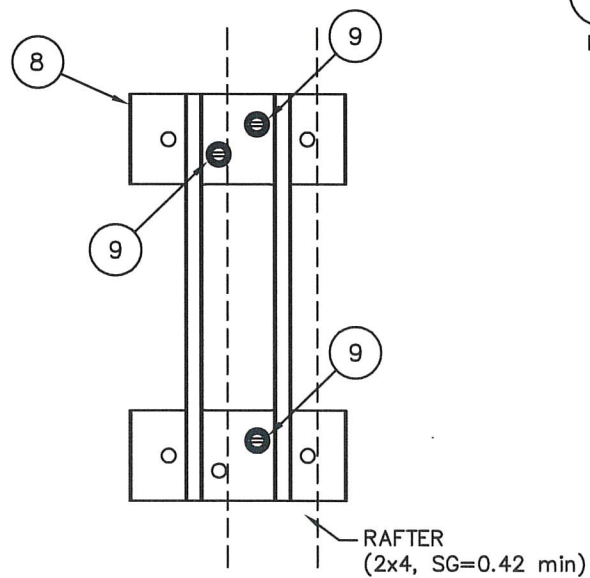
PHONE (877) 859-3947
info@ecofastensolar.com

DWG: **ROCKIT-SSL**
SHEET: **1/6**

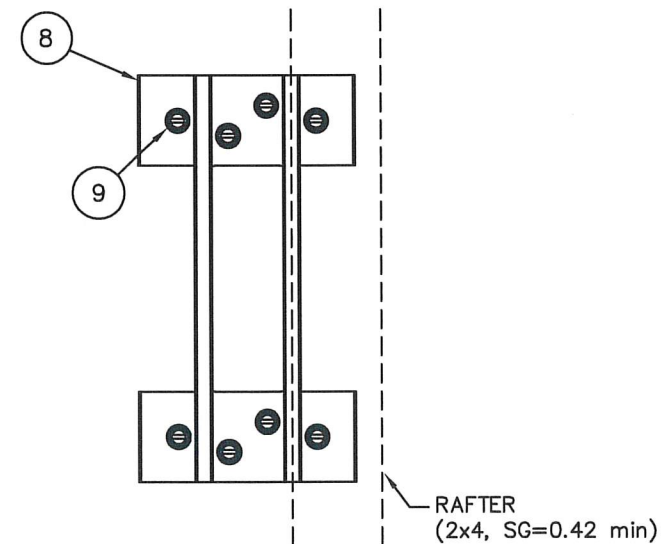
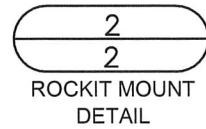
ECOFASTEN ROCKIT RAIL-LESS PHOTOVOLTAIC PANEL RACKING SYSTEM WITH ROCKIT SMART SLIDE ROOF ATTACHMENTS



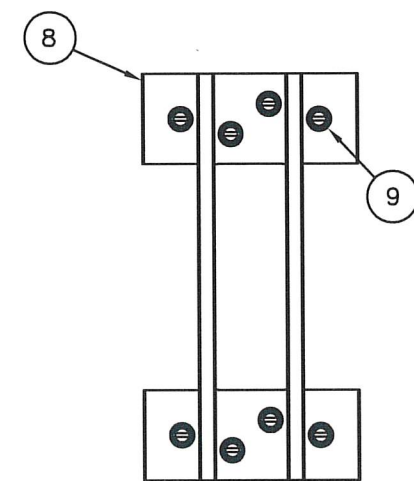
FASTENER PATTERN #1(a)
(2) INSIDE FASTENERS IN RAFTER



FASTENER PATTERN #1(b)
(2) INSIDE FASTENERS IN RAFTER
AND (1) IN DECK



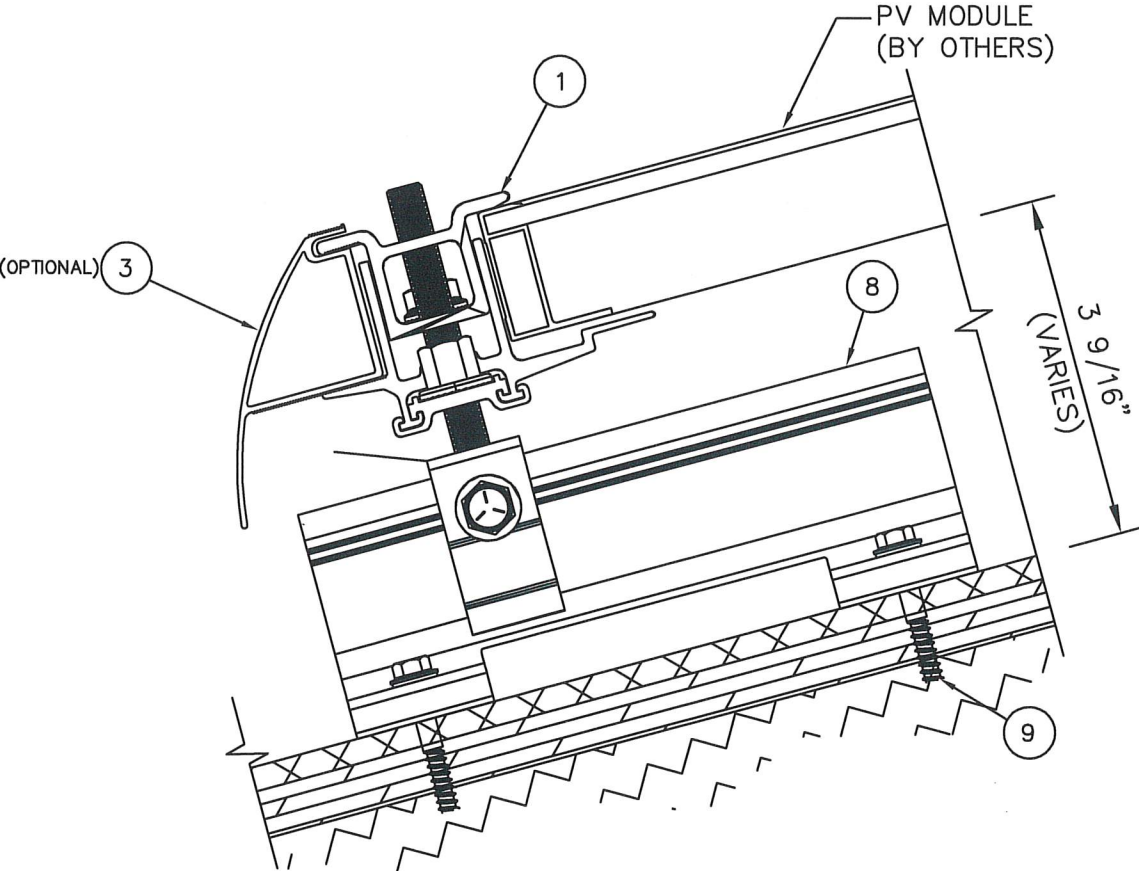
FASTENER PATTERN #2
(2) OUTSIDE FASTENERS IN RAFTER
AND (6) IN DECK



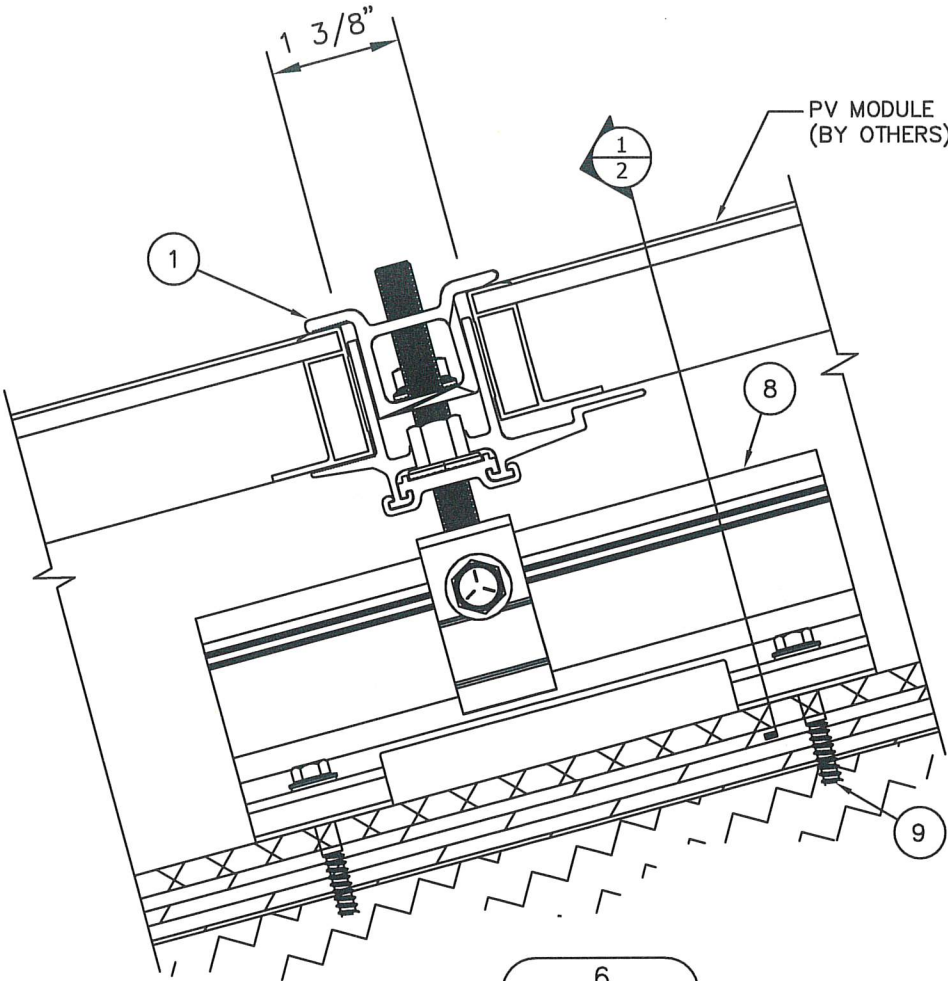
FASTENER PATTERN #3
(8) FASTENERS IN DECK

 EcoFasten® An Esdec Solar Group Company	DWG: ROCKIT-SSL SHEET: 2/6	
	4141 W VAN BUREN ST, SUITE 2 PHOENIX, AZ 85009	
	PHONE (877) 859-3947 info@ecofastensolar.com	
	SCOTT WOLTERS FL PE# 62354	
	WOLTERS ENGINEERING (COA# 27194) 15211 97TH ROAD N WEST PALM BEACH, FL 33412 (561) 225-1982	

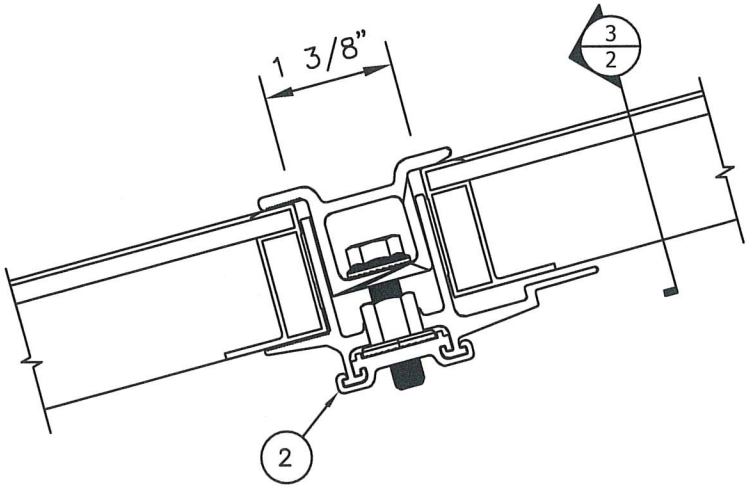
ECOFASTEN ROCKIT RAIL-LESS PHOTOVOLTAIC PANEL RACKING SYSTEM
WITH ROCKIT SMART SLIDE ROOF ATTACHMENTS



5
3
ROCKIT MOUNT
AND SMART SLIDE



6
3
ROCKIT MOUNT
AND SMART SLIDE



7
3
ROCKIT COUPLING
DETAIL



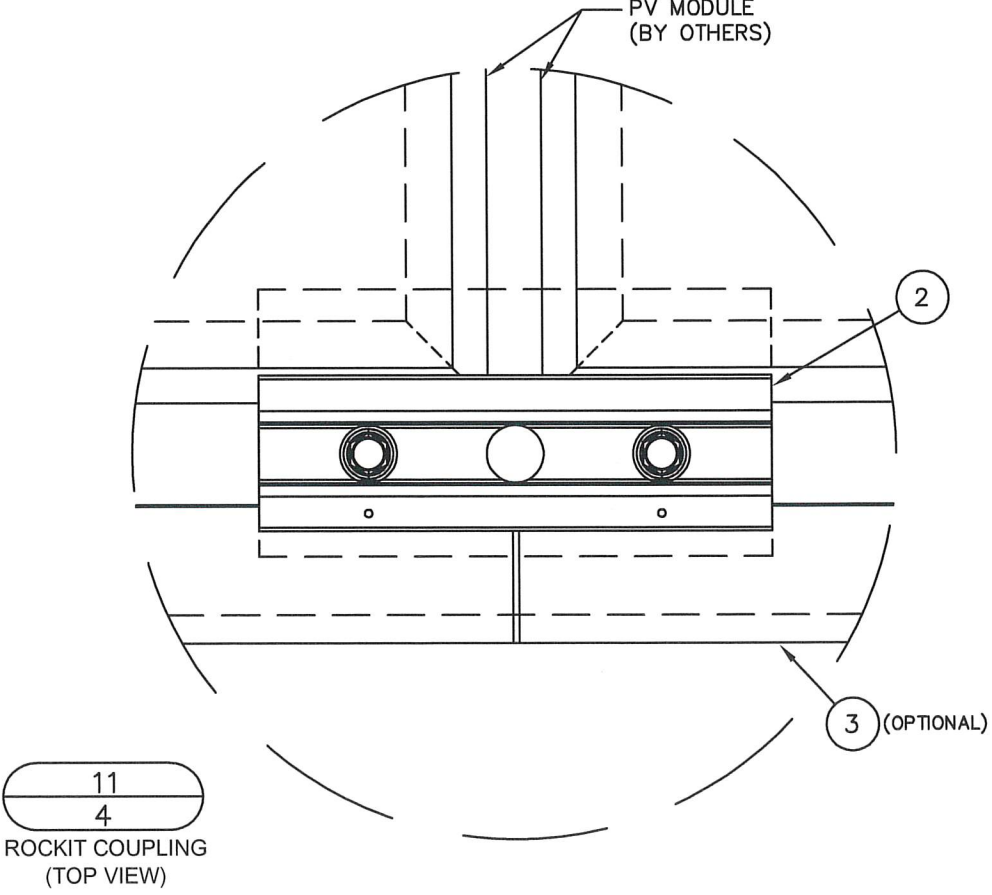
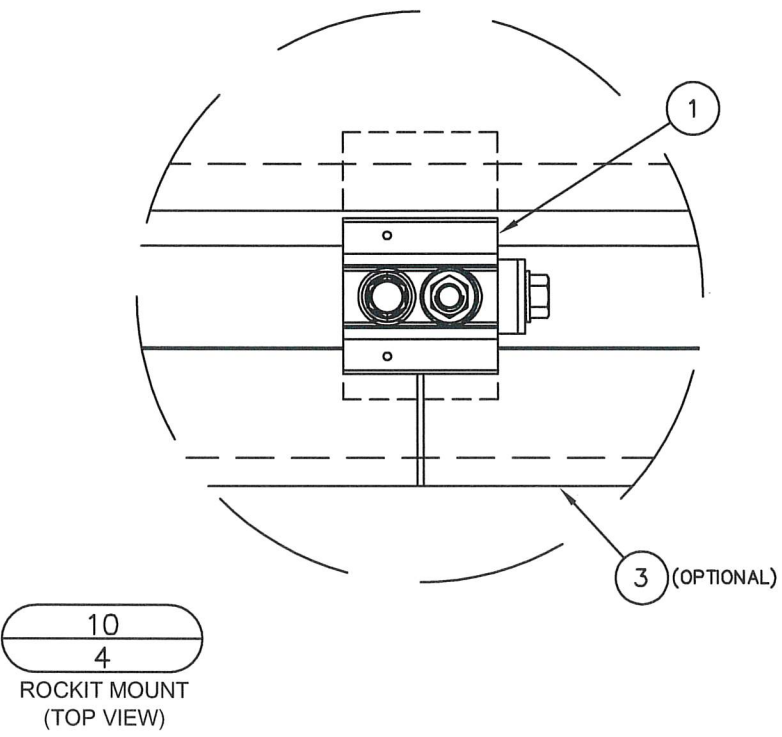
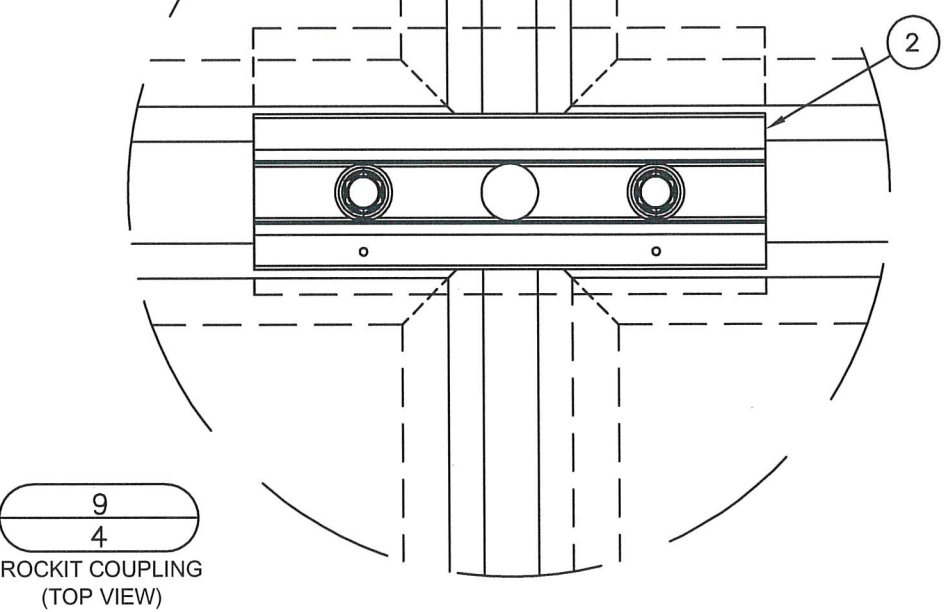
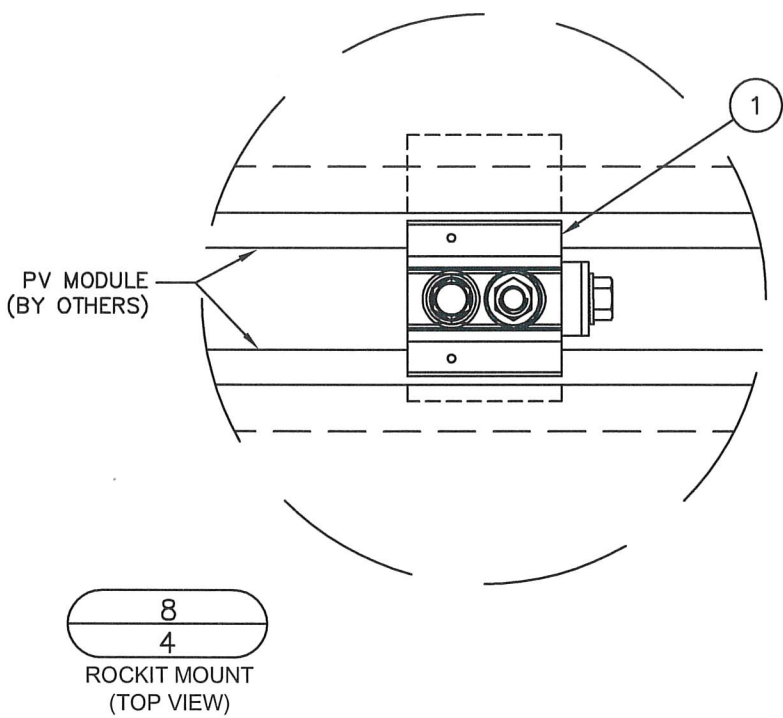
SCOTT WOLTERS
FL PE# 62354
WOLTERS ENGINEERING
(COA# 27194)
15211 97TH ROAD N
WEST PALM BEACH, FL 33412
(561) 225-1982

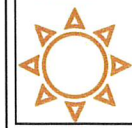
EcoFasten®
An Esdec Solar Group Company
41141 W VAN BUREN ST, SUITE 2
PHOENIX, AZ 85009
PHONE (877) 859-3947
info@ecofastensolar.com

DWG: **ROCKIT-SSL**
SHEET: **3/6**

REV.#	DATE	PRINTS ISSUED FOR
2	10/18/23	2023 CODE UPDATE
1	4/21/23	NAME REVISION
-	8/15/22	1ST SUBMITTAL

ECOFASTEN ROCKIT RAIL-LESS PHOTOVOLTAIC PANEL RACKING SYSTEM
WITH ROCKIT SMART SLIDE ROOF ATTACHMENTS





EcoFasten®
An Esdec Solar Group Company

4141 W VAN BUREN ST, SUITE 2
PHOENIX, AZ 85009

PHONE (877) 859-3947
info@ecofastensolar.com

DWG: **ROKIT-SSL**
SHEET: **4/6**

SCOTT WOLTERS
FL PE# 62354

WOLTERS ENGINEERING
(COA# 27194)
15211 97TH ROAD N
WEST PALM BEACH, FL 33412
(561) 225-1982

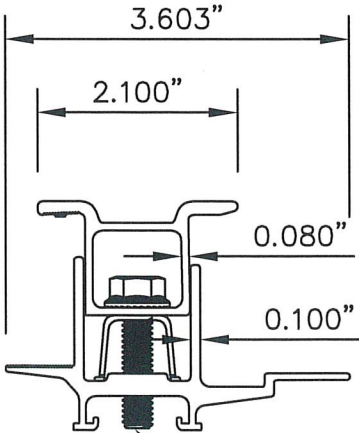
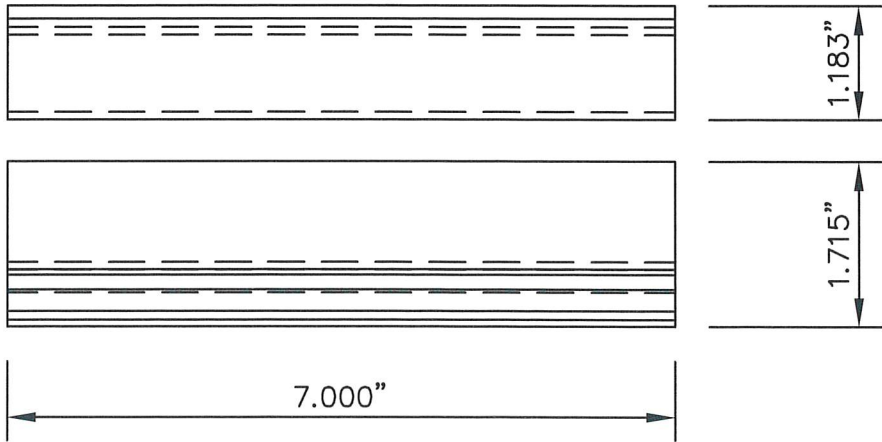
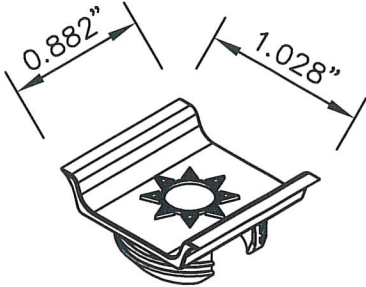
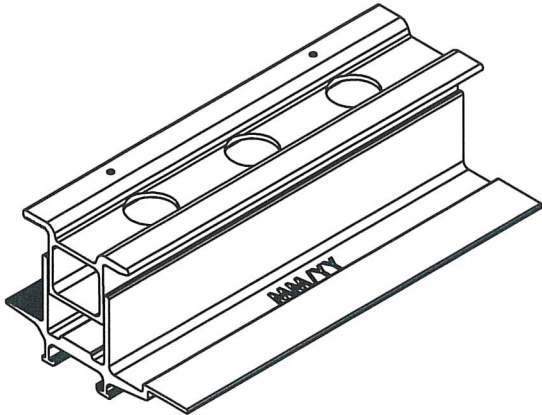
SEAL
NO 62354

STATE OF
OCT 18 2023
PROFESSIONAL ENGINEER

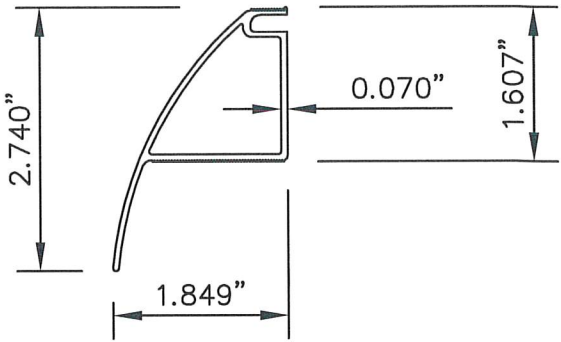
10/18/23	2	2023 CODE UPDATE
4/21/23	1	NAME REVISION
8/15/22	-	1ST SUBMITTAL
REV.#	PRINTS ISSUED FOR	

ECOFASTEN ROCKIT RAIL-LESS PHOTOVOLTAIC PANEL RACKING SYSTEM
WITH ROCKIT SMART SLIDE ROOF ATTACHMENTS

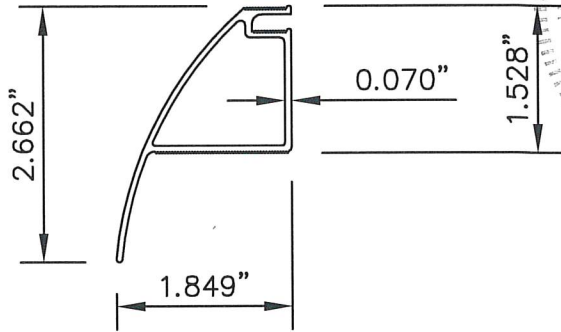
BILL OF MATERIALS- ROCKIT SYSTEM		
#	DESCRIPTION	MATERIALS/NOTES
1	ROCKIT MOUNT ASSEMBLY	6000 SERIES ALUMINUM & 300 SERIES STAINLESS & POLYMERIC
2	ROCKIT COUPLING ASSEMBLY	6000 SERIES ALUMINUM & 300 SERIES STAINLESS & POLYMERIC
3a	ROCKIT SKIRT 35MM&40MM AXX	6000 SERIES ALUMINUM
3b	ROCKIT SKIRT 32MM&38MM BXX	6000 SERIES ALUMINUM
3c	ROCKIT SKIRT 30MM CXX	6000 SERIES ALUMINUM
4	ROCKIT SKIRT END CAP	POLYMERIC
5	ROCKIT COUPLING FOOT ASSEMBLY (OPTIONAL)	POLYMERIC
6	ROCKIT MID CLAMP CAP PLUG (OPTIONAL)	POLYMERIC



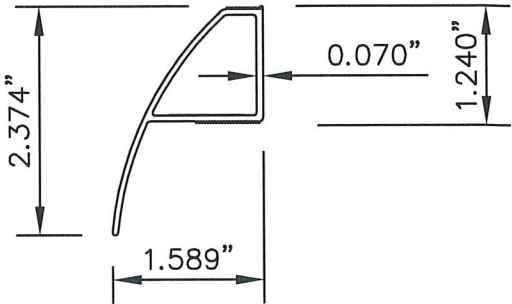
5/16"x1 1/4" HH FLANGE
BOLTS (300 SERIES SS,
Fut=100 ksi min)



3A



3B



3C

2

SCOTT WOLTERS
FL PE# 62354

WOLTERS ENGINEERING
(COA# 27194)
15211 97TH ROAD N
WEST PALM BEACH, FL 33412
(561) 225-1982

SEAL

NO 62354

STATE OF FLORIDA

PROFESSIONAL ENGINEER

OCT 18 2023

10/18/23

4/21/23

8/15/22

2023 CODE UPDATE

NAME REVISION

1ST SUBMITTAL

PRINTS ISSUED FOR

REV.#

DATE

ECOFASTEN®

An Esdec Solar Group Company

4141 W VAN BUREN ST, SUITE 2
PHOENIX, AZ 85009

PHONE (877) 859-3947
info@ecofastensolar.com

DWG: **ROCKIT-SSL**
SHEET: **5/6**

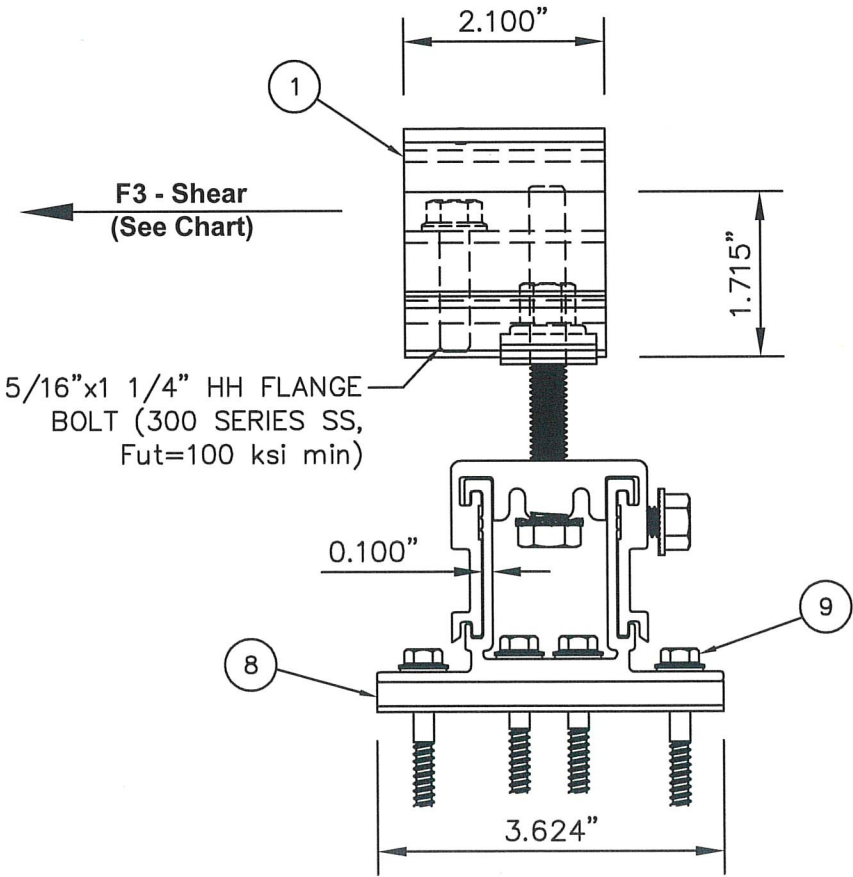
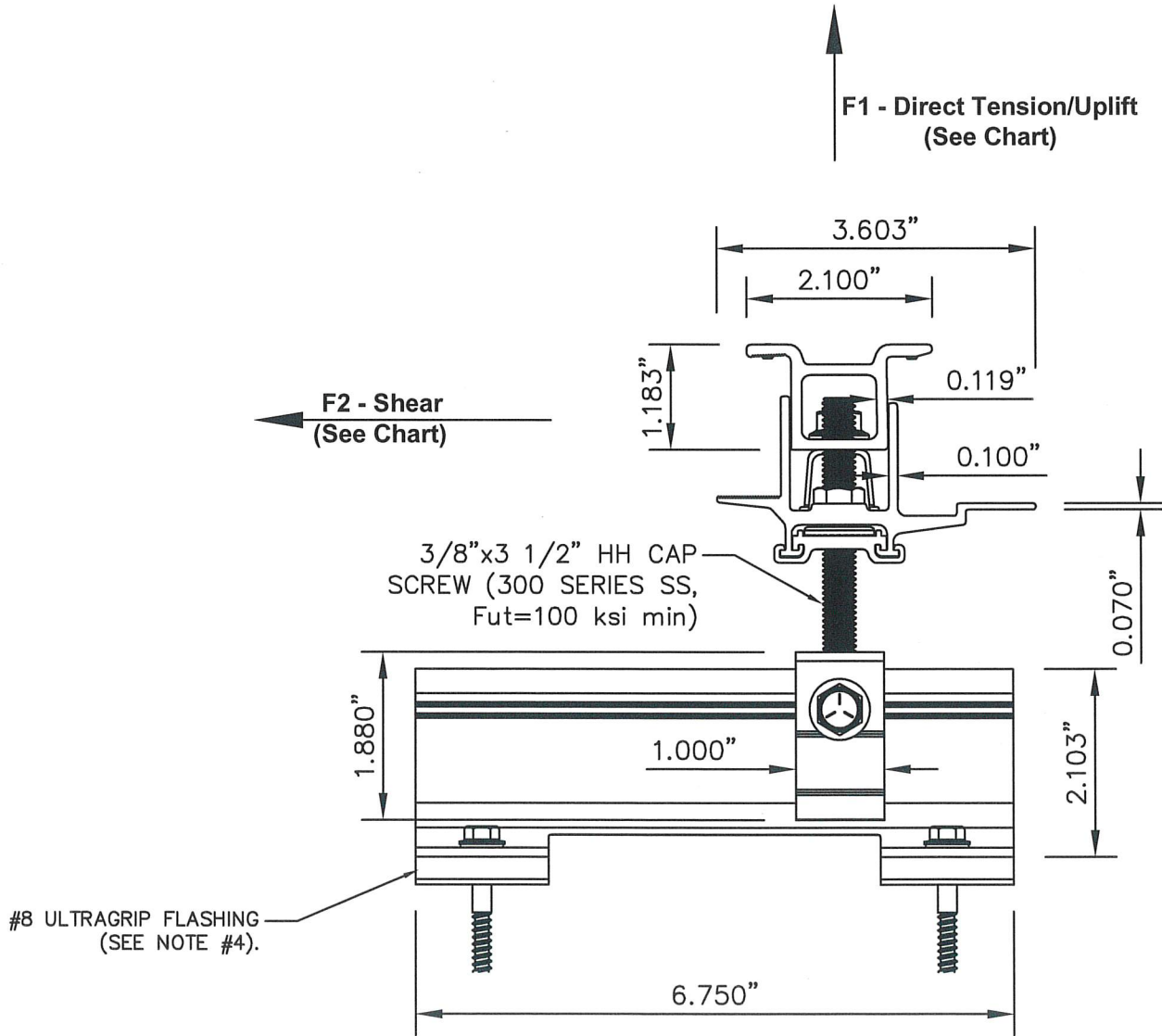
ECOFASTEN ROCKIT RAIL-LESS PHOTOVOLTAIC PANEL RACKING SYSTEM
WITH ROCKIT SMART SLIDE ROOF ATTACHMENTS

BILL OF MATERIALS- ROCKIT SMART SLIDE		
#	DESCRIPTION	MATERIALS/NOTES
1	ROCKIT SMART SLIDE	6000 SERIES ALUMINUM
8	ULTRAGRIP FLASHING	PROPRIETARY FLASHING TECHNOLOGY
9	SCREW, #12 X 3" WITH EPDM BACKED WASHER	300 SERIES STAINLESS & EPDM

ANCHOR NOTES:

- 1. ANCHOR CAPACITIES LISTED ARE PER FLPA# 39871.
- 2. SEE FASTENER PATTERNS ON SHEET 2/6.
- 3. CAPACITIES FOR FASTENER PATTERNS #1 AND #2 APPLY TO RAFTER SIZE OF 2x4 OR GREATER, DECK THICKNESS OF 7/16" OR GREATER, AND LAG SCREWS SECURED WITHIN THE CENTER 1/3 OF RAFTER WITH 2 1/2" MIN. END DISTANCE.
- 4. ANCHORS ARE SUPPLIED WITH FACTORY-APPLIED ULTRAGRIP FLEXIBLE FLASHING, AS LISTED IN TEST REPORT 9042.02-301-47.

ALLOWABLE LOADS				
LOAD DIRECTION	ROCKIT MOUNT WITH SMART SLIDE			
	FASTENER PATTERN #1 or #2 (lb)	FASTENER PATTERN #3		
		7/16" OSB (lb)	15/32" OSB (lb)	19/32" OSB (lb)
F1 - UPLIFT	530	186	216	283
F2 - SHEAR	142	142	142	142
F3 - SHEAR	103	82	82	82



SCOTT WOLTERS
FL PE# 62354

WOLTERS ENGINEERING
(COA# 27194)
15211 97TH ROAD N
WEST PALM BEACH, FL 33412
(561) 225-1982

4141 W VAN BUREN ST, SUITE 2
PHOENIX, AZ 85009

PHONE (877) 859-3947
info@ecofastensolar.com

DWG: ROCKIT-SSL
SHEET: 6/6



REV.#	DATE	PRINTS ISSUED FOR
2	10/18/23	2023 CODE UPDATE
1	4/21/23	NAME REVISION
-	8/15/22	1ST SUBMITTAL