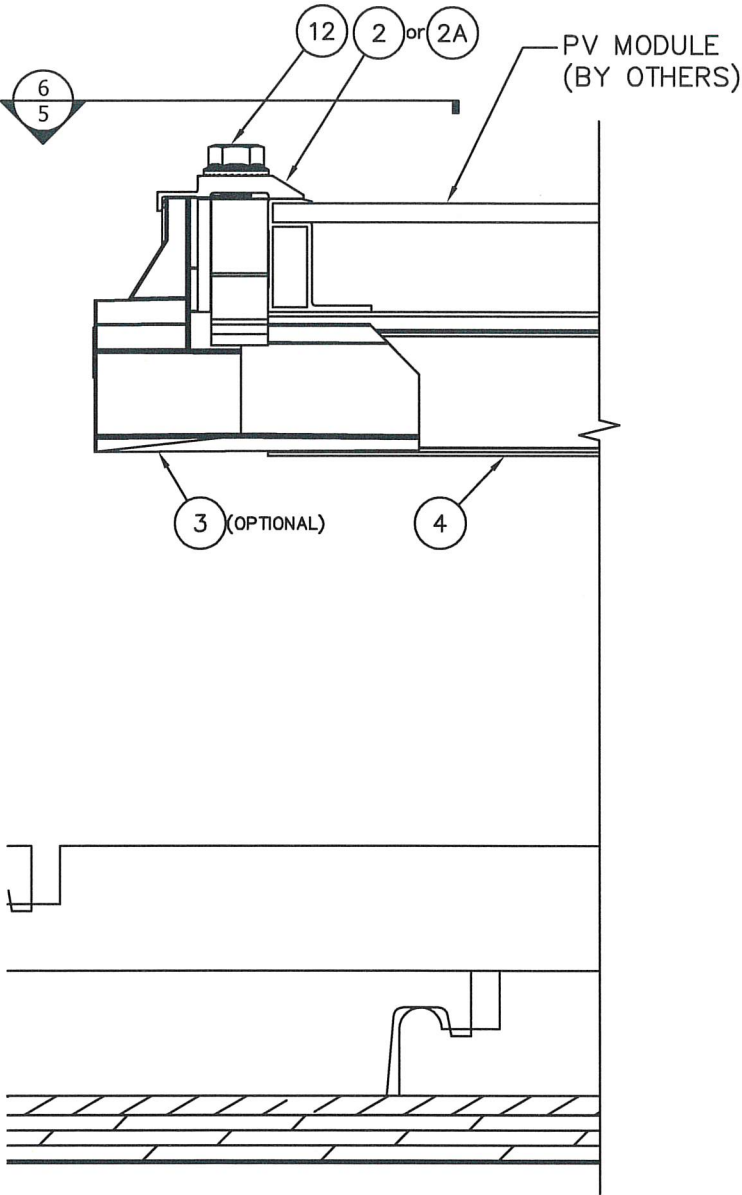


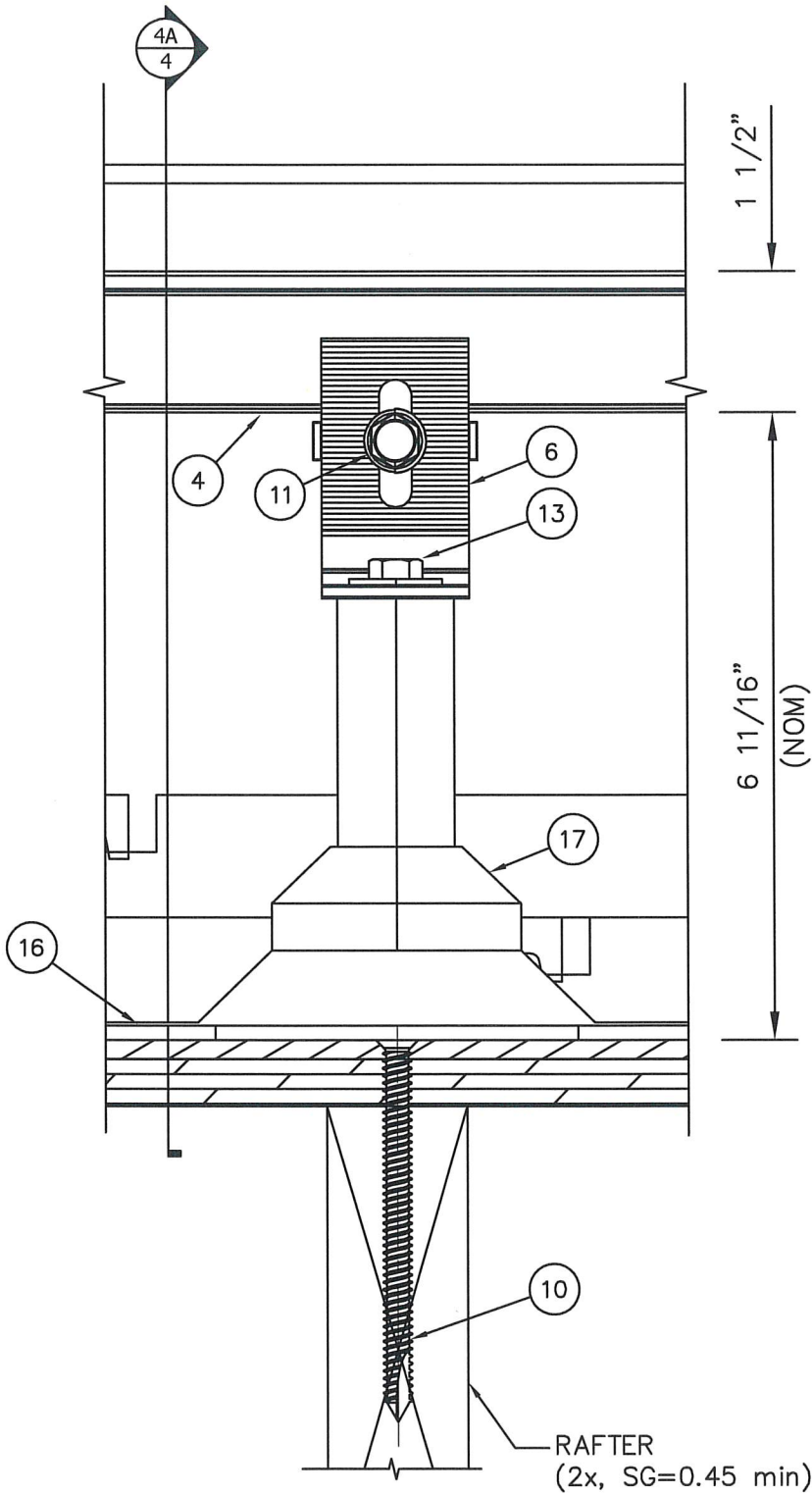
1. DESIGN WINDLOADS MUST BE CALCULATED BY A LICENSED PROFESSIONAL ENGINEER OR ARCHITECT FOR EACH PROJECT, PER ASCE 7-22 SECTION 29.4.4. DESIGN WINDLOADS (ASD) MAY NOT EXCEED THE ALLOWABLE WINDLOADS SHOWN IN THE CHARTS ON THIS SHEET OR SHEET 5.
2. PANEL SYSTEM LOCATION, HEIGHT, AND SPACING MUST MEET THE REQUIREMENTS OF ASCE 7-22 SECTION 29.4.4. WINDLOADS ACT NORMAL TO THE SURFACE OF THE PV PANEL SYSTEM.
3. OTHER CONFIGURATIONS REQUIRE PROJECT SPECIFIC ANALYSIS BY A LICENSED PROFESSIONAL ENGINEER OR ARCHITECT.
4. ALLOWABLE (ASD) WINDLOADS BELOW ARE BASED ON ANCHORING IN WOOD RAFTERS WITH S.G.=0.45 MIN.

DWG: ECO-QB
SHEET: 1/9

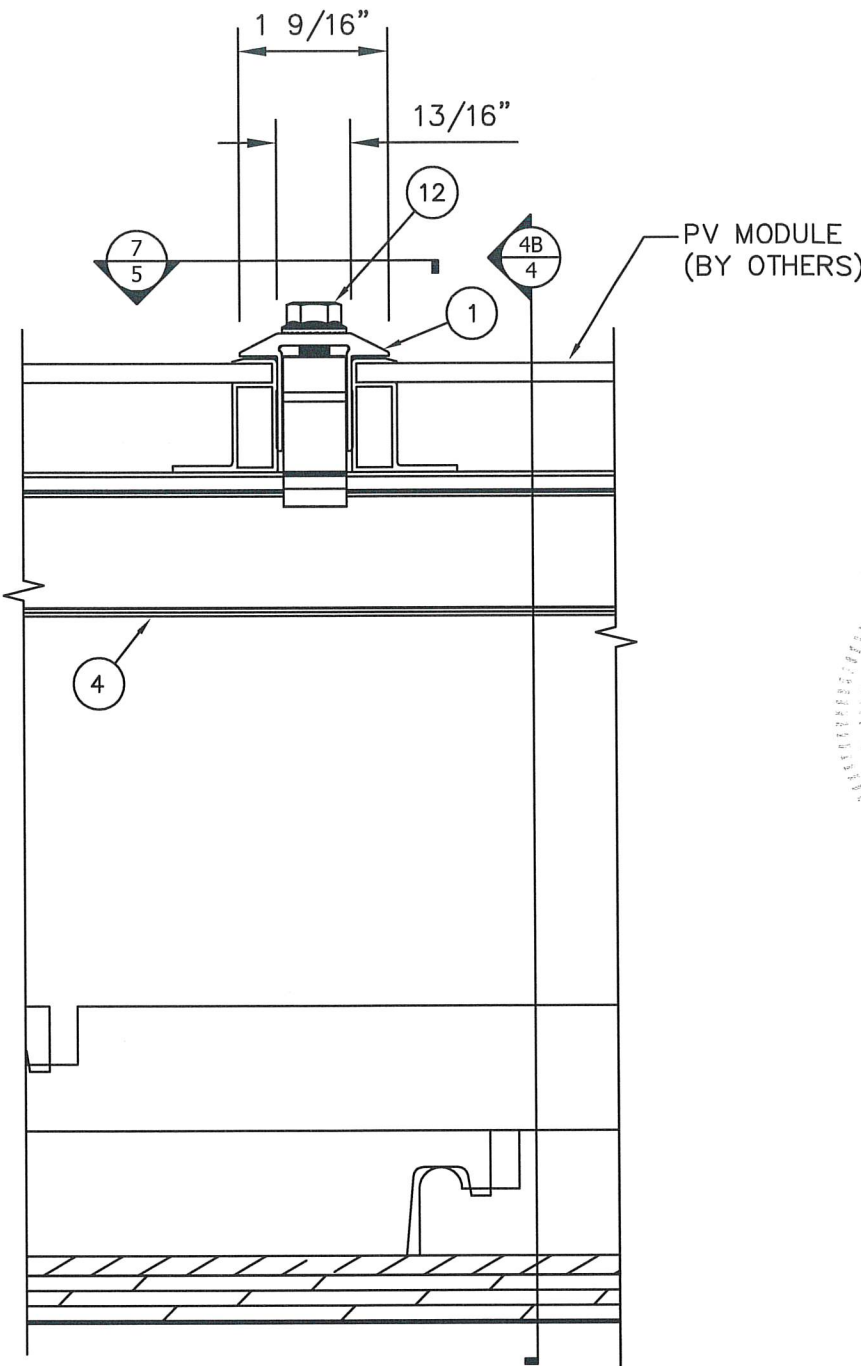
ECOFASTEN CLICKFIT PHOTOVOLTAIC PANEL RACKING SYSTEM
WITH ECOFASTEN QB-1 ROOF ATTACHMENT



1
2
END-CLAMP DETAIL



2
2
QB-1 DETAIL



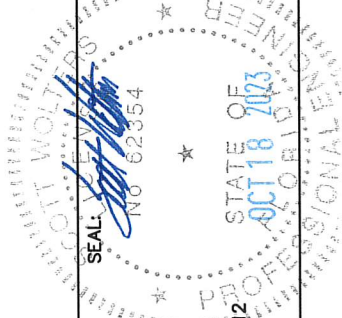
3
2
MID-CLAMP DETAIL



DWG: ECO-QB
SHEET: 2/9

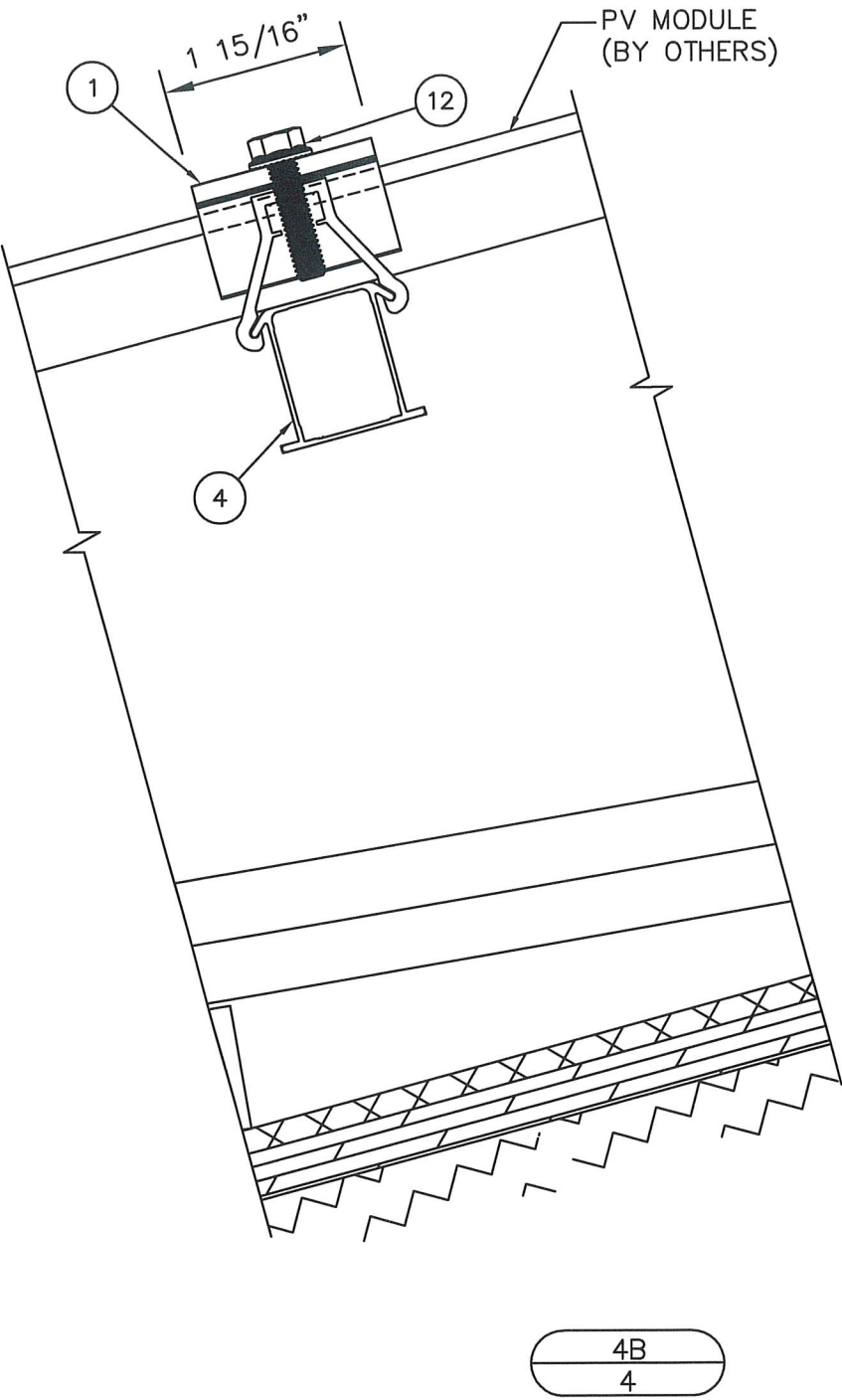
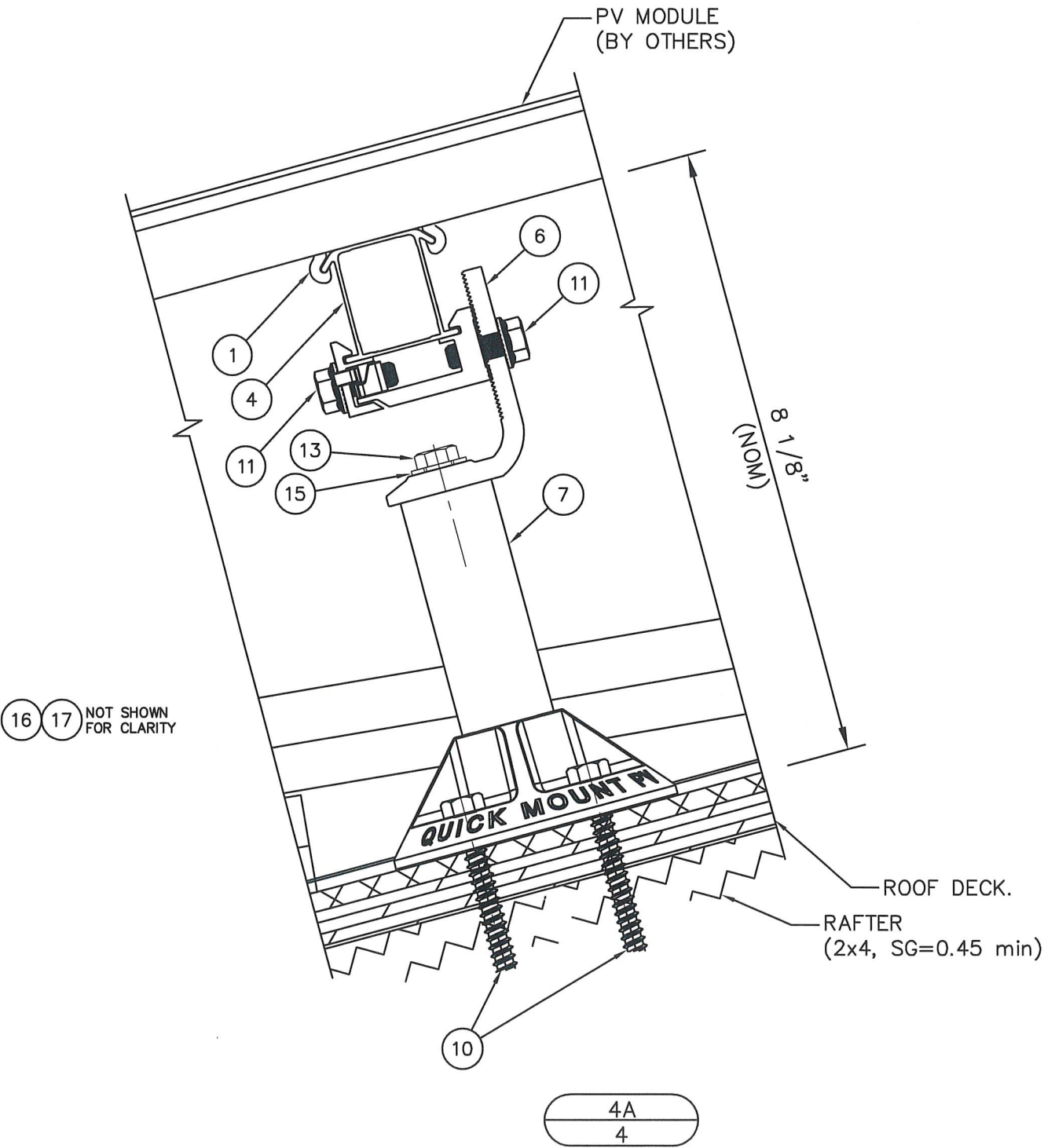
4141 W VAN BUREN ST, SUITE 2
PHOENIX, AZ 85009
PHONE (877) 859-3947
info@ecofastensolar.com

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



REV.#	DATE	PRINTS ISSUED	FDR
1	10/18/23	2023 CODE UPDATE	
1	12/30/22	1ST SUBMITTAL	

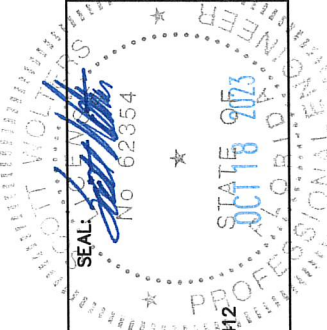
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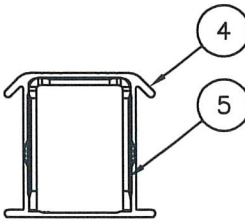
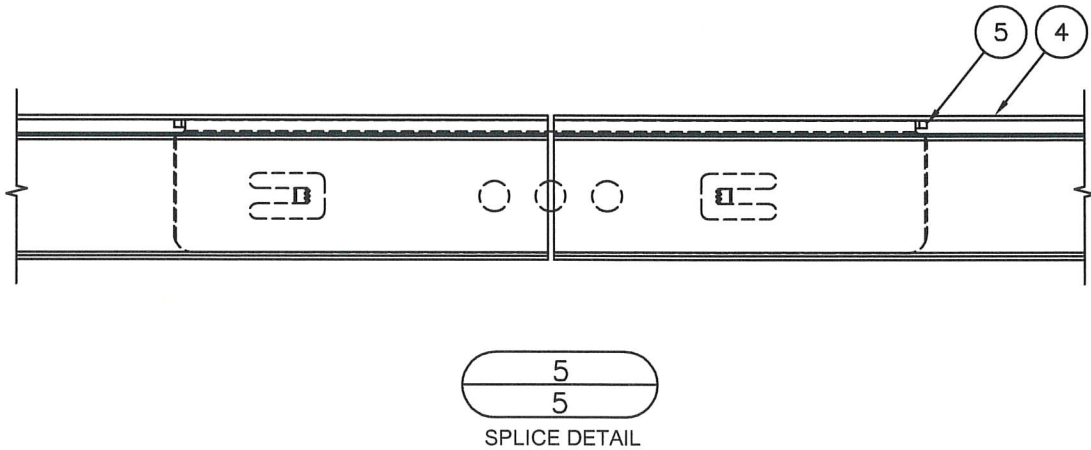
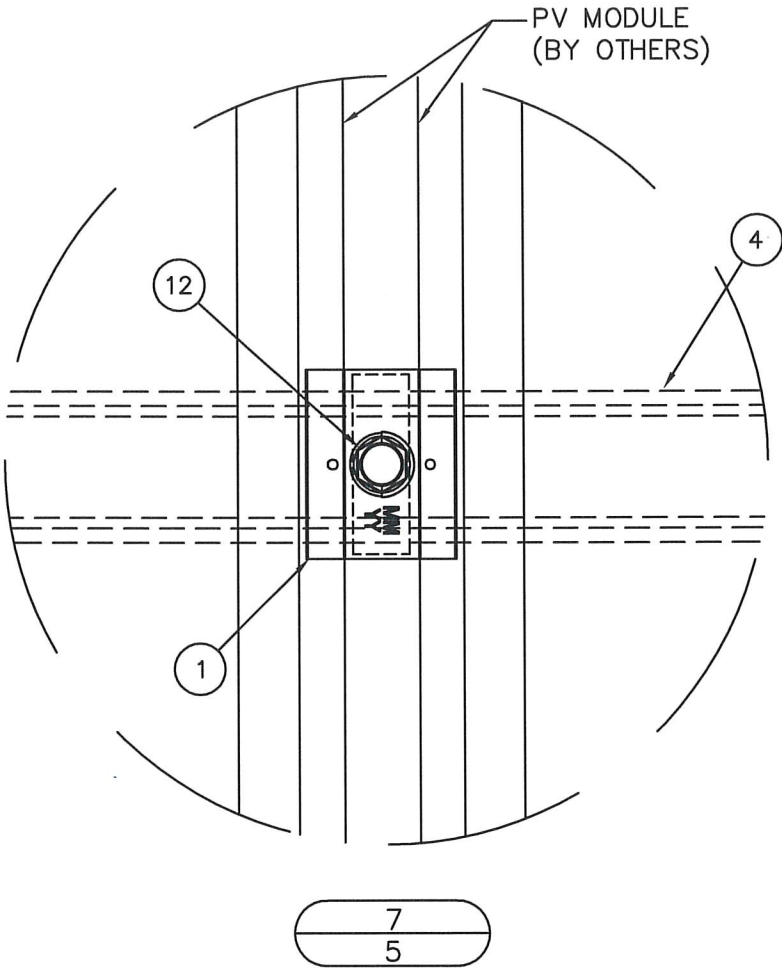
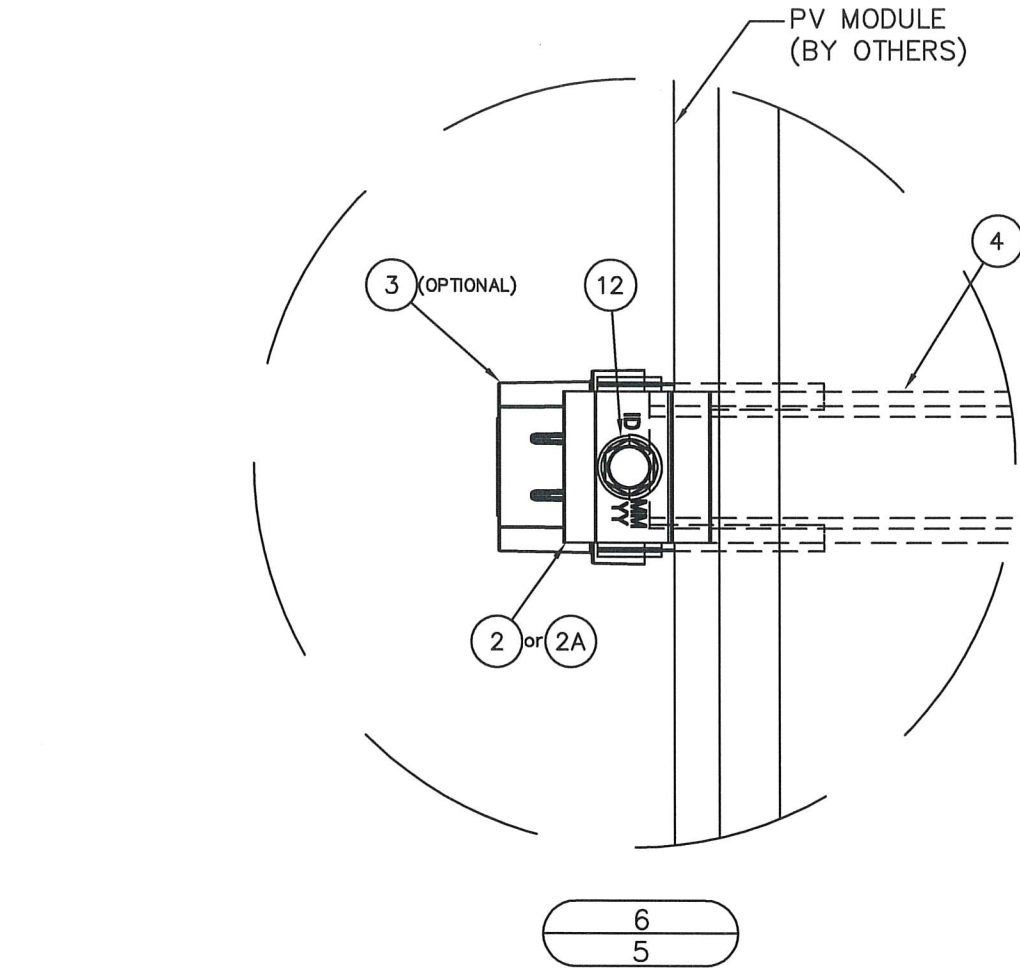
DWG: ECO-QB
SHEET: 3/9

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REV.#	ISSUED FOR	DATE
1	2023 CODE UPDATE	10/18/23
1	1ST SUBMITTAL	12/30/22

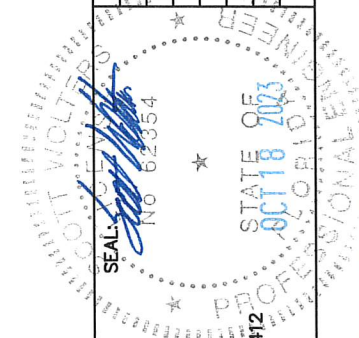
ECOFASTEN CLICKFIT PHOTOVOLTAIC PANEL RACKING SYSTEM
WITH ECOFASTEN QB-1 ROOF ATTACHMENT



SPLICE LOCATIONS:

SPLICE LOCATIONS MAY NOT BE INSTALLED
IN THE FOLLOWING LOCATIONS:

- A. IN A CANTILEVER.
- B. WITHIN THE MIDDLE 1/4 OF AN ANCHOR-
TO-ANCHOR SPAN OF THE RAIL.
- C. WITHIN 3" OF A ROOF ATTACHMENT.



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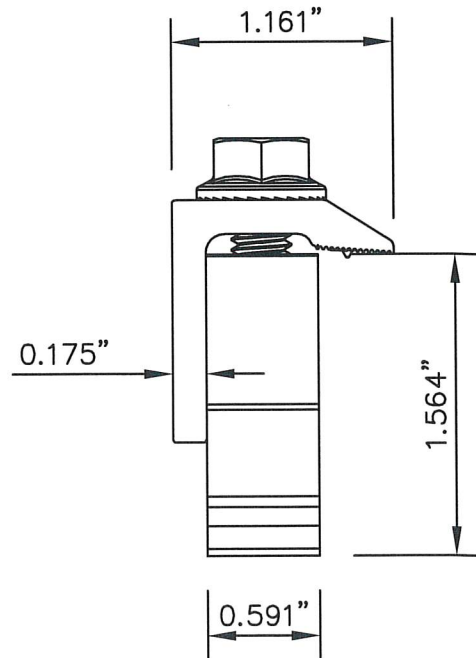
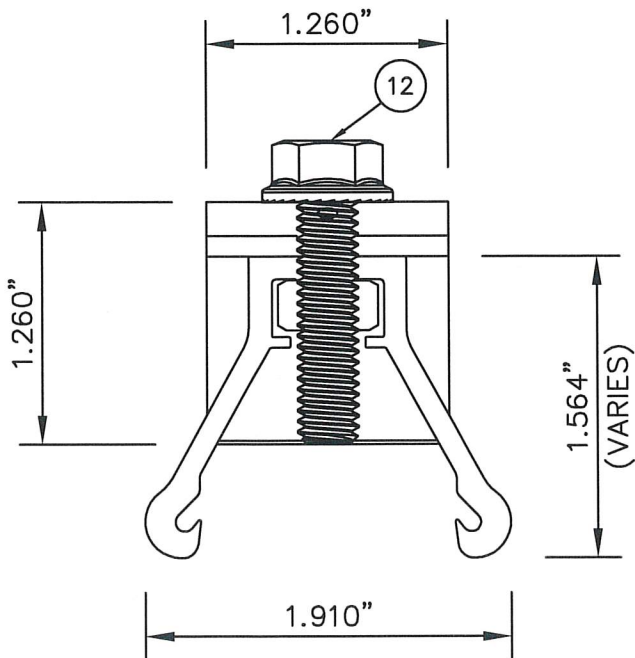
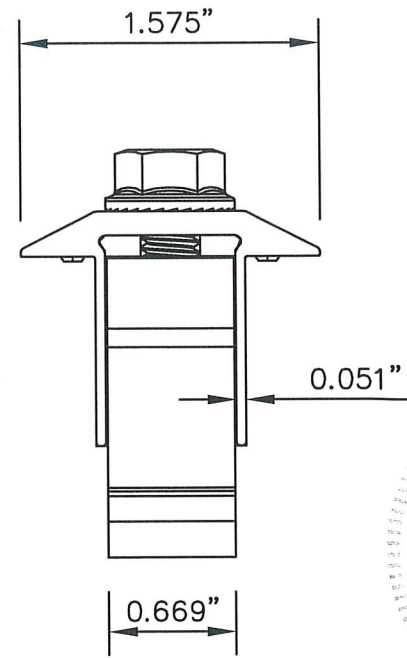
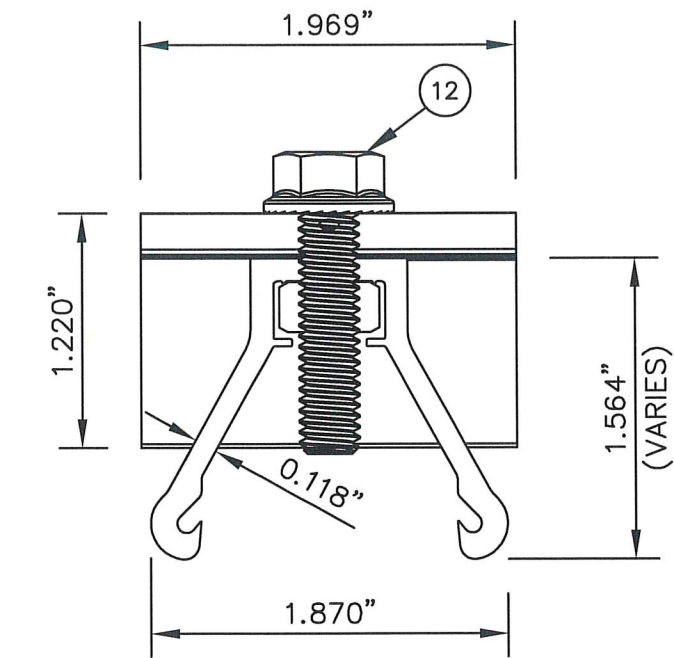
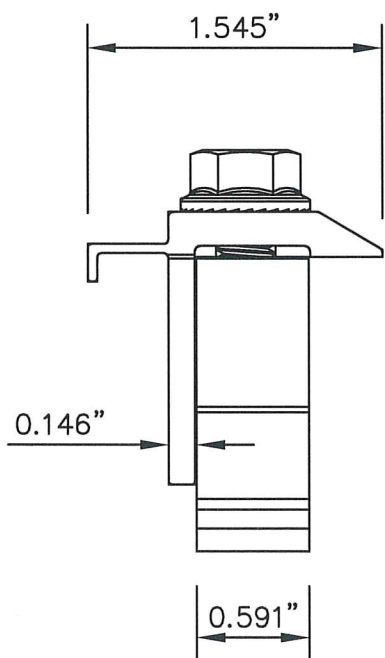
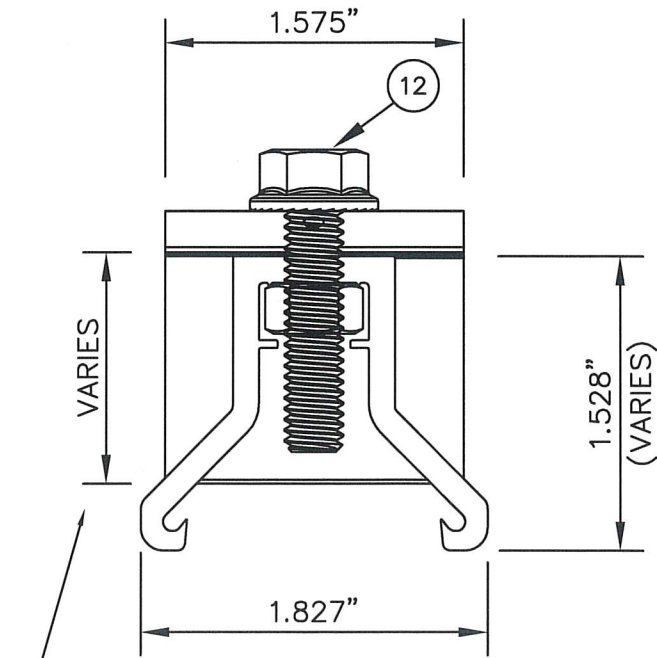
DWG: ECO-QB
SHEET: 4/9

1	10/18/23	DATE
1	12/30/22	REV.#
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ECOFASTEN CLICKFIT PHOTOVOLTAIC PANEL RACKING SYSTEM
WITH ECOFASTEN QB-1 ROOF ATTACHMENT

BILL OF MATERIALS- ClickFit System		
#	DESCRIPTION	MATERIALS/NOTES
1	MID-CLAMP ASSEMBLY	6000 SERIES AL
2	END-CLAMP ASSEMBLY	6000 SERIES AL
2A	UNIVERSAL END-CLAMP ASSEMBLY	6000 SERIES AL
3	END CAP (OPTIONAL)	POLYMERIC
4	CLICKFIT STANDARD RAIL	6000 SERIES AL
5	SPLICE SLEEVE	CORROSION RESISTANT STEEL
6	CLICKFIT GF1 L-FOOT ROOF ANCHOR ASSEMBLY	SEE FLPA# 39871 FOR MORE INFO
7	CLICKFIT QB-1 ROOF ANCHOR ASSEMBLY	SEE FLPA# 39871 FOR MORE INFO
10	5/16" x 3" HWH LAG SCREW with EPDM WASHER	300 SERIES STAINLESS STEEL
11	5/16" x 3/4" HWH CAP SCREW	300 SERIES STAINLESS STEEL
12	5/16" x 1 1/4" HWH CAP SCREW	300 SERIES STAINLESS STEEL
13	5/16" x 1" HWH CAP SCREW	300 SERIES STAINLESS STEEL
14	5/16" x 1" HWH CAP SCREW	SAE GR. 2 (min) STEEL
15	5/16" (id) x 1 1/4" (od) FLAT WASHER	300 SERIES STAINLESS STEEL
16	QB-1 BASE FLASHING	300 SERIES ALUMINUM
17	QB-1 COUNTER-FLASHING CAP	EPDM

FOR 6000 SERIES EXTRUSIONS $F_{UT}=38$ ksi min, $F_Y=35$ ksi min.
FOR 300 SERIES STAINLESS STEEL $F_Y=65$ ksi min.



10/18/23

12/30/22

DATE

1

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**EcoFasten**
An Esdec Solar Group Company

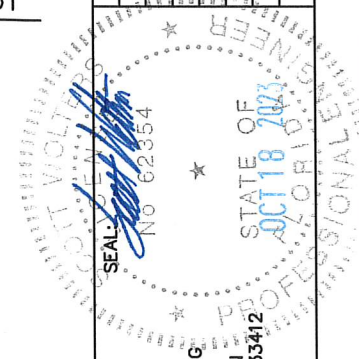
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PHOENIX, AZ 85009
PHONE (877) 859-3947
info@ecofastensolar.com

DWG:

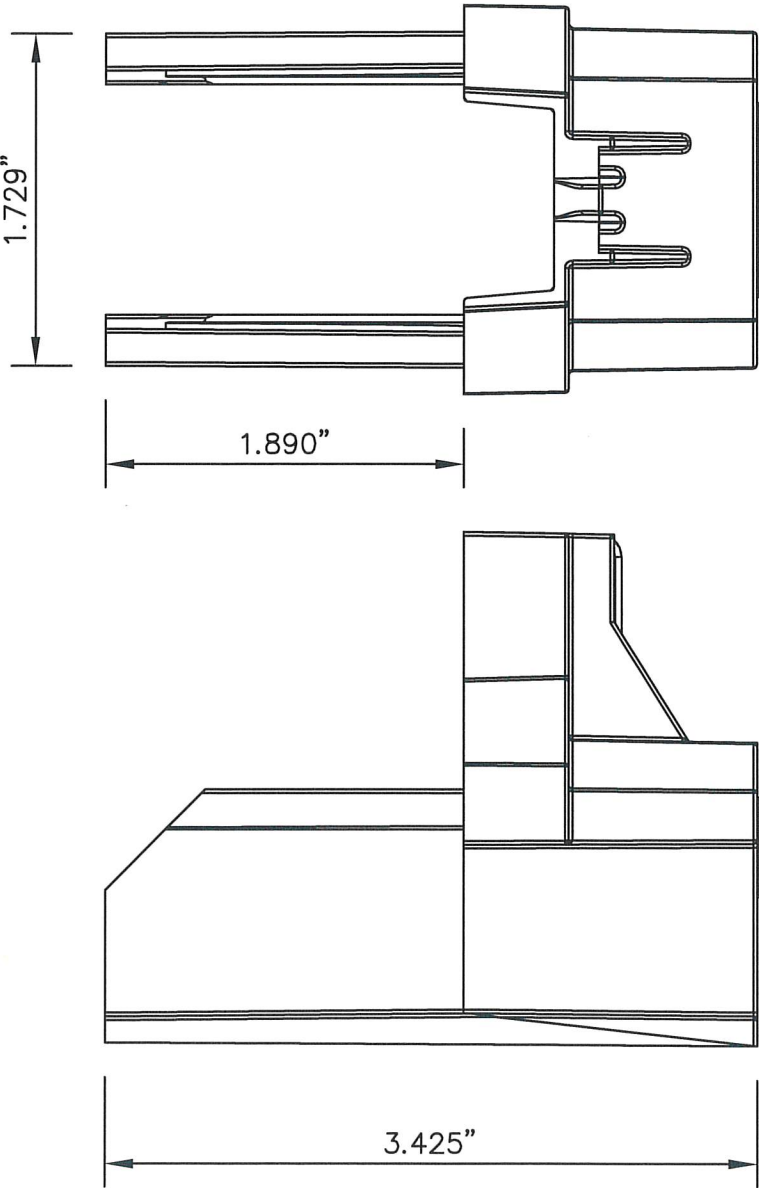
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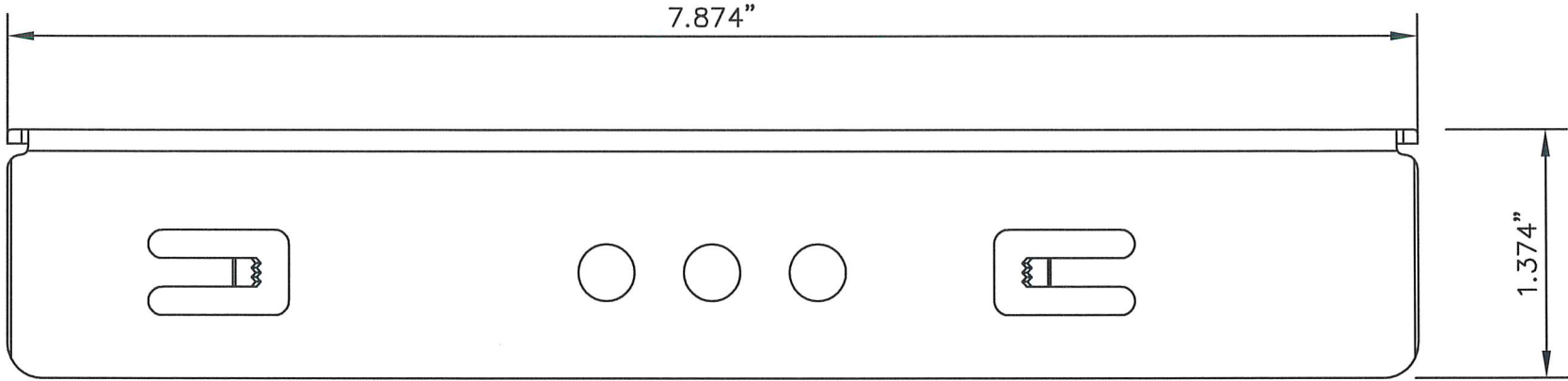
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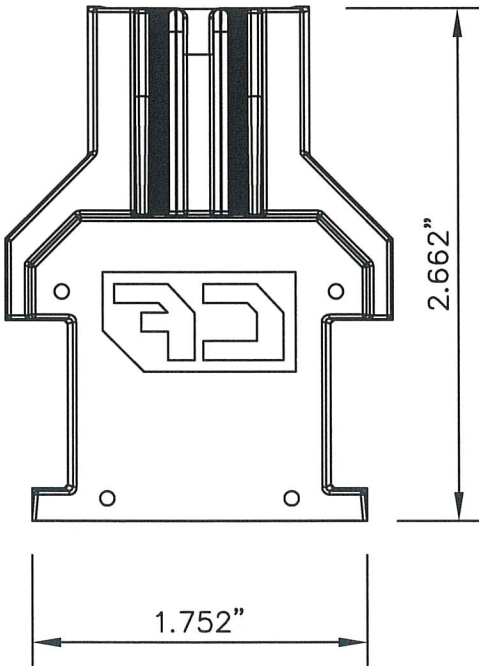
ECOFASTEN CLICKFIT PHOTOVOLTAIC PANEL RACKING SYSTEM
WITH ECOFASTEN QB-1 ROOF ATTACHMENT



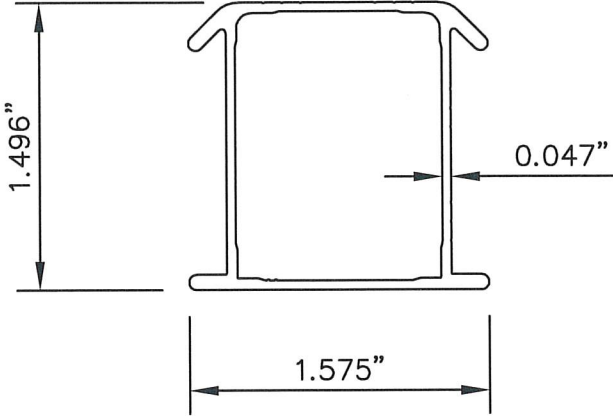
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5



4



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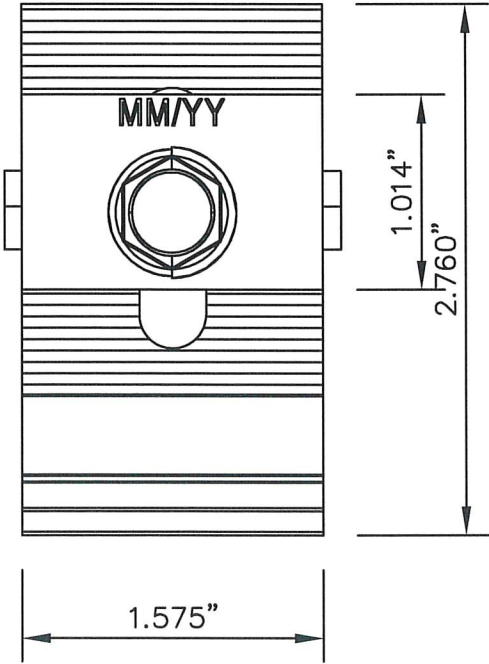
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FL PE# 62354

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(COA# 27194)
15211 97TH ROAD N
WEST PALM BEACH, FL 33412
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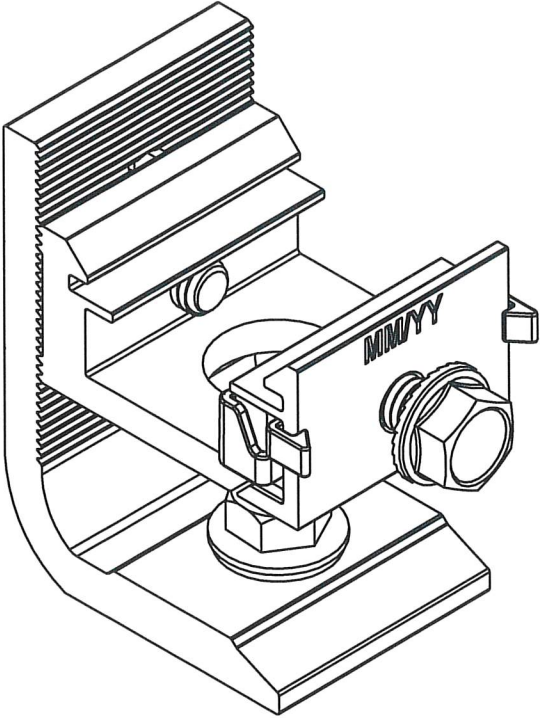
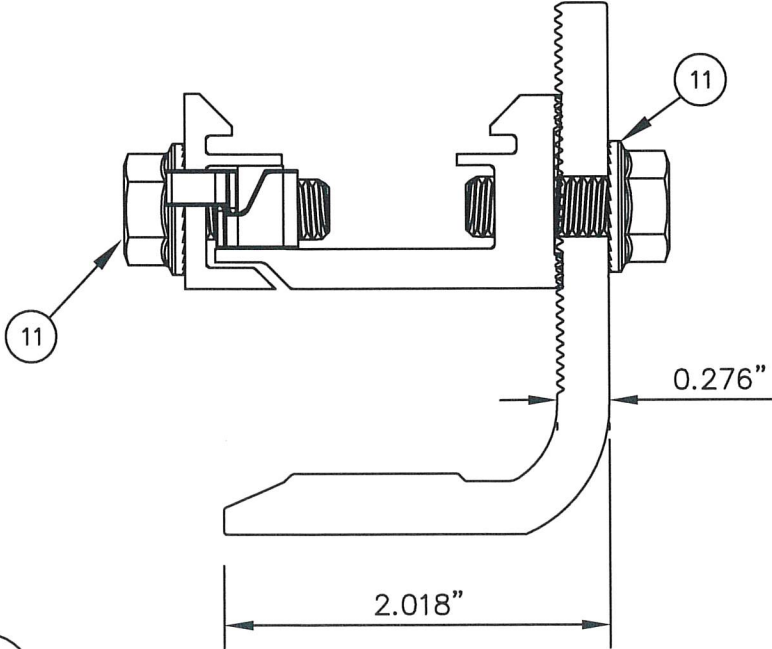


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WITH ECOFASTEN QB-1 ROOF ATTACHMENT

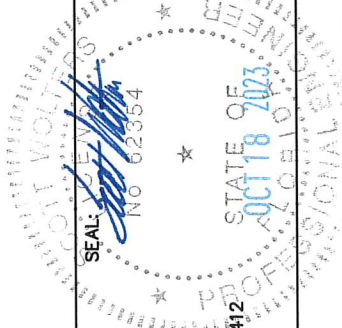


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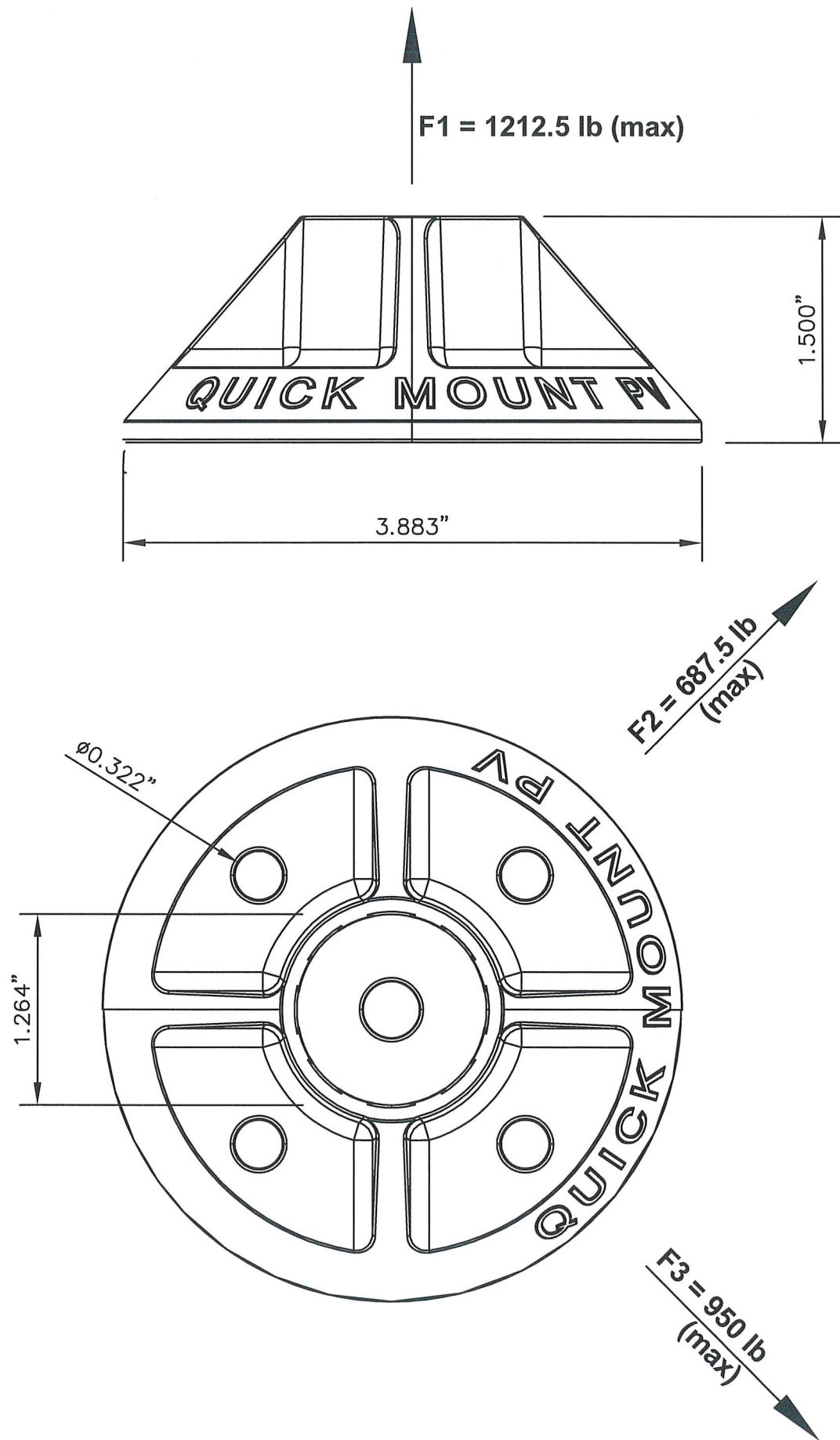


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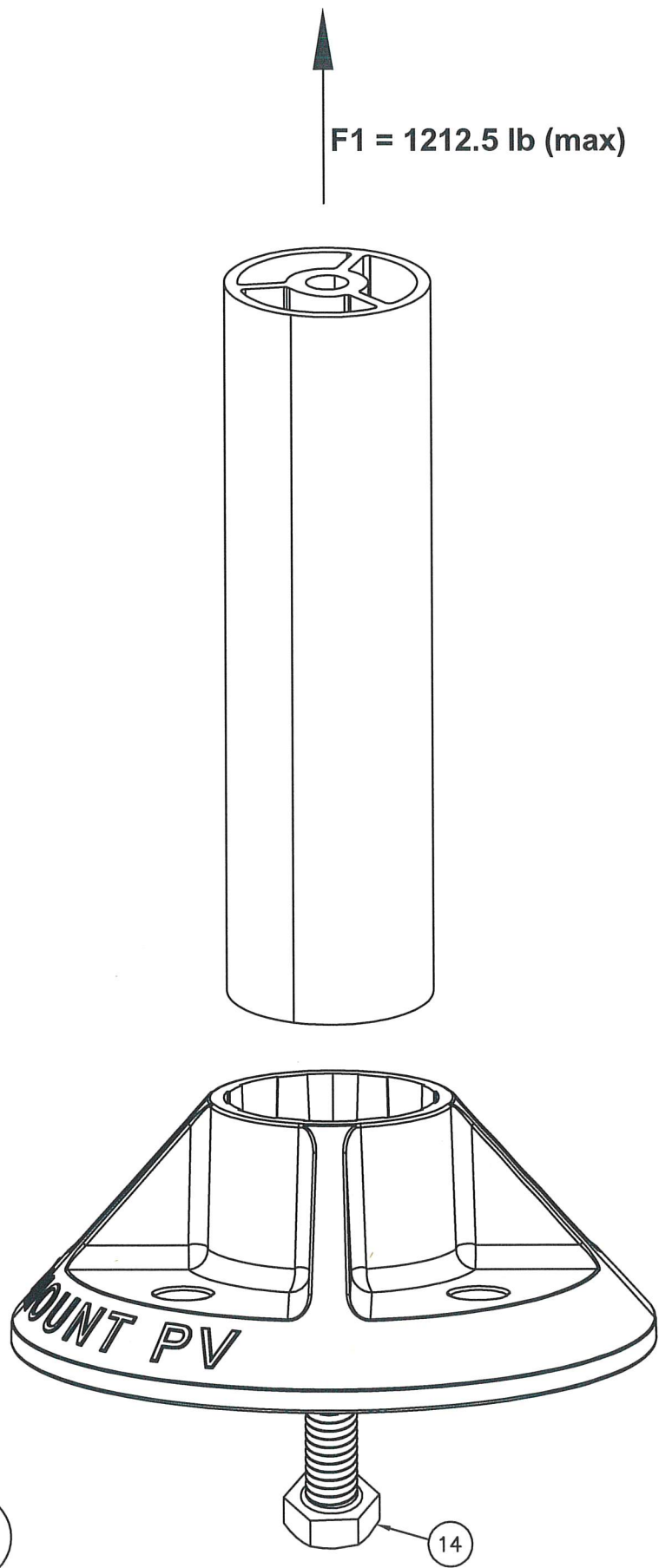
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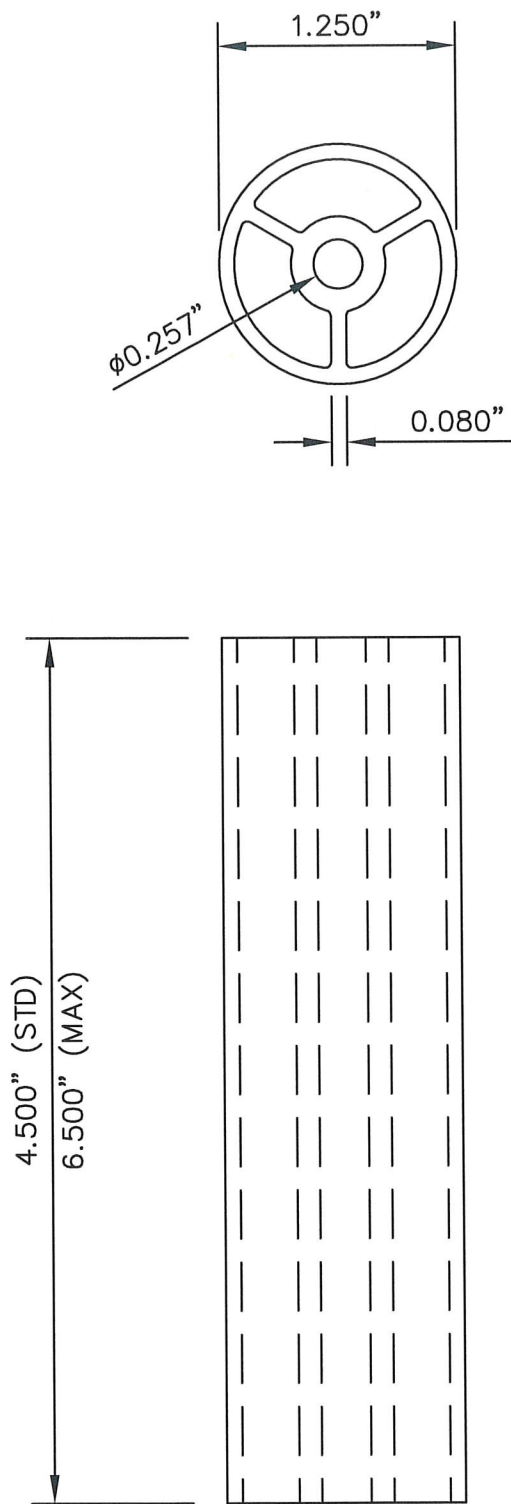
ECOFASTEN CLICKFIT PHOTOVOLTAIC PANEL RACKING SYSTEM
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7

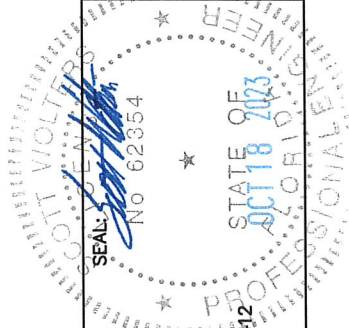


14



ANCHOR CAPACITY:

ANCHOR CAPACITIES LISTED ARE
PER FLPA# 39871.
F2 IS PARALLEL TO RAFTER
F3 IS PERPENDICULAR TO RAFTER

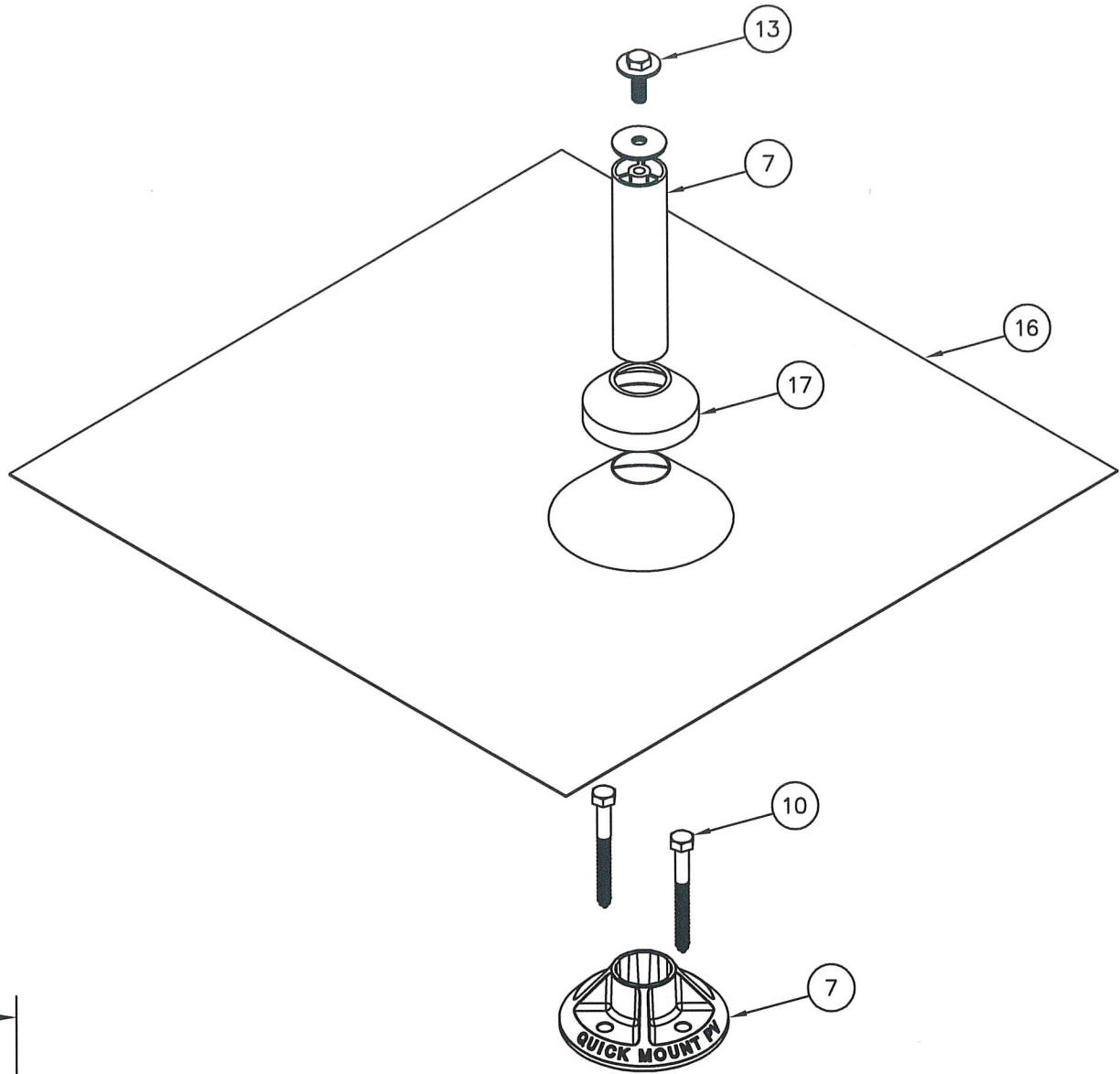
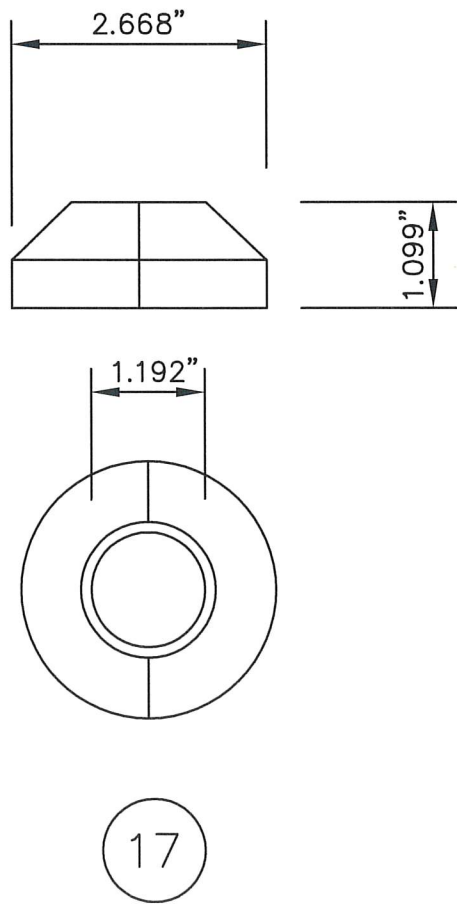
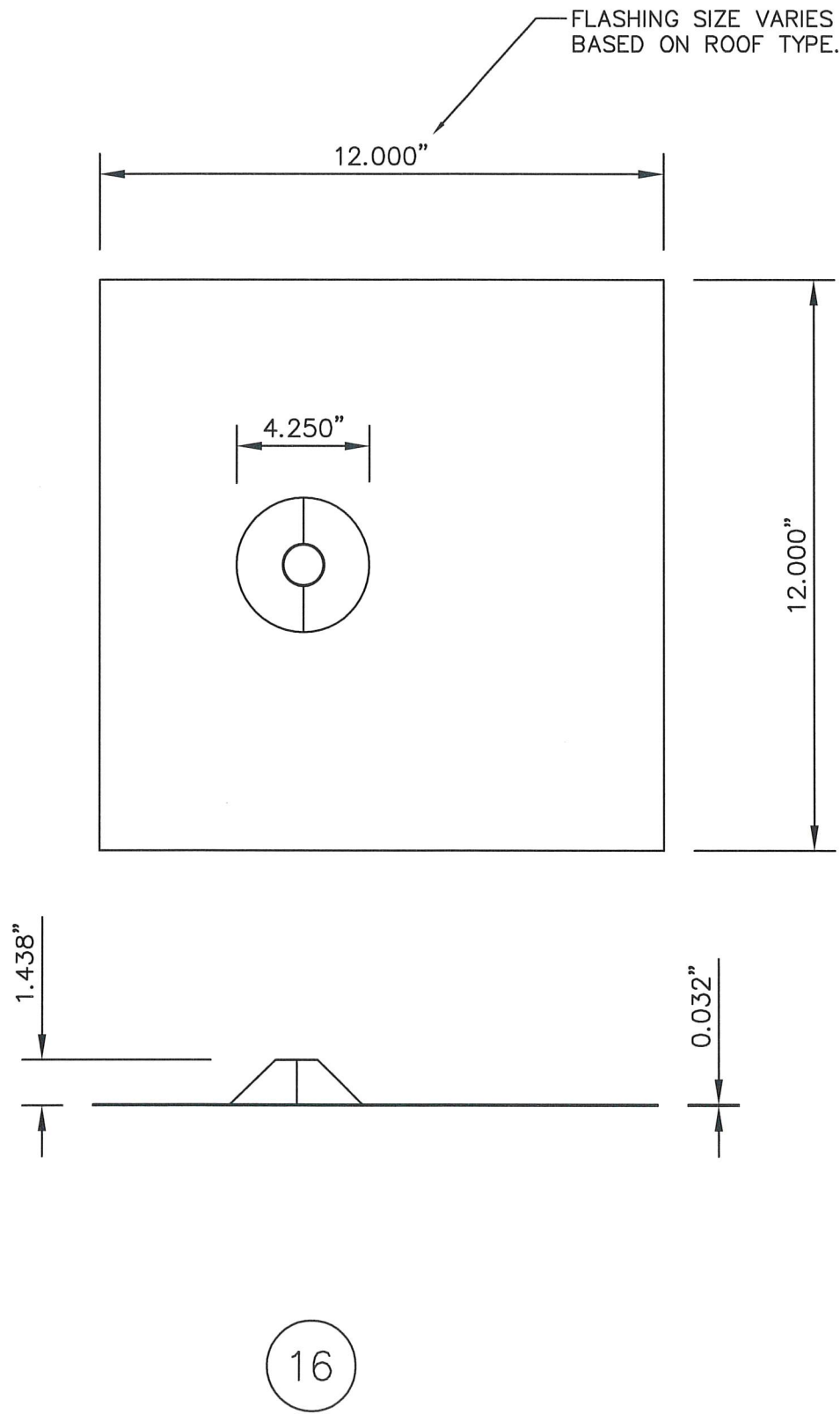


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DWG: ECO-QB
SHEET: 8/9

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



IRONRIDGE

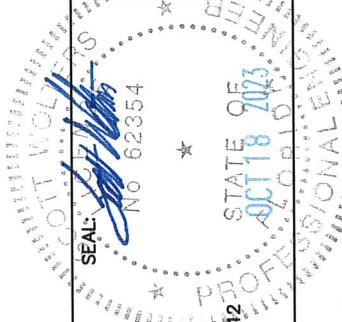
28357 INDUSTRIAL BLVD.
HAYWARD, CA 94545

PHONE: (800) 227-9523
info@ironridge.com

DWG: ECO-QB
SHEET: 9/9

SCOTT WOLTERS
FL PE# 62354

WOLTERS ENGINEERING
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