Wiley
Advancing Renewable Technology
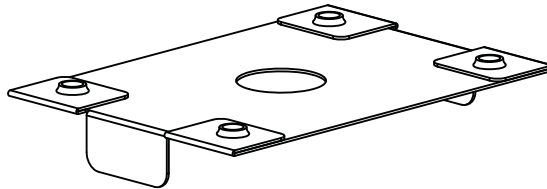
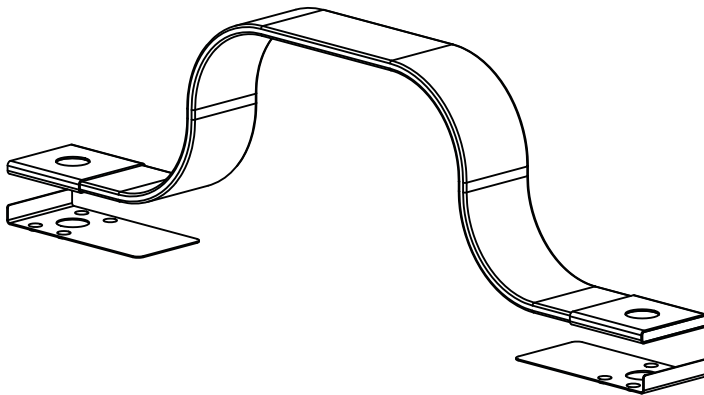# Washer, Electrical Equipment Bond

WEEB
Patent Pending

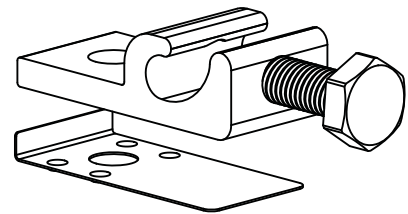# INSTALLATION INSTRUCTIONS

For SnapNrack Only

Please read carefully before installing.

WEEB-PMC

WEEBL-6.7 assembly

WEEB Bonding Jumper-6.7

Products are tested to UL 467
UL standard for safety grounding and bonding equipment

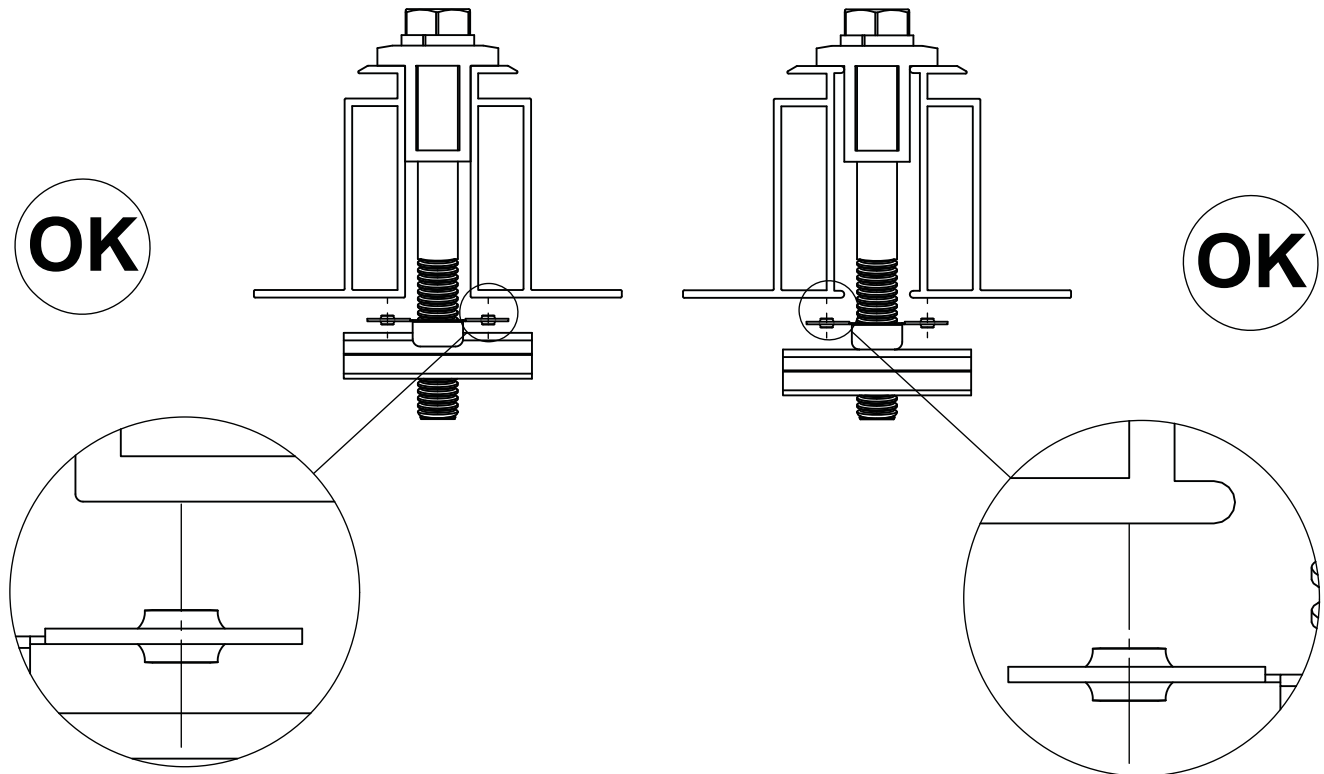Document Number 104-0404-000034-008

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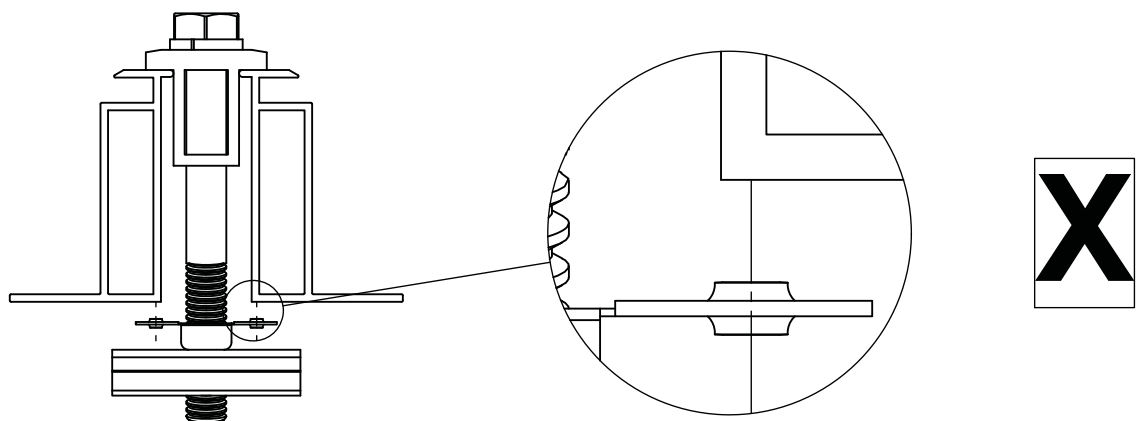3098177

WEEB COMPATIBILITY

The WEEB family of products can be used to bond anodized aluminum, galvanized steel, steel and other electrically conductive metal structures.

Standard Top Down Clamps

The WEEBs used for bonding the PV modules to the mounting rails are compatible with various cross-sections of module frames. The following are examples of module frames that are compatible. Notice that the WEEB teeth are positioned completely under the edge of the module frame.
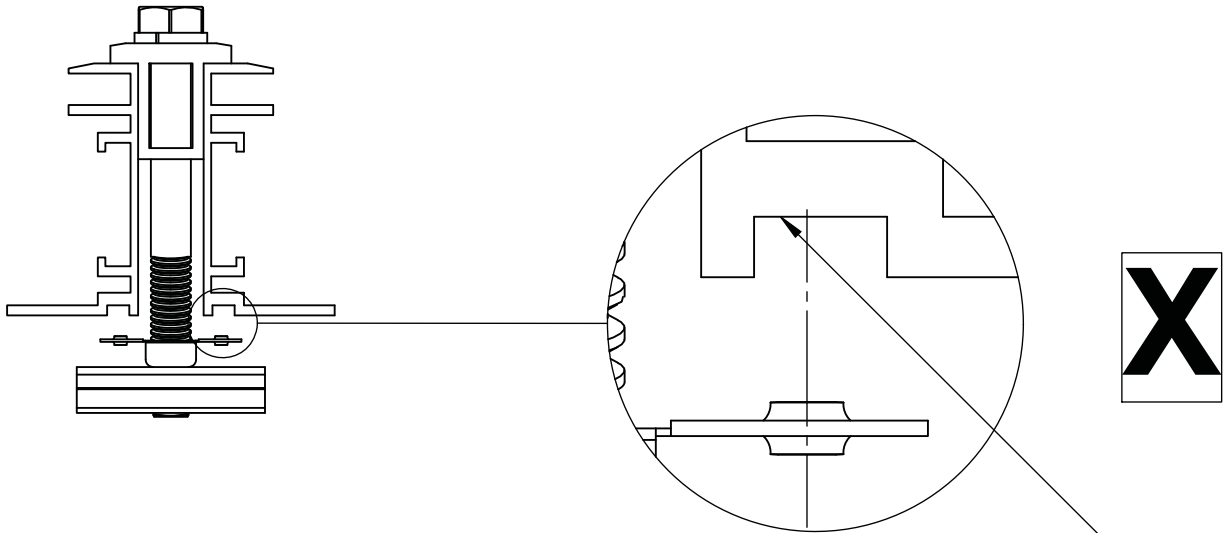
OK

OK

The following is an example of a module frame that is incompatible with the WEEB. The WEEB teeth are positioned only partially under the edge of the module due to the lip on the top edge of the module.
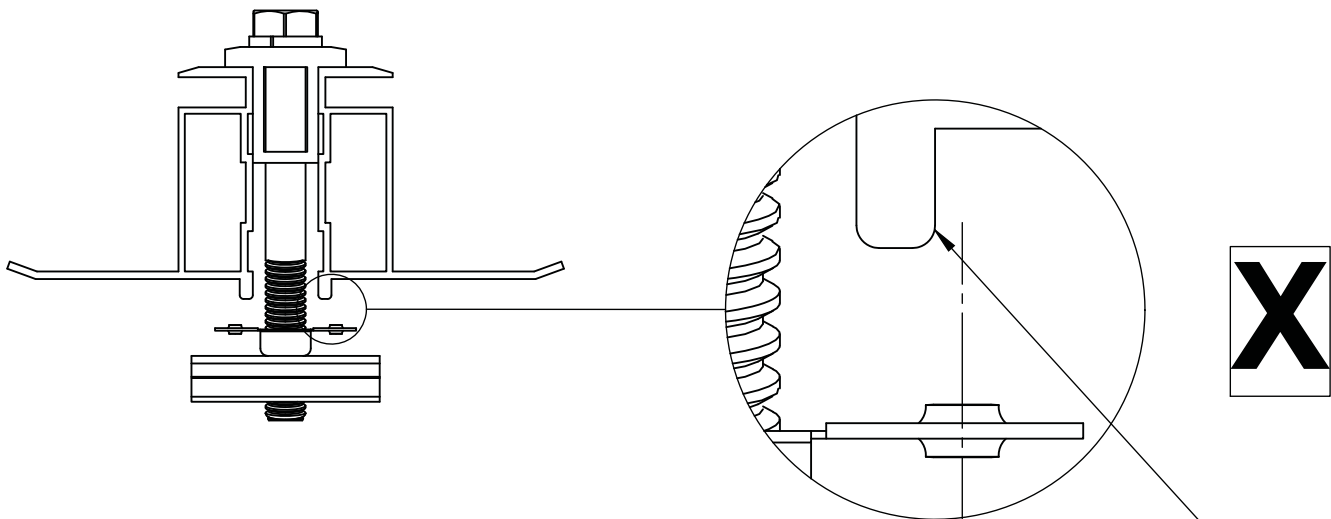
X

WEEB COMPATIBILITY

Module frames like those shown here may have a ridge or lip on the bottom edge of the frame that would prevent the WEEB teeth from fully embedding.

Shown here is an example of a groove that will prevent the WEEB teeth from properly penetrating the module frame. This type of frame is not compatable with the WEEB.
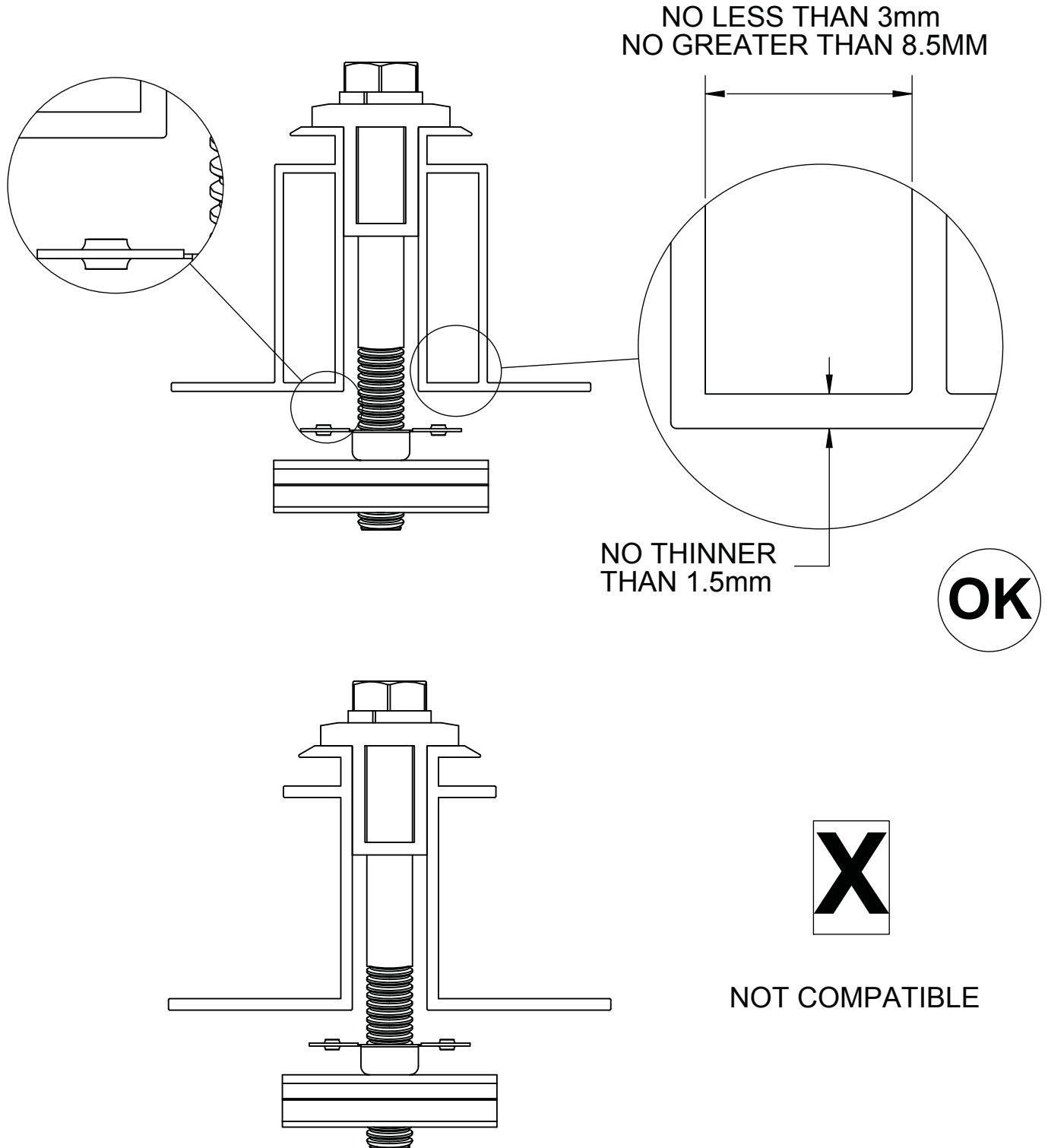
Shown here is an example of a lip that will prevent the WEEB teeth from properly penetrating the module frame. This type of frame is not compatable with the WEEB.
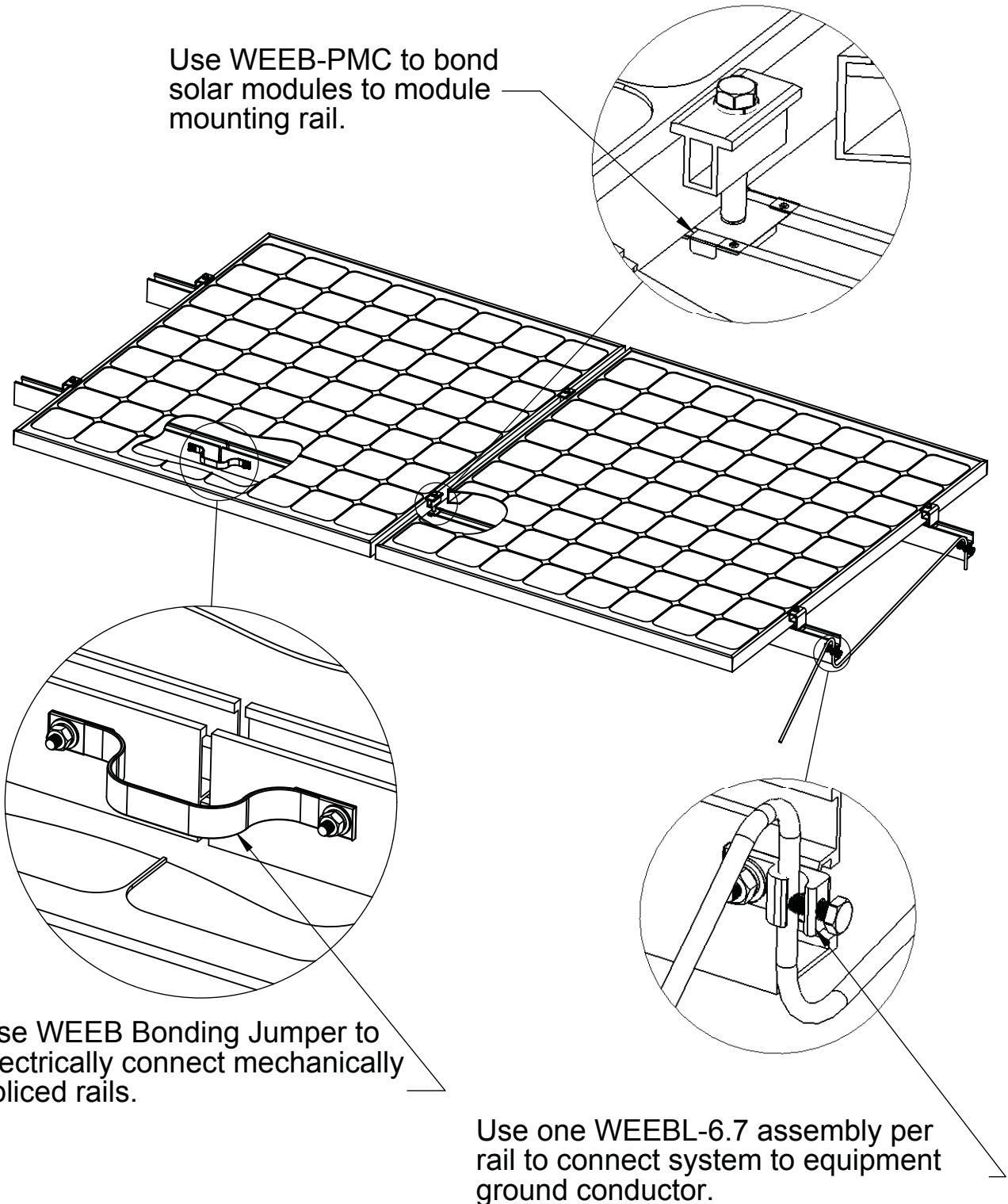
Important Note:

Inspect each module frame used with a WEEB to ensure that the bottom mounting face of the frame is flat, and that there are no hinderances to embedding OWEEB teeth. Do not use a module with a frame that prevents the WEEB teeth from embedding fully.

WEEB-PMC on SnapNrack System

The WEEB-PMC is compatible with the SnapNrack system. However, due to the width of the SnapNrack mid clamp, only module frames with reinforcing box structures can be used for grounding with the WEEB. Below are specifications for such module frames.

NO LESS THAN 3mm
NO GREATER THAN 8.5MM

NO THINNER
THAN 1.5mm

OK

X

NOT COMPATIBLE

SYSTEM OVERVIEW

Use WEEB-PMC to bond solar modules to module mounting rail.

Use WEEB Bonding Jumper to electrically connect mechanically spliced rails.

Use one WEEBL-6.7 assembly per rail to connect system to equipment ground conductor.
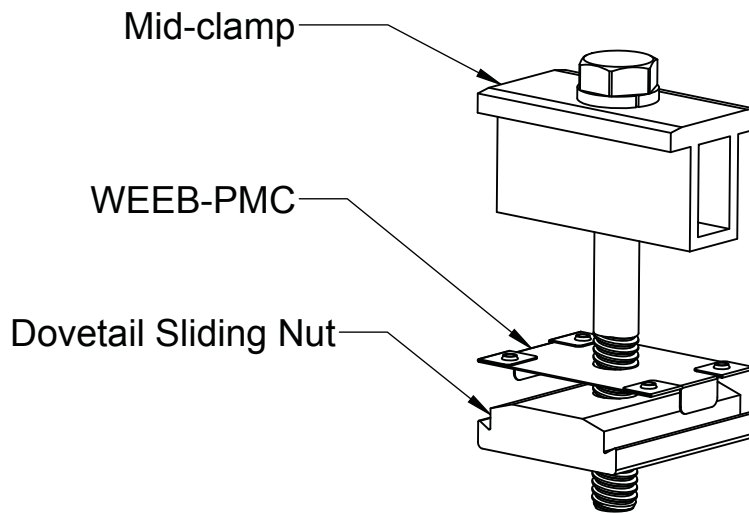
Important notes

1. **Use general purpose anti-seize compound on fastener threads when installing WEEBs.**
2. **WEEBs are intended for SINGLE USE ONLY. Functionality will not be guaranteed if reused.**
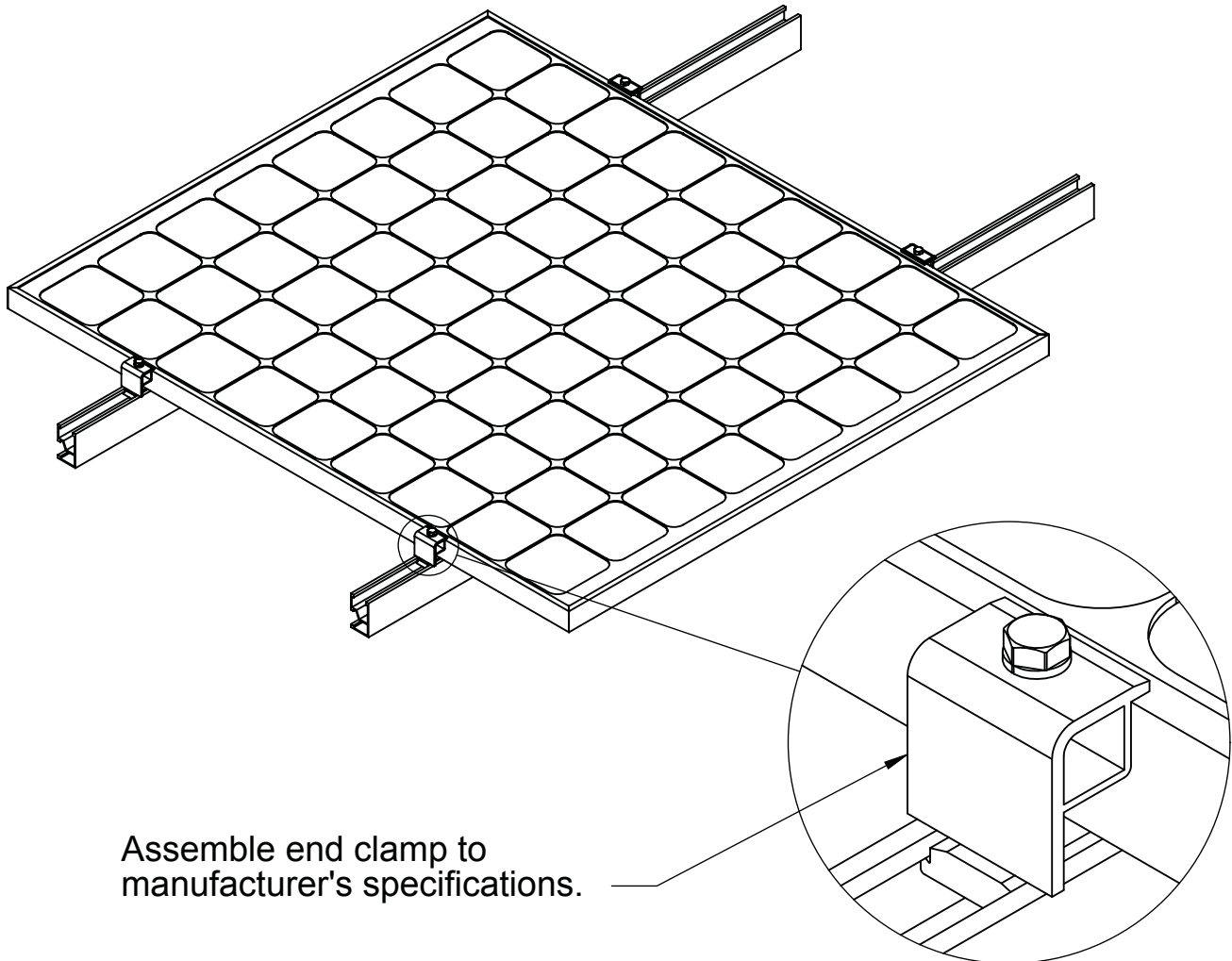
WEEB-PMC ASSEMBLY
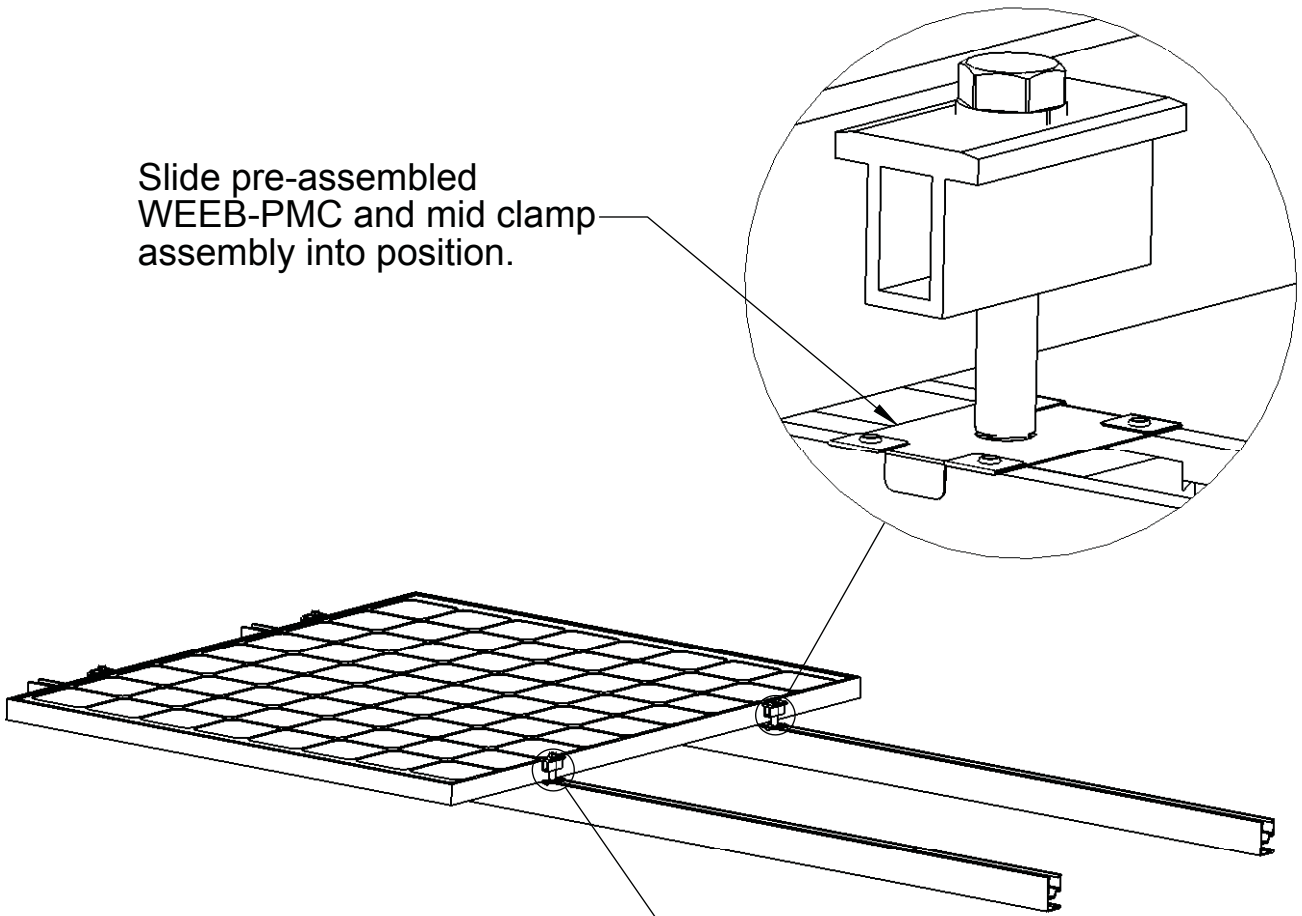
①

Mid-clamp

WEEB-PMC

Dovetail Sliding Nut

Pre-assemble WEEB-PMC to mid-clamp assembly as shown. Pre-assembling WEEB-PMC to mid-clamp assembly will contain the small individual parts, reducing the possibility of losing parts during installation.
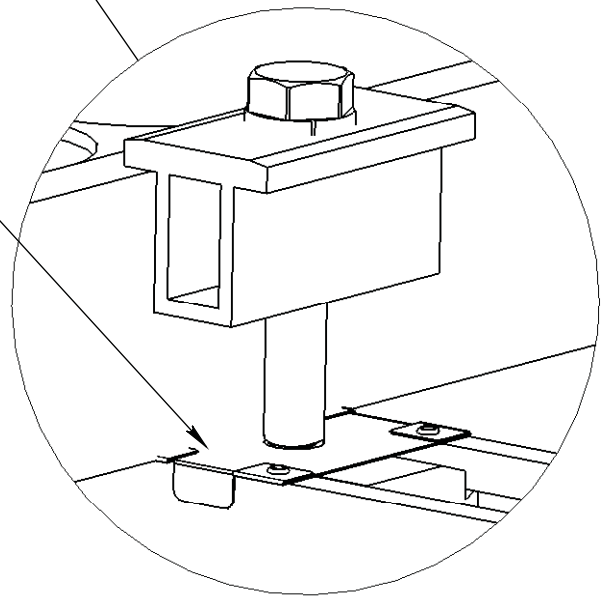
②

Assemble end clamp to manufacturer's specifications.

③

Slide pre-assembled
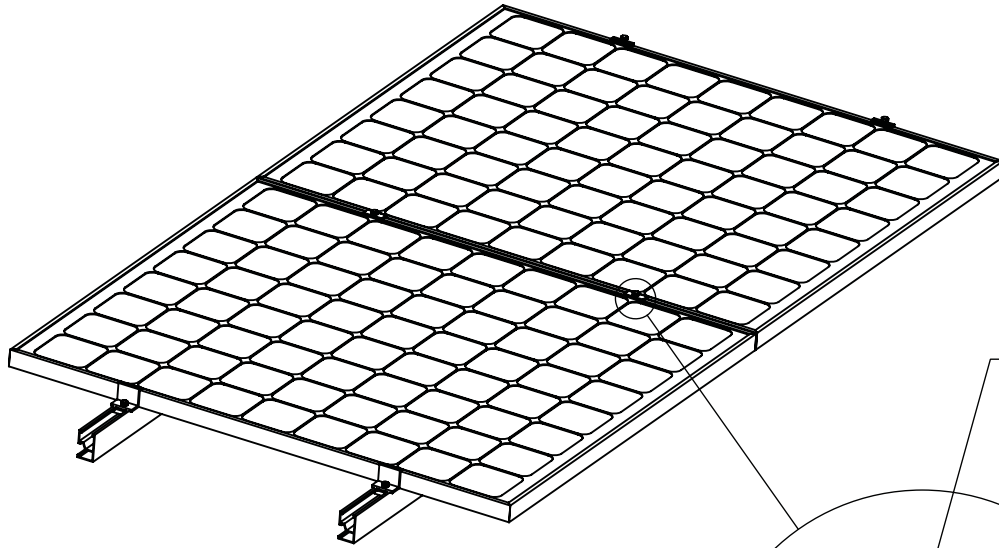WEEB-PMC and mid clamp
assembly into position.

Slightly lift solar module and
slide WEEB-PMC and mid
clamp assembly into position.
WEEB teeth will automatically
be aligned under the edge of
the module when the mid-clamp
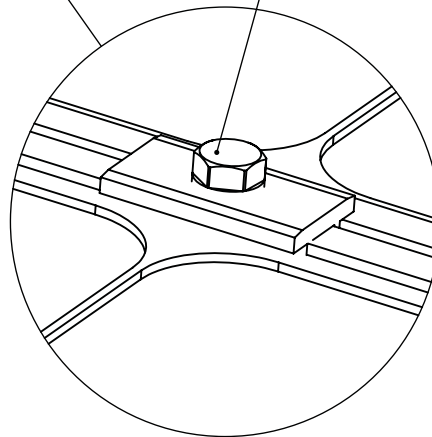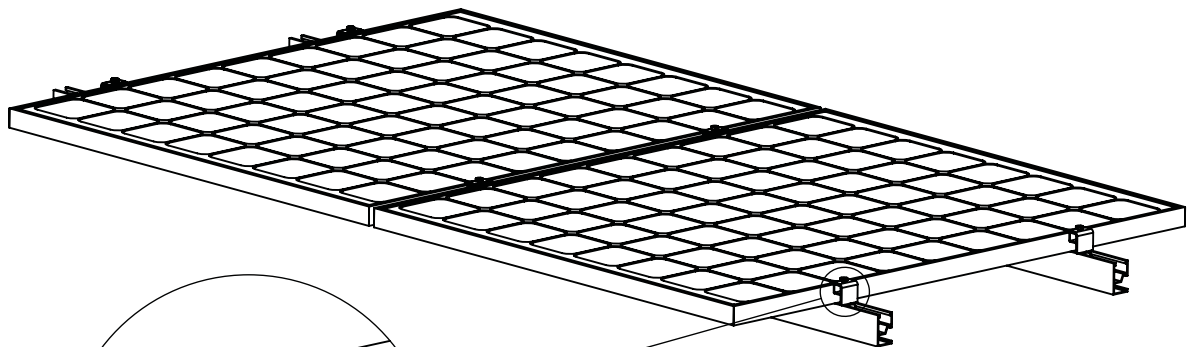assembly is correctly installed.

④ **Important note:**
WEEBs are for SINGLE USE ONLY! Do not torque fasteners down if position of solar modules is not finalized. Only slightly tighten fasteners to keep modules in place.
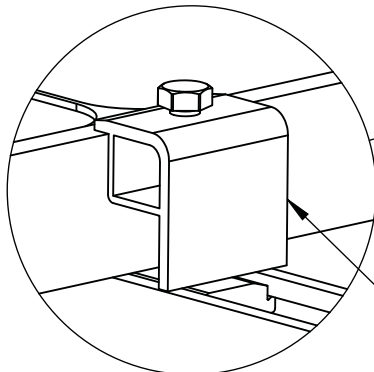
When position of solar modules are finalized, torque fasteners to 15ft-lb / 20.5 N-m using general purpose anti-seize compound on threads.

⑤

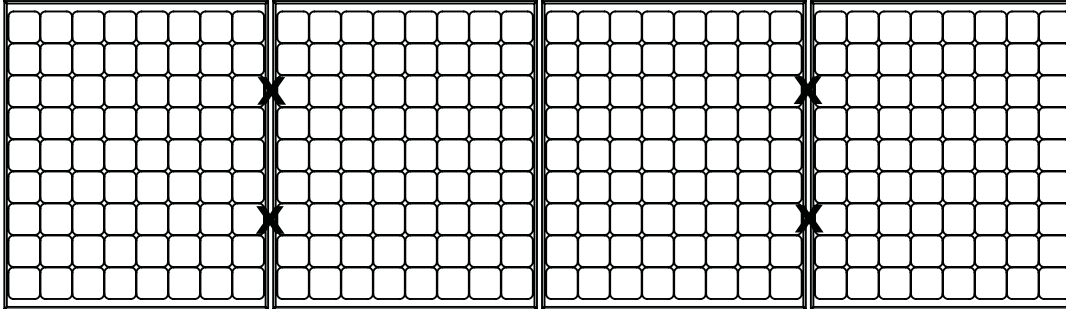Assemble end clamp to manufacturer's specification.

WEEB-PMC LAYOUT

⑥
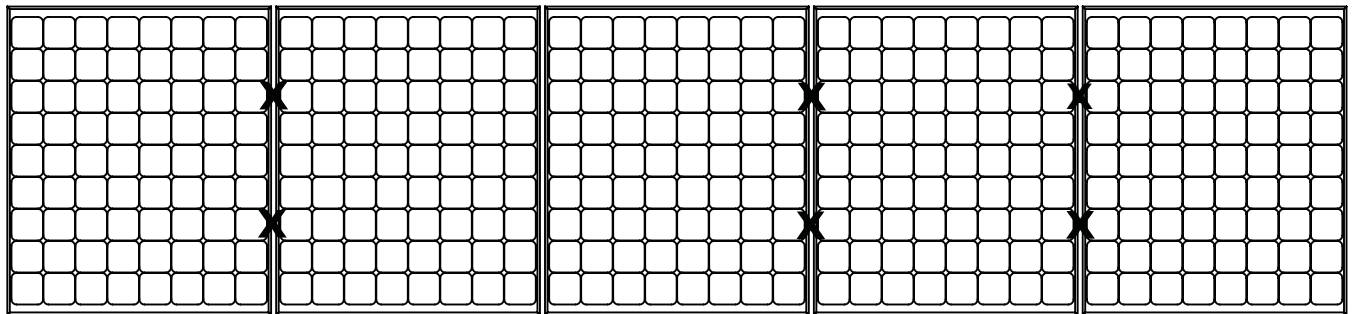
EVEN NUMBER OF MODULES IN ROW

X DENOTES PLACES TO INSTALL WEEB-PMC

C X R = 4 X 1
WEEB-PMC NEEDED = C X R = 4 X 1 = 4

ODD NUMBER OF MODULES IN ROW

X DENOTES PLACES TO INSTALL WEEB-PMC

C X R = 5 X 1
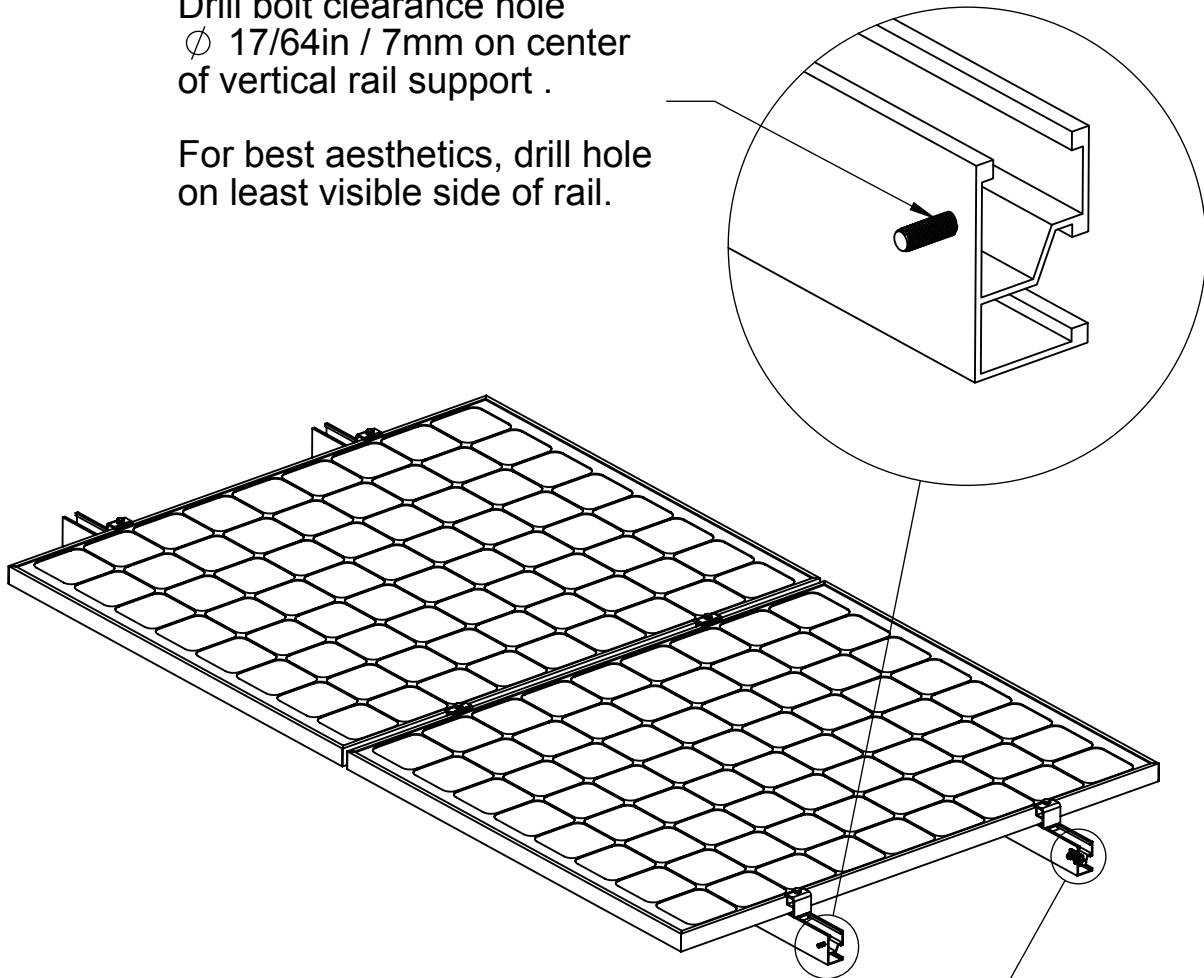WEEB-PMC NEEDED = [C+1] X R = [5+1] X 1 = 6

Note:
When replacing a single faulty module, also remove the adjacent module which contacts the same WEEBs as the faulty module. This will ensure that there are never ungrounded modules in the array.
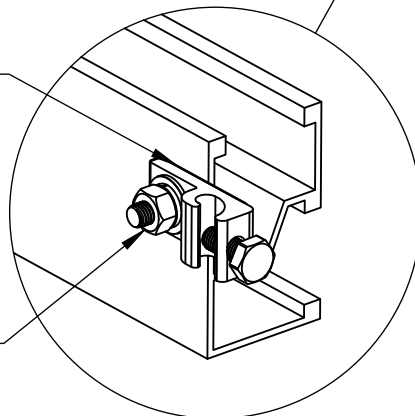
WEEBLUG ASSEMBLY

⑦

Drill bolt clearance hole
⌀ 17/64in / 7mm on center
of vertical rail support .

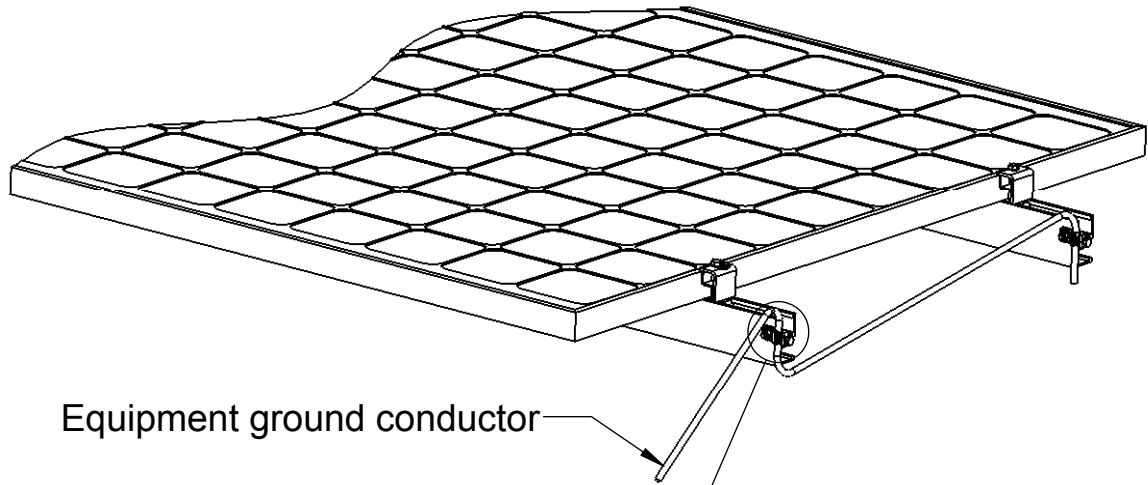For best aesthetics, drill hole
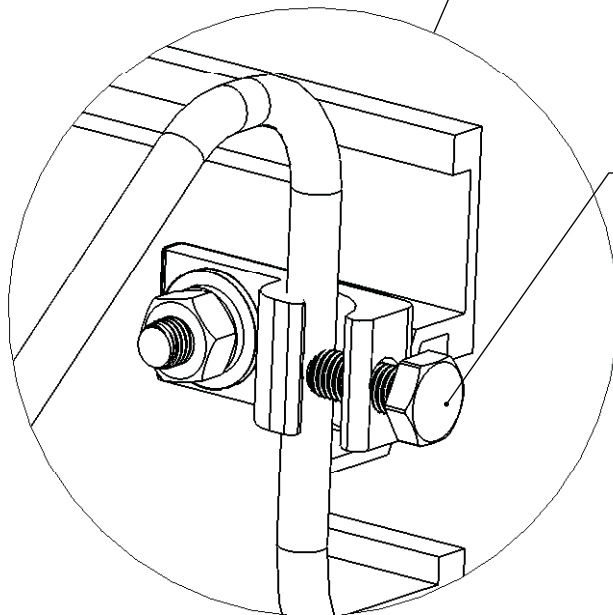on least visible side of rail.

WEEB teeth towards rail

Assemble WEEBL-6.7 assembly and
tighten fasteners to 10 ft-lb / 13.5 N-m,
using general purpose anti-seize on
threads.

Important note:
WEEB-6.7 that sits under the WEEBLug is for SINGLE USE ONLY!
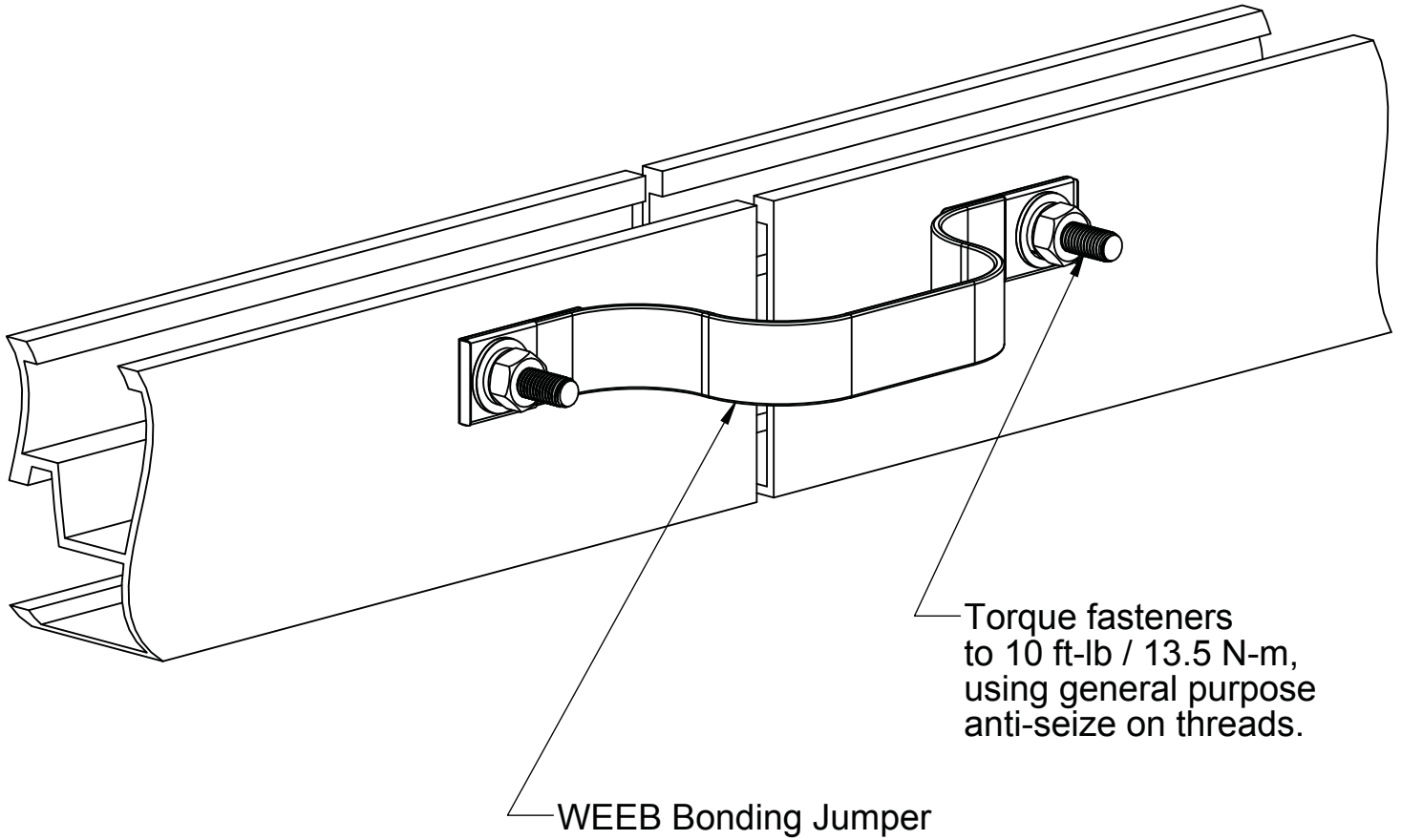**Ensure position is correct before tightening.**

⑧

Equipment ground conductor

Lay in equipment ground
conductor and torque bolt
to 7 ft-lbs / 10 N-m.

WEEB BONDING JUMPER ASSEMBLY

(9) WEEB Bonding Jumper can be used for all rail splices including expansion joints.

Torque fasteners
to 10 ft-lb / 13.5 N-m,
using general purpose
anti-seize on threads.

WEEB Bonding Jumper

Blue Pacific Solar