

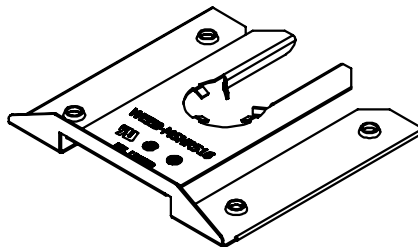


Washer, Electrical Equipment Bond

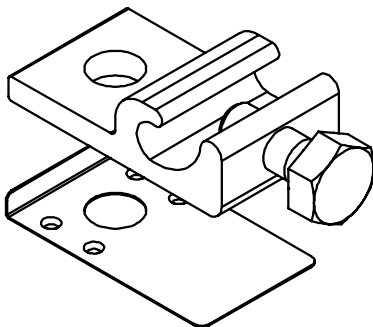
WEEB[®] WASHER

INSTALLATION INSTRUCTIONS *For Renusol America MS Series Solar Mounting System Only*

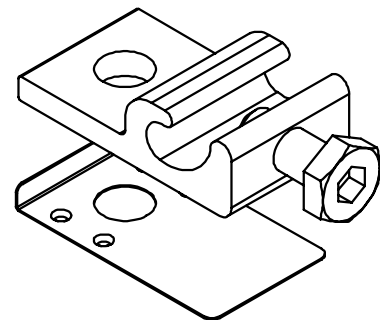
Burndy LLC recommends that the sufficient details of the installation be submitted to the AHJ for approval before any work is started.



WEEB-MSNR516



WEEB-LUG-8.0



WEEB-LUG-8.0HS



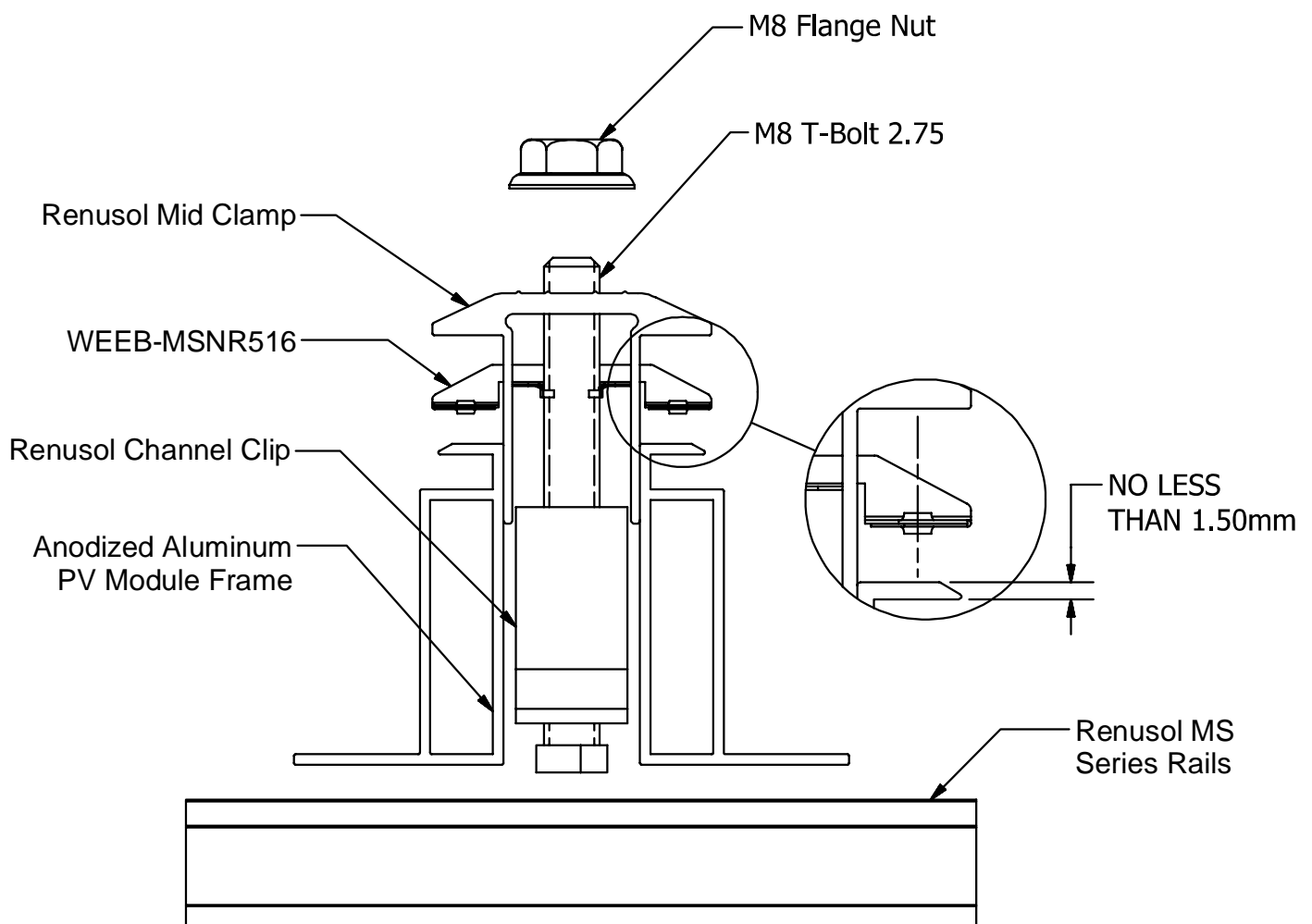
Products are tested to UL 467, CAN/CSA-C22.2 No. 41
US/ Canadian standards for safety grounding and bonding equipment.



WEEB-MSNR516 COMPATIBILITY

The WEEB® washer family of products can be used to bond anodized aluminum, galvanized steel, steel and other electrically conductive metal structures. All installations shall be in accordance with NEC requirements in the USA and with CSA C22.1 in Canada. The WEEB® washers are for use with modules that have a maximum fuse rating of less than 25A.

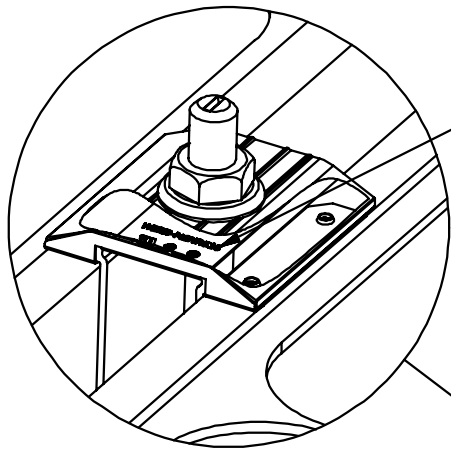
Certain module frames do not have enough structural strength to withstand the force required to embed a WEEB® washer. These frames will deform and therefore not allow sufficient penetration of the WEEB® washer teeth. The general requirements for minimum module frame thickness of "boxed" type module frames are illustrated below. For more information regarding module compatibility, please see the technical documents section of our website.



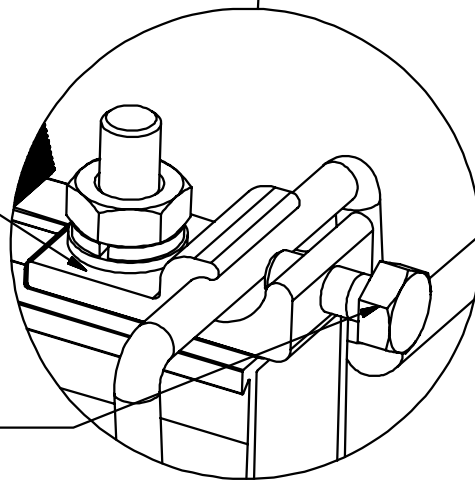
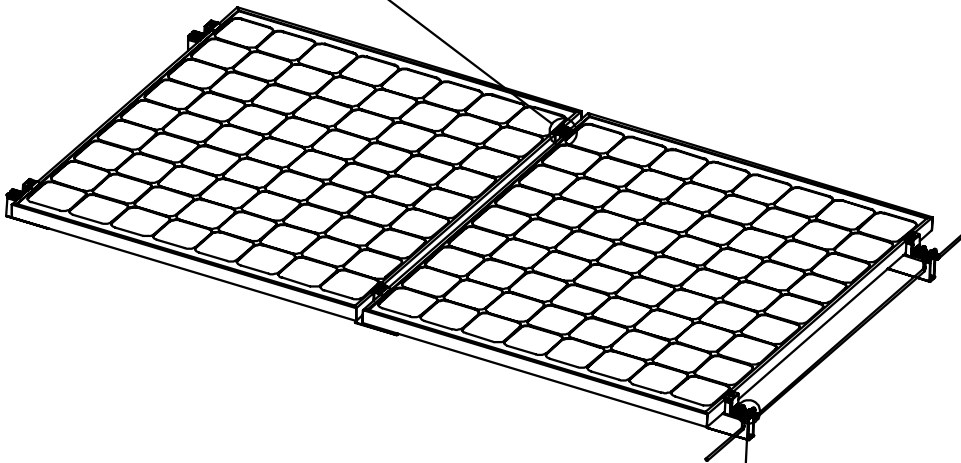
Note:

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

SYSTEM OVERVIEW



Use WEEB-MSNR516 to bond Mid clamp to Solar Module and torque fasteners to 10 ft-lbs / 13.5 N-m.



Assemble WEEB-LUG assembly and torque fasteners to 10ft-lbs / 13.5N-m.

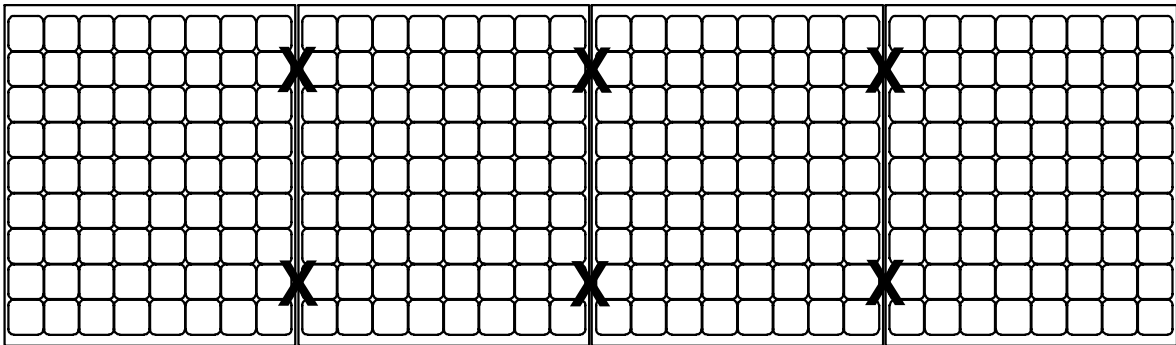
Lay in equipment ground conductor and torque bolt to 5 ft-lbs / 6.7 N-m

Important notes:

1. The MS-HP and MS-HPF Rails shall be grounded using WEEB-LUG-8.0 installed on the rail. WEEB-LUG-8.0 is not compatible with MS-LP Rail.
2. Anti-seize or Burndy PENETROX-A is not required on mounting hardware.
3. WEEB® washers are suitable for multiple use, up to 5 times.
4. The NEC section 690.43 states “Exposed non-current carrying metal parts of module frames, equipment, and conductor enclosures shall be grounded in accordance with 250.134 or 250.136(A) regardless of voltage”.

WEEB-MSNR516 LAYOUT LANDSCAPE MODULE ORIENTATION

EVEN NUMBER OF MODULES IN ROW

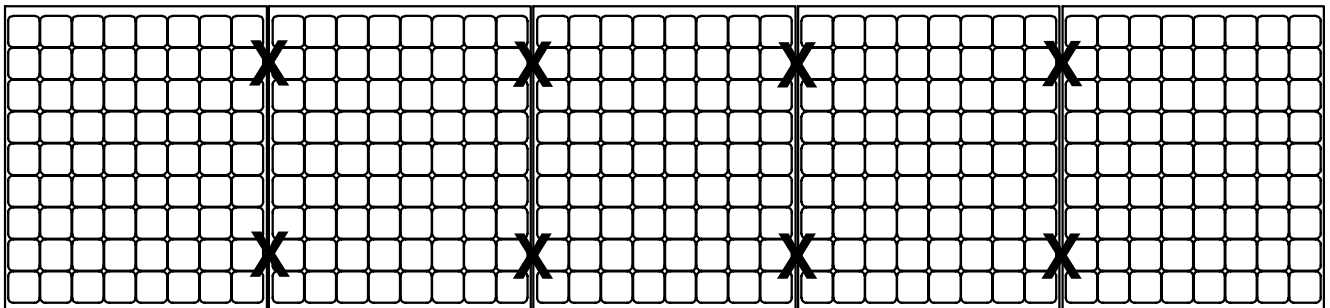


X DENOTES PLACES TO INSTALL WEEB-MSNR516

$$[\text{COLUMN} - 1] \times [\text{ROW} \times 2] = [C - 1] \times [R \times 2] = [4 - 1] \times [1 \times 2] = 6$$

WEEB-MSNR516 NEEDED = 6

ODD NUMBER OF MODULES IN ROW



X DENOTES PLACES TO INSTALL WEEB-MSNR516

$$[\text{COLUMN} - 1] \times [\text{ROW} \times 2] = [C - 1] \times [R \times 2] = [5 - 1] \times [1 \times 2] = 8$$

WEEB-MSNR516 NEEDED = 8

Note:

1. Each WEEB-MSNR516 to module frame connection can be assumed to have a resistance of 0.05 Ohms when installed as specified.
2. When replacing a single faulty module, also remove the adjacent module which contacts the same WEEB® washers as the faulty module.

Customer Service Department
7 Aviation Park Drive
Londonderry, NH 03053
1-800-346-4175
1-603-647-5299 (International)