GENMOUNTS™
PV MOUNTING SYSTEMS
An innovative way to mount solar
Designed and manufactured in the USA

# Installation Manual

Genmounts™ | Renewable Energy Holdings
26 Snydertown Road
Hopewell, NJ 08525
T: 908-788-7750 | F: 609-466-8049

Version 1.1

# TABLE OF CONTENTS

## WARNING

The Genmounts™ mounting system is engineered and tested to withstand specifications when installed properly. Failure to install properly may decrease the performance of the installation.

## SAFETY

All regional safety requirements should be followed when installing Genmounts™.
All equipment/tools should be properly maintained and inspected prior to use. This installation manual is intended for use by professional installers with a working knowledge of construction principles.

# 1.0 Introduction

The purpose of this document is to provide instructions on how to properly install Genmounts™.

# 2.0 Product Overview

Genmounts™ offers a low profile easy installation solar mounting system to be used on the ground or on flat roofs. Genmounts™ is offered in either stainless steel or aluminum.

The key components of Genmounts™ are the following:

Pan
Connection Tabs
Connection Bars
Hardware

Features of the technologically advanced Genmounts™ system are:

1. Lightweight stackable aluminum mounting pans that provide attachment of two (2) modules per pan
2. Only five (5) connections per pan
3. Completely bonded grounding at five (5) points per pan
4. Low installation labor costs

## 2.1. Technical Specs

All materials are made from non-corrosive materials, stainless steel or aluminum, with a design life of twenty-five (25) years or more.

See Wind Load in Appendix C.

# 3.0 Installer Responsibility

The installer is responsible for the following:

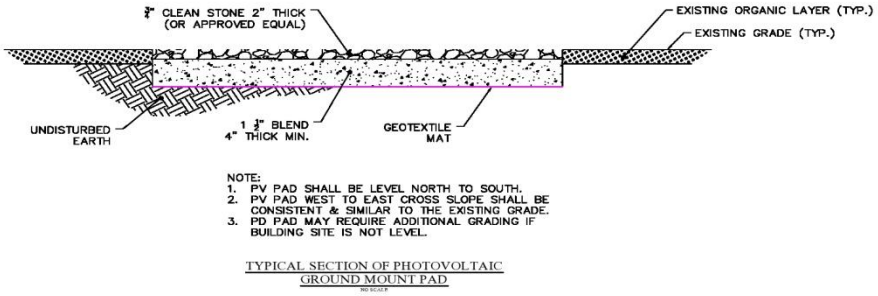
- Complying with all applicable local or national codes including any that may supersede the relevant requirements stated in this manual
- Ensuring that the Genmounts™ system components are appropriate for the particular installation and the installation environment
- Ensuring that the selected structure can support the Genmounts™ system under actual environmental loading conditions
- Using only Genmounts™ parts and installer–supplied parts as specified by Genmounts™. Substitution parts may void the warranty
- Ensuring safe installation of all electrical aspects of the Solar PV System
- Ensuring the installation shall be conducted by qualified service personnel only

## 3.1 Site Selection

Proper preparation of the ground must be ensured for a well-performing system to be installed.

General guidelines include:

Choose a clear area free of shading
Prepare a well-drained pad of no more than five (5) degree slope west to east and zero (0) degrees north to south
Suggested three (3) foot border surrounding array




TYPICAL SECTION OF PHOTOVOLTAIC GROUND MOUNT PAD

## 4.0 Materials and Tools Required

The following tools are required for the installation of the Genmounts™ system:

- Open end, 1/2" Box Wrench
- 3/8" Drive Socket Wrench and 1/2" Deep Sockets
- Suggested impact wrench, torque 20 lbs
- String line
- Concrete or stone ballast (see Appendix B, Wind Loading)

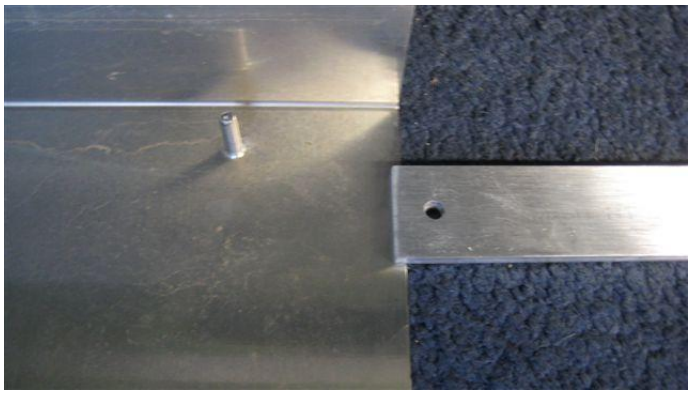
## 5.0 Component List

The Genmounts™ system contains the following parts:

Pan
Mounting Bar
Mount Tab
Alignment Jig

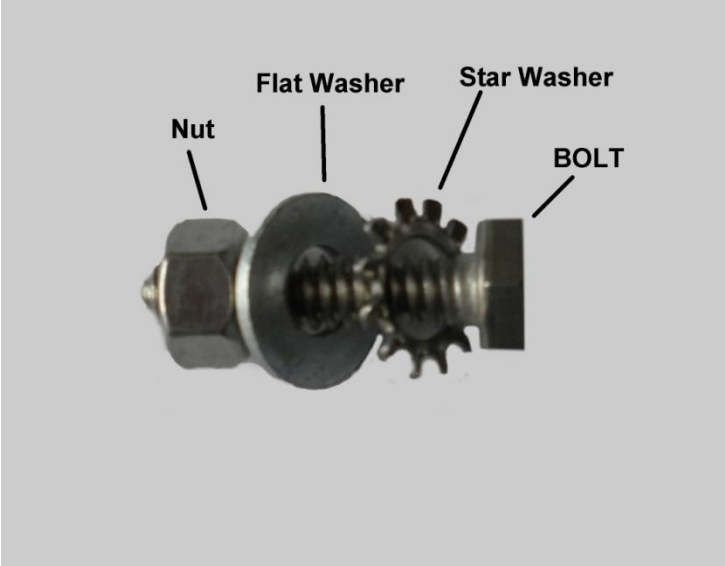
Stainless Steel Hardware includes:
Nuts
Bolts
Star Washers

Mounting Tab



Mounting Tab

Genmounts™ | Renewable Energy Holdings
26 Snydertown Road
Hopewell, NJ 08525
T: 908-788-7750 | F: 609-466-8049




Washer, nut and bolt

## 6.0 Assembly and Installation Instructions – Ground

### Step 1: Preparation for Ground Mounted System

The Genmounts™ system will typically be mounted on a flat surface or slightly graded surface facing South.

### Step 2: Placement of the Pans

Measure the footprint of the array according to the installer's design and site plan.

Confirm pad size.

Find the edges of the array according to provided design.

Drive in rebar on the corners.

Drop a string line on the southern edge.

Use the provided front pans for the front row. (Note the difference between the front row pans and the remainder of the array; the front pan edge is lower).

Place first front row pan at the edge of the array, aligning the front edge with the string line.

Measure the distance to the next pan.

Place the next pan with the front edge aligned with the string line and repeat.

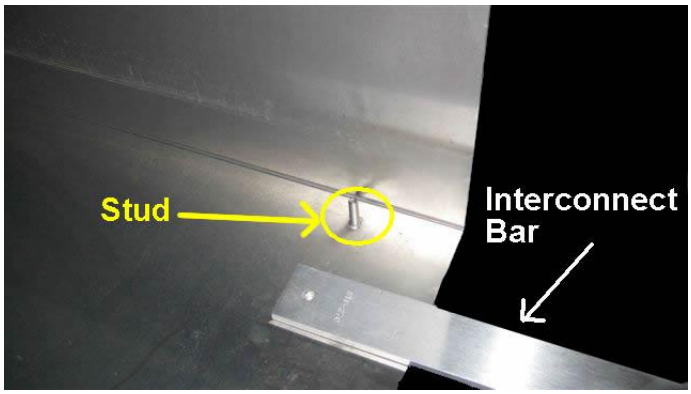
## Step 3: Installation of Interconnect Bars

Place the interconnect bars on the mounting stud located in the belly of the pan.

Ensure that the bars are level and parallel.

The order of components is as follows:

Stud (located on pan)
Star washer
Bar
Nut




Stud and interconnect bar

Assemble components and tighten by hand allowing for adjustment of pan assembly along the string line.

Once panels are located on the string line, tighten to 20 lbs of torque.

## Step 4: Install Genmounts™ Mounting Tabs

Place module glass side down on a debris free, flat surface.

Tabs are symmetrical and either side can be mounted to the module or the pan.

Locate the mounting location on the corner of the module approximately 12" from the corner.

Use the provide Alignment Jig to help find the tab mounting location if necessary.

From the bottom of the module frame (glass side down) the order of components are:

Nut
Module
Star washer
Tab
Bolt

Place the bolt up through the mounting location on the frame.

Add a star washer.

Place the tab on top of the star washer.

Tighten the nut by hand.

Adjust the tab with the Alignment Jig.

Use the provide Alignment Jig to properly align the mounting tabs.

Tighten the nut to 20lbs torque.

Repeat for all (4) four corners.

Step 5: Installation of Modules on Pans

Rotate the module, glass side up.

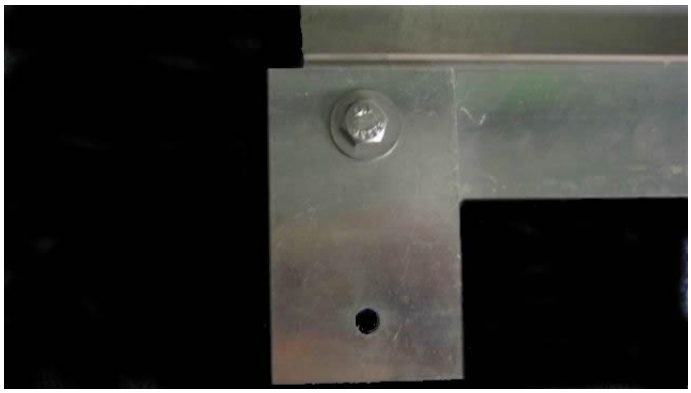
Place the module on assembled pan.

Place the bolt up through the mounting location on the frame.

Add a star washer.

Place the tab on top of the star washer.

Tighten the nut by hand.



Nut and bolt

Adjust the tab with the Alignment Jig.

Use the provide Alignment Jig to properly align the mounting tabs.

Tighten the nut to 20lbs torque.

Repeat for all (4) four corners.

Step 5: Grounding

The Modules and pans are all bonded together, left to right and front to back to form one single structure. However the entire system needs to be grounded from ANY single point to an appropriate grounding source. ***Please confirm with an electrician, as this is their responsibility***

Connect the bare ground lead to the ground lug on pan. Using the Ground Lug Detail in Appendix A.

Step 6: Ballasting

The pans should be filled with ballast of concrete pavers according to site-specific design.

Examples of a Ground Mounted Ballasted system