

**Overview** 

# **GROUND MOUNT STRUCTURES**

For Framed and Frameless Photovoltaic Modules



### **Ultimate Flexibility**

The S:FLEX ground mount system allows for easy installation of all framed and frameless photovoltaic modules. The proprietary Bearing Block allows  $\pm 45^{\circ}$  degree of tilt and  $\pm 6^{\circ}$ of side to side flexibility. The Vertical Post system allows up to 12 inches of vertical adjustability in the field with no cutting or welding. Systems are scalable and repeatable.

### **Maximum Security**

Each S:FLEX system is perfectly optimized towards the location specific wind, snow, and seismic load requirements. The designs meet or exceed IBC 2012 standards and are compliant with all current codes and standards.

## **Quick Assembly**

Numerous pre-assembled parts including the universal height-adjustable module clamps in combination with the patented click technology reduce assembly times.



### **Foundation Optimization**

Engineered flexibility greatly reduces grading requirements. Shallow embedment depths speed up the installation and can follow terrain contours. Galvanized steel posts are easy to handle and can be pile driven into difficult terrain including gravel and stone. Alternate foundation options include welded plate, concrete pour, ballast, and ground screw.

#### **Lifetime Longevity**

The aluminum and stainless steel components' natural corrosion resistance decreases maintenance and extends the lifetime of the installation. Aluminum rails are lighter and easier to handle than steel systems, therefore reducing shipping and labor costs. In addition, all components are recyclable.

#### **Project Support**

If requested, a dedicated representative will support your project from the initial estimate through the final installation. Project specific designs to optimize material use, ease of installation and logistics are essential to a successful project. Permitting packages are available.

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Example of a S:FLEX Ground Mount System with modules in landscape orientation



Example of a S:FLEX Ground Mount System with modules in portrait orientation



Standard rails and components are being designed to optimize each ground mount



Various foundation options, (from left to right): Rammed Post, Post embedded in concrete, Post with base plate, H-Post embedded in concrete and ground screw/helical pier

Application	Fixed-Tilt Ground Mount
Tilt	Up to ±45° adjustable in North-South direction
Terrain Slope	Maximum terrain slope tilt: $\pm 8^{\circ}$ East-West/ $\pm 45^{\circ}$ North-South
Vertical Adjustment	12 inches of adjustability on site with no cutting or welding
Module Clamps	Universal height-adjustable module End-Clamps and Mid- Clamps with patented click-technology offer an easy and quick installation of framed and frameless modules
Module Orientation	Portrait or Landscape
Project Design	Rail/Post spans are optimized for each local wind, snow, and seismic load requirements (Services of a structural engineer are advised.)
Design Standards	Meets or exceeds IBC 2006/2009/2012, ASCE 7-05, ASCE 7-10, Aluminum Design Manual 2005/2010, 2010 AISC code. Compliant in all North American jurisdictions.
Hardware & Tools	Standardized stainless steel bolts and nuts require only the use of a few tools
Grounding	Integrated grounding options are available
Foundation Type	Galvanized steel driven Post, Post embedded in concrete, Post with base plate, H-Post embedded in concrete, above ground ballast and ground screw/helical pier
Manufacturing	Flexible use of various extrusion and fabrication facilities in North and South America as well as Europe to meet the variable demands of the markets
Maintenance	Minimal maintenance due to aluminum rails and components which are naturally corrosion resistant. Easily accessible for grounds and system maintenance.
Warranty	10 year limited product warranty. Extended warranty upon request.
Additional Services	Project specific design and engineering services as well as installation support upon request