





## Pick your preference

Solar Developers and EPCs demand choices and continued innovation to maintain their leadership position. The Field Assembled G3-X Ground Rack joins our flagship Pre-assembled G3L and G2P series as the latest advancement in our ongoing quest to provide products which meet project-specific needs. Solar FlexRack stands alone as the only racking company able to provide you with these options.

# Easy assembly

The G3-X system is easily staged on the jobsite, can be assembled in the field by crews of nearly any skill level, and has been third-party verified for speed of installation by The Industrial Time Study Institute, Inc. Multiple pre-drilled holes, slot to slot connections, and generous construction tolerances make the G3-X an efficient and adaptable model on the jobsite.

## Seamless flexibility

The G3-X, available in both Portrait and Landscape orientations, leverages the knowledge gained in delivering nearly 1 GW of pre-assembled ground mounts into a racking system which is assembled in the field. This product is a perfect fit for projects where labor costs are low and field assembly is preferred.

# Intelligent design

The series G3-X is value-engineered by our professional team of best-in-class engineers to optimize materials and limit components to create a cost-effective solution. Our field engineering team will work with you personally to ensure that whatever system you choose will be the most cost effective solution for your project needs.

## Bankability

Solar FlexRack is a product of Northern States Metals, a full service manufacturer with over 40 years of experience. With close to 1 GW of installed capacity Solar FlexRack has the experience and sustainability to be a reliable partner for your next successful solar project. The G3-X series also comes standard with a 20 year warranty.

### + TURN-KEY SERVICES

We're here for you because we care about your projects. From engineering to installation, you can also leverage our expert turn-key services on any job from start to finish.

Contact us to see how our team of project engineers, field techs, geologists and other specialists can help make sure your next project is a success.

# Experience the Flex

CALL US TO FIND OUT HOW THIS GROUNDBREAKING
RACK CAN IMPROVE HOW YOU DO SOLAR

1.888.380.8138 | SOLARFLEXRACK.COM

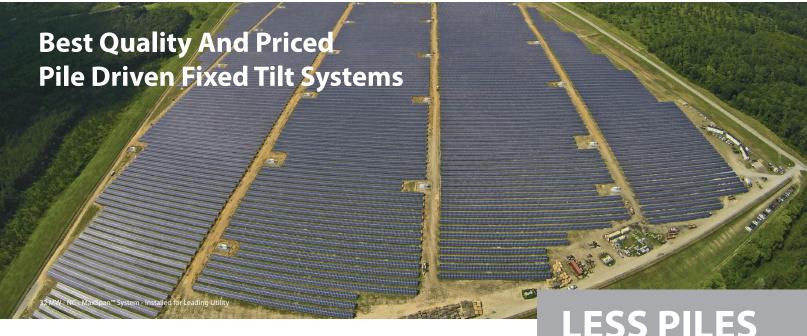




MATERIALS	
Hardware	Mounting hardware is Magni 560 coated standard. Stainless available upon request.
Racking Structure	G 90 galvanized steel standard. Higher coatings available for high corrosion areas
Foundations	Hot Dipped Galvanized
DESIGN	
Orientation	Landscape or Portrait
Tilt Angle	5° - 45° (custom tilts can be accommodated)
Adjustability	20% E/W Landscape, 20% E/W Portrait
Wind Speed	Any
Snow Load	Any
Module Accommodation	Any 60 or 72 cell framed module along with any frameless module
Module Mounting Type	Direct bolt to vertical rails (bonded connection)
Foundation Accommodation	W-Section, SmartPost, Round Post, Helical Pier, Ballast
Warranty	20 Years
CERTIFICATIONS AND TESTING	
UL Compliance	UL 2703 (Issue 2) compliant.
Wind Tunnel Testing	CPP third party testing laboratory
Structural Connection Testing	Accutek Testing Laboratory
Code Compliance	Racks are designed using local environmental loads (wind, snow, and seismic) per the governing and/or local building codes
Finite Element Modeling	Risa 3D
Engineering	PE stamped drawings and calculations
SERVICES	
Geotechnical Engineering	Field investigation and engineering, laboratory testing, engineering analysis, push/pull tests, foundation design
Structural/Civil Engineering	Preliminary investigation, engineering, layout
Installation	Foundation, racking, module, and module pre-wiring



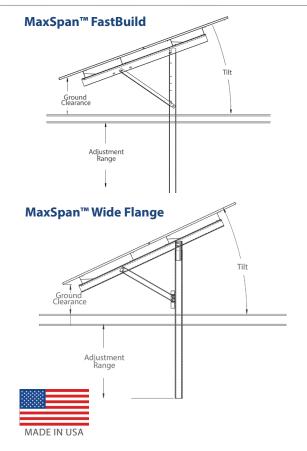
**Technical Data Sheet** 



# **FAST INSTALL & HANDLES SLOPING GROUND**

Industry's longest spans and fewest foundations: as few as 190 per MW Articulating purlin connections to navigate up to 15% terrain slopes

UP TO 15%
TERRAIN SLOPES



Supports all poly, glass and thin film modules

Rugged design enables 150mph [67.06 m/s] wind and 90 psf [4.31 kPa] snow loads

Turnkey install, pull test and geotech services available

Galvanized Z purlins have integrated trays for easy wire management

5° to 35° tilt with multiple inter-row spacing options















## Technical Data Sheet



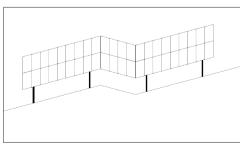
MaxSpan™ FastBuild's rugged beam and brace rapidly attach to pile with just six bolts and nuts
- fewest parts in the industry



Telescoping post bracket with up to 5" [12.7cm] vertical adjustment for fast top of pile leveling



Patent pending articulating purlin connection to navigate sloping terrain



Articulating purlin connections to navigate up to 15% terrain slopes

### **Features**

#### MaxSpan™ FastBuild

StickyPile™: G235 galvanized steel (HDG available), purlins, beams & braces: G90 galvanized steel

20 men install 1.55MW per week using bolts

Three axes of adjustability demanded by installers for navigating real world site conditions where significant adjustability in the field is required

The unmatched span capability of MaxSpan™ means there are fewer foundations than competing systems, which means less piles and less pile installation cost. As few as 190 piles per MW

Standard system has 3.5" [8.89cm] vertical adjustability

Optional post extenders allow 10" [25.4cm] vertical adjustability

#### MaxSpan™ Wide Flange

Industry's most flexible racking system handles undulating ground conditions

Telescoping post bracket with over 5" [12.7cm] vertical adjustment for fast top of pile leveling Multiple options with Wide Flange

## **Test & Certification**

- Meet IBC and ASCE standards for structural loading
- ETL / UL 467 GameChange top mount clamps or star washers included
- · ETL / UL 2703 tested
- · Wind tunnel tested by industry leader CPP
- · Independent assessment by Black & Veatch
- · Warranty 20 years Made in USA

#### **Calculations**

- 100% code compliant designs for any locality
- · Structural PE drawings & calculations for foundation & racking structure
- Available 2 up in portrait and 4 up in landscape poly as well as multiple glass on glass module configurations incl. First Solar Series 4 & 6™
- · Design loads according to IBC 2006 or 2009

## Pull Test, Geotech & Installation Services

- · Free pull test on orders over 5 MW
- · Vertical and lateral capacity of the post is determined by pull test
- Test data is then analyzed by our in-house engineering team in parallel with geotechnical report to give the most efficient embedment depths, spans and post type
- · Turnkey installation of piles, racks and modules available

#### Material

- Post: G235 galvanized steel (HDG ASTM123 option also available)
- $\cdot\,\,$  Galvanized Purlins, NS Beam, Brace: G90 galvanized steel
- · Star washer or ETL / UL top mount teethed module clamp: stainless steel
- Associated hardware: Magnacoat 3/8", 1/2" and 3/4" x 1" hex or serrated flange hex bolts, 3/8", 1/2" and 3/4" serrated flange nuts HDG or magnacoat, 3/4" washers; stainless steel 1/4" 20" serrated flange nuts, 1/4" 20" x 3/4" hex bolts; or if mounting modules using stainless steel module mounting clamps: 1/4" 20" x 2 1/2" hex bolts, or 1 1/2" 2 1/2"T-bolts, stainless steel 1/4" 20" serrated flange nuts