

Interview of GameChange Racking CEO for Ballasted Roof System

By Michael Puttré

Field Feedback

Andrew Worden, founder and CEO of New York City-based GameChange Racking, says that while codes and standards have driven many aspects of racking and mounting development, the majority of the company's engineering efforts are efficiency-driven, so there can be quicker installs.

"Our background building solar power plants before we got into the racking business helped us understand how important it is to not just be able to put in the racks quickly, but to do the wiring before you put the panels on," Worden says.

With reference to the GC Ballasted Roof System, Worden says the engineering efforts result from first-hand knowledge of how difficult racking and mounting assembly can be if material and product cost is the primary consideration. However, experience demonstrates that the complexity of the assembly process and how time- and labor-consuming it is has redirected the focus on eliminating steps and parts in order to make assembly more efficient.

"One of the things about these disconnected systems is that they are simple," Worden says. "There are just a few parts. There's a pan to put the ballast in, and it also holds up the panels and a wind deflector. We figured out a way to make a wind deflector that, first of all, works great so you need less ballast, and second, it functions as a jig."

For example, for a standard panel that is 77 inches long, GameChange makes the wind deflector a little longer so it provides spacing in the east-west axis for a south-facing array. Installers would otherwise need a jig for that purpose. The assembly also has features and guides for prewiring the array and then placing the panels with a single tool.

"We didn't have these features in the beginning," Worden says. "You have to think it through from the installer's perspective."

Link to the article:

http://www.solarindustrymag.com/issues/SI1504/FEAT_01_Mounting-And-Racking-Designs-Make-Life-Easier-Up-On-The-Roof.html

Marketplace: Rooftop Mounting & Racking

Mounting And Racking Designs Make Life Easier Up On The Roof

Suppliers of solar's supporting infrastructure work to turn installer experience into better engineered parts, tools and assemblies.

By Michael Puttré

The effort to reduce the cost of racking and mounting infrastructure has been a focus for a decade. It's not just about the panels themselves. While engineering and research and development have played their part, the same is true of the tools and manufacturing.

All the same time, manufacturers of the supporting infrastructure have been engaged in ongoing effort to design and develop products that make life easier for installers. This is not just about the racking and mounting systems for the solar panels, it's also about the tools and equipment that make the job easier. One of the most significant examples of this is the "game changer" of the product line, the result of an ongoing process of engineering and research and development.

As the solar sector looks beyond the PV panel for opportunities to reduce the cost of racking and mounting systems, manufacturers are stepping up to deliver from time to time. In particular, developments in racking and mounting systems have gone to great lengths to reduce the price of the solar and the time and complexity of installed PV systems.

Adam Fabel, co-founder and

founder of U.S. and German racking and mounting related assets, says that the U.S. and German markets are "very different" and that the U.S. market is "more conservative" than the German market.

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According to Fabel, co-founding members have also been driven by the installation portion of the process. "Racking companies are working not only to lower the price of their products but to reduce labor needs for customers by making installation easier," he says.

Fabel says in December 2013, only by the Solar Mounting Institute and



An array installer at a multi-building project for the U.S. Army at Fort Belvoir that used GC's Rapid Mounting System. Photo courtesy of GameChange Racking.

Word says, "If you want to add to GameChange, you want to make the racking the GameChange system to buy."

The "game changer" of the product line, the result of an ongoing process of engineering and research and development. As the solar sector looks beyond the PV panel for opportunities to reduce the cost of racking and mounting systems, manufacturers are stepping up to deliver from time to time. In particular, developments in racking and mounting systems have gone to great lengths to reduce the price of the solar and the time and complexity of installed PV systems.

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"The Solar Strike Tray is a hand-carried system for racking the carrier DC cabling from solar panels to their terminations. Such mounting rigs enable a variety of mounting options, and multiple trays can be distributed with a single connector at each rig."

"The challenges of racking, racking and mounting systems and their mechanical behavior in future. Since we have systems and part geometries that are not the best of the PV project is perhaps the most labor-intensive. Therefore, the engineering required to make more efficient assemblies comes from understanding how installers work and turning that process knowledge into parts."

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GC's Mounting Tray is used to set the system for correct mechanical loading and panel installation. It also features integrated grounding. Photo courtesy of GameChange Racking.

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