



Better Solar Racking By Design

The real problem with other solar racking systems is they don't address what could happen to a building's roof after the solar array is installed. Voiding the warranty, leaking, and issues with structural integrity have all been potential deterrents to installing solar.

Silverback Solar created an entirely new approach to mounting PV and Solar Thermal. The better design incorporates stronger, lighter-weight materials, and is capable of spanning longer distances with fewer penetrations. So what happens to the roof is never a concern.

You can place a Silverback Solar racking system over most existing rooftop equipment. The patented watertight connections give the added assurance that the roof penetrations will never have a leak. Ever. So you can feel confident a Silverback Solar racking system is the right choice for your commercial building.

Every Silverback Solar racking system is engineered for your installation

Silverback designs a mounting solution specifically for your installation. All the framing tubes are cut to length for the project conditions, the fittings come pre-assembled and the parts arrive on-site in neatly packaged boxes. This makes it the easiest system to install, saving time and money. Those are the two best words Silverback has for value.

**Silverback is Addressing the
Barriers for Adoption of Solar
with Practical Solutions for All:
Installers, Roofers and
Building Owners.**



Taking Apart the Technology

How the Silverback Solar patent-pending system works

The key to a successful rack installation is to preserve the integrity of the roofing system, while gaining the advantages of having the system elevated off the roof. Silverback Solar has done just that.

Roof Attachment Systems

The Silverback Solar roof attachment system, consisting of the base supports, flashings, gaskets, and base cap assemblies, creates structural mounting points that are completely watertight.

The system is compatible with any type of roof structure. Wood, steel, concrete or any other construction is no problem for the universal mounting supports. In most cases, the base supports can be installed directly into the structural members from above without going inside the building, saving time and money.

Base Supports

The base supports are the main anchor to the roof structure. The holes in the bottom plate (on the inside) provide a means of attaching to the structural members in the roof framing.

Flashings

The flashings are the weather barrier that keeps the roof penetrations watertight. They fit perfectly over the 6"x6" base supports and extend onto the roof 4" for proper roofing.

The flashing heights are adjustable to easily account for the thickness of rooftop insulation.

Base Cap Assembly

The Base Caps keep the tops of the assemblies watertight. They cap the Flashing Boots and Base Supports overlapping them by 2.4", while compressing the Rubber Gaskets and creating the seal.

tubing and Connectors

The tubular design and telescoping fittings allow for unlimited adjustment during installation. Simply slide the fittings on the tubes to level and plumb the rack, then lock them together with self-drilling Tek screws.



Full Engineering Included. That's Real Value.

Our shop drawing packets include complete frame layout and detail sheets.



Specifications

Base Supports

1/8" and 1/4" thick steel

5", 9" and 12" tall

Powder coat primer finish

Flashings

Stainless steel

Stainless with lead flange

TPO and PVC single ply

Adjustable heights

Fittings & Connectors

1/8" steel

Zinc plating

Powder coat finish

Hardware

All screws, nuts, bolts, washers are stainless steel

Tubing

1.5" and 2.5" diameter

16 and 11 gauge thicknesses

Gatorshield® triple coat galvanizing by Allied Tube & Conduit



Engineering? Done.

Good news. Silverback does all the engineering so you don't have to.

Project Specific

You will be pleased when you see what the Silverback design team produces for your project. Each job is carefully reviewed to help you determine the best way to get it done. The strength of the frames and flexibility of the design provide many options to help you overcome rooftop challenges other PV racking and ballasted systems just can't handle.

Complete Packet

Project specific structural calculations, wet stamped by a licensed structural engineer, are part of the comprehensive solution provided by Silverback. To assist with the installation, blue print sized shop drawings and detail sheets are included.

All the engineering and design work can be completed in one to two weeks! Go to silverbacksolar.com and enter the specifics for your upcoming solar installation.



The steel Gatorshield® tubing is 3 times as strong as aluminum, and has 4 times the corrosion resistance of standard galvanized pipe.

Why Silverback Longer and Stronger is the Future of PV and Solar Thermal Racking

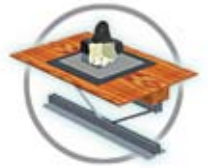
Reducing installation times means lower costs and opens up the possibility for more solar roofs

There are billions of square feet of un-shaded rooftops available for PV and Solar Thermal installations. The problem is that many of them have pipes, ducts, air conditioners, fans and other equipment which prevent ballasted and other racking systems from being installed. Silverback solves that problem. The strong steel frames mount quickly to watertight roof connections and can span over all the rooftop clutter. The result is lower cost, fewer structural penetrations, higher PV density per square foot, and a system that ultimately protects the roof.

Adjustable Module Clips back up any solar panel

What kind of solar modules are you thinking about? SunPower, Kyocera, BP, Sharp, Evergreen, Yingli, Suntechnics and many other brands are all perfectly suited to be mounted with a Silverback patent pending Solar Module Clip. The clip is adjustable for panels ranging from 1.21" to 2.02" thick. The stainless steel clip is easy to install using self-drilling Tek Screws.

Typical Types of Attachments



Plywood Deck



Metal Deck



Module Clip



Silverback Solar – The Right Rack for Even the Toughest Wind Loads



Concrete Over
Metal Deck



Steel Joist



Structural
Concrete

Wherever the rooftop is located, difficult weather presents no surprises for a Silverback rack. They are ideal for buildings located in areas with heavy wind and snowloads. By simply changing the distance between the frames, the system can be adapted for any challenging weather conditions.

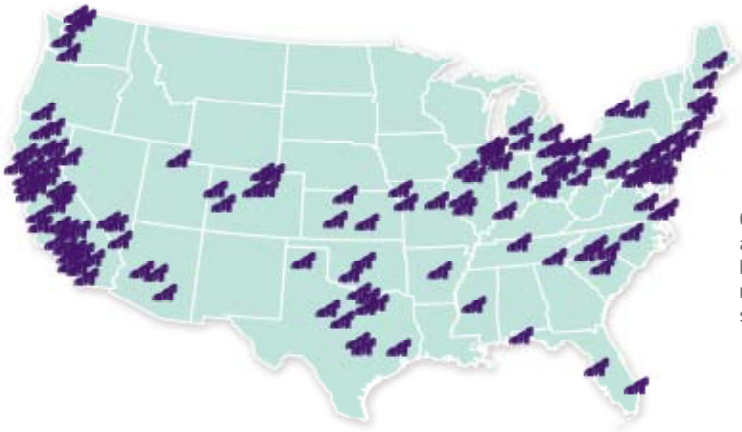
Silverback isn't just the smart choice – in many cases it is the only solution

There isn't any kind of rooftop or weather that Silverback Solar can't engineer around. The stronger materials make it easy to engineer a layout avoiding rooftop obstructions. Conduits, skylights and HVAC units are no longer a barrier to making the most of your roof's square footage.

If you have a roof you want to put PV or Solar Thermal on, the smartest choice for racking is Silverback Solar.



Completed
Assembly



Over 21,000 of our roof attachment systems have been installed nationwide, without a single leak.

The Legacy of Silverback Solar: RoofScreen Mfg., Inc.

Silverback was developed by RoofScreen Mfg., Inc., a recognized leader in the design and distribution of rooftop framing systems for concealing unsightly ductwork, vents, air conditioners and other equipment from view on commercial rooftops. The RoofScreen pre-manufactured system includes structurally engineered frames and components in hundreds of different configurations and facing styles, and utilizes the same proven, patented, leak-proof and worry free attachments as the Silverback system.

Visit their website at www.roofscreen.com to learn more.

For information on using this stronger, leak-proof PV Mounting system for commercial applications (with the fewest roof penetrations), or to get an estimate for your upcoming project, please give us a call or visit our website.

Silverback Solar

347 Coral St.
Santa Cruz, CA 95060
877-765-2759

www.silverbacksolar.com

**THE BIGGER IDEA
IN SOLAR RACKING**



**Silverback
SOLAR**

Engineered Solar Racking Systems