



INFINITY RACK

Power • Beauty • Comfort

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Introduction

Discover the journey and innovations behind Infinity Rack. We'll take you through:

- ❖ **Who We Are:** Meet the team driving our vision.
- ❖ **Origins of Infinity Rack:** Learn how we began.
- ❖ **Design Evolution:** See how our concepts have evolved.
- ❖ **Infinity Rack Structures:** Explore our core offerings.
- ❖ **Sun Lounge, Carports, Cantilever, Super Span and More:** Dive into our diverse products. Discover our solutions for commercial needs.
- ❖ **Limitless Customization Options:** Understand our flexible design capabilities.
- ❖ **Configurator:** See our tools and advanced design features in action.
- ❖ **Components:** Get to know the parts that make up our structures, from horizontal supports to frame beams and brackets.

We're excited to share our story and showcase how our innovative solutions can meet your needs.



What Drives Us

Vision

To develop cutting-edge solutions that seamlessly blend **power**, **beauty**, and **comfort**, creating functional and sustainable environments.

Mission

At Infinity Rack, we innovate with durable, easy-to-install, and aesthetically stunning designs that seamlessly integrate into any space, delivering exceptional value and clean electricity production. Our solutions transform environments into beautiful, functional spaces, starting with pergolas, pavilions, carports, and charging stations, and expanding to fully modular building solutions.



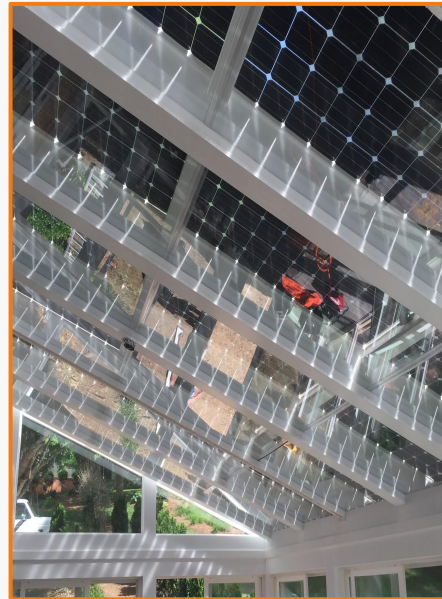
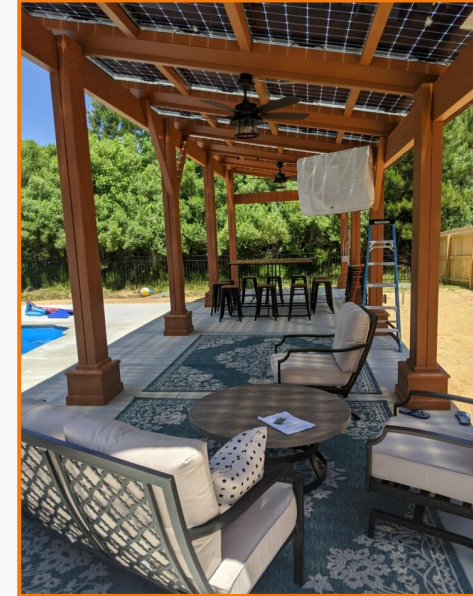
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Origins of Infinity Rack

Design Evolution: From Concept to Second Iteration

- ❖ Evolved Through 12 Years of Innovation: Infinity Rack has developed custom, watertight solar canopies, focusing on ease of installation and practical benefits for installers.
- ❖ Installer-Centric Design: Created by installers for installers, our structures evolved to feature a sleek, mechanically watertight design that appeals to both customers and end-users.



Design Evolution: Refining Our Concept

After over a decade of experimentation, Infinity Rack now produces highly modular and visually appealing canopies and carports.

The Infinity Rack Advantage

- ❖ **Mechanically Watertight:** Horizontal support clamps modules together on EPDM gasket
- ❖ **Hidden Wiring:** Fully Encapsulated dual wiring chaseways for AC & DC wiring
- ❖ **Integrated Design:** Post bases designed to accept conduit or plumbing to bring electric, water and gas directly into the frame on our Aluminum Structures. Access points for pulling wire internally into steel frame, Cantilever Steel Structures
- ❖ **Extreme Durability:** Designed for extreme weather and snow loads
- ❖ **Modular Design for Panels:** By fully supporting modules on all four sides large format bifacial solar panels can be used in high wind and snow load regions
- ❖ **Limitless Customizations**



Infinity Rack Structures

Our Products: Your Customizable Solutions

- ❖ SunLounge
- ❖ Aluminum Carport
- ❖ Cantilever Carport
- ❖ Dual Cantilever Carport
- ❖ Super Span



SunLounge

Our Aluminum Pergolas Enhance Outdoor Spaces



Aluminum Carport

Watertight electric car charging station or covered parking to power homes or businesses.



Cantilever Carport

Watertight electric car charging station or covered parking for commercial projects covering single row parking



Dual Cantilever Carport

Watertight electric car charging station or covered parking for commercial projects covering double row parking



Super Span Structures

Watertight canopies for large spaces, with a maximum depth of just under 70ft, ideal for parking garages, entrance ways, and fleet charging stations.



Limitless Customizations

❖ **All Canopies:**

- Integrated dotless LED light strips fit perfectly into the T-Bolt slots of the Frame Beam and Sun Beam to bring accent lighting.
- Application of 2604 powder coating results in long lasting, UV resistant, highly durable, glossy finish available in white, black, and beige.
- Accessory options are available through the use of M10 T-bolts including mounts for TVs and fans and columns wrapped with Trex or other outdoor building products.

❖ **Aluminum Carports:** Modular components allow for unlimited custom configurations. 7 Pre-engineered configurations. Multiple height options up to 14 ft minimum clearance. Semi-Cantilever options available with roof beams cantilevered up to 6 ft.

❖ **Cantilever Carports:** Single & Dual Cantilever Options, 3 to 11 modules deep in landscape. Multiple height options up to 16 ft minimum clearance for RVs, Trucks and Buses. Custom Color Options and framing layouts.

❖ **Super Span Structures:** Custom Build Options. Stackable and can be interconnected via gutter and ridge caps for an unlimited size watertight solar canopy. Multiple height options up to 32 ft minimum clearance for large covered drive through entrances. Custom Color Options and framing layouts.



Configurator: Overview

- ❖ Infinity Rack is developing a cutting edge 3D configurator for all of our product lines using Solidworks and Driveworks.
- ❖ By designing the configurator the way it is being done it will become an extremely powerful tool that will become the backbone of our business and it will do it in several ways.
- ❖ End user sales tool allows for quick design of their structure with a 3D visual, base MSRP installed cost estimate, and quickly connects them with installers in their area.
- ❖ Contractor tool to connect with end users looking for our products, quickly produce images and proposals, create perfectly accurate BOMs, provide installer component pricing, plansets, engineering calculations and stamped plans for permitting.
- ❖ Manufacturing tool to provide fabrication drawings and 3D tooling data for CNC machining and robotic welding
- ❖ Tool for architects and engineers to pull engineering data and BIM files for advanced architectural building design and renderings.



Configurator SunLounge

01. **02. Dimensions** **03.** **04.** **05.** **06.**

SOLAR PANEL

Custom Panel

Panel Length: 2277.11 mm
Panel Width: 1134.11 mm
Panel Thickness: 38.1 mm
Wattage: 440 W
Custom Solar Panel Wattage: 10

STRUCTURE

Use Desired

of Panels: 5
Desired Structure Depth: 19 feet 2 inches
of Panels Width: 3
Desired Structure Width: 22 feet 0 inches
Header Spacing Feet: 22
Roof Width = 23.46' Roof Depth = 18.83'

Structure Front Height: 10 feet 0 inches
Structure Back Height: 8 feet 0 inches

CANTILEVER

Custom Cantilever

Front Cantilevered Depth: 0 feet 0 inches
Back Cantilevered Depth: 0 feet 6 inches

3D Model Dimensions:
136
16
8.12
10.13
Back Cantilevered Depth = 6"

Refresh



Configurator - Aluminum Carport

01. Dimensions

02.

03. SOLAR PANEL

04. Custom Panel

05. Panel Length: 2277.11 mm, Panel Width: 1134.11 mm

06. Panel Thickness: 38.1 mm, Wattage: 440, Custom Solar Panel Wattage: 10

STRUCTURE

Use Desired

of Panels: 5, Desired Structure Depth: 19 feet 2 inches

of Panels Width: 3, Desired Structure Width: 22 feet 0 inches

Header Spacing Feet: 22

Roof Width = 23.46', Roof Depth = 18.83'

Structure Front Height: 12 feet 0 inches

Structure Back Height: 10 feet 0 inches

CANTILEVER

Custom Cantilever

Front Cantilevered Depth: 0 feet 0 inches

Back Cantilevered Depth: 0 feet 6 inches

The image shows a 3D wireframe rendering of an aluminum carport structure. The structure consists of four vertical posts supporting a roof with a gabled front edge. The roof is covered with solar panels. Dimensions are labeled on the structure: 18.73 for the front roof slope, 16 for the main roof depth, 10 for the front post height, and 13.36 for the back post height. A cantilevered section at the back is labeled 10.34. The configuration panel on the left lists various settings for the solar panels and structure, including dimensions, wattage, and cantilever options. A 'View Modal' button is at the bottom of the panel. The rendering interface includes a 'Refresh' button and several view icons at the top right.



Configurator - Cantilever Carport

DIMENSIONS

Solar Panel

Custom Panel

PANEL LENGTH: 2384
PANEL WIDTH: 1303

PANEL THICKNESS: 33

WATTAGE: 440

Structure

Use Desired

OF PANELS DEPTH: 7
DESIRED STRUCTURE DEPTH: 19

OF PANELS WIDTH: 29
DESIRED STRUCTURE WIDTH: 22

ROOF WIDTH: 232.76
ROOF DEPTH: 30.28

Header Spacing Feet: 18.667

Roof Angle: 5

STRUCTURE FRONT HEIGHT: 14

Cantilever

Custom Cantilever

BACK CANTILEVERED DEPTH: 33 feet, 5 #Chss



Configurator - Dual Cantilever

The image displays a web-based configurator for a solar panel structure. On the left is a dark blue sidebar with white text and input fields. The main area on the right shows a 3D perspective view of a solar panel array mounted on a dual cantilever structure. The structure consists of two rows of vertical posts supporting a grid of solar panels. The panels are tilted at an angle. The interface includes a 'Refresh' button in the top right corner of the main area.

DIMENSIONS

01
02 **Solar Panel**
03 Custom Panel
04
05
06

PANEL LENGTH: 2364
PANEL WIDTH: 1303

PANEL THICKNESS: 33
Custom Side Panel Storage: 700

WATTAGE: 440

Structure

Use Desired

OF PANELS DEPTH: 10 OR DESIRED STRUCTURE DEPTH: 19
OF PANELS WIDTH: 31 OR DESIRED STRUCTURE WIDTH: 22
ROOF WIDTH = 248.78' ROOF DEPTH = 432'
Header Spacing Feet: 18.667
Roof Angle: 5
STRUCTURE FRONT HEIGHT: 14

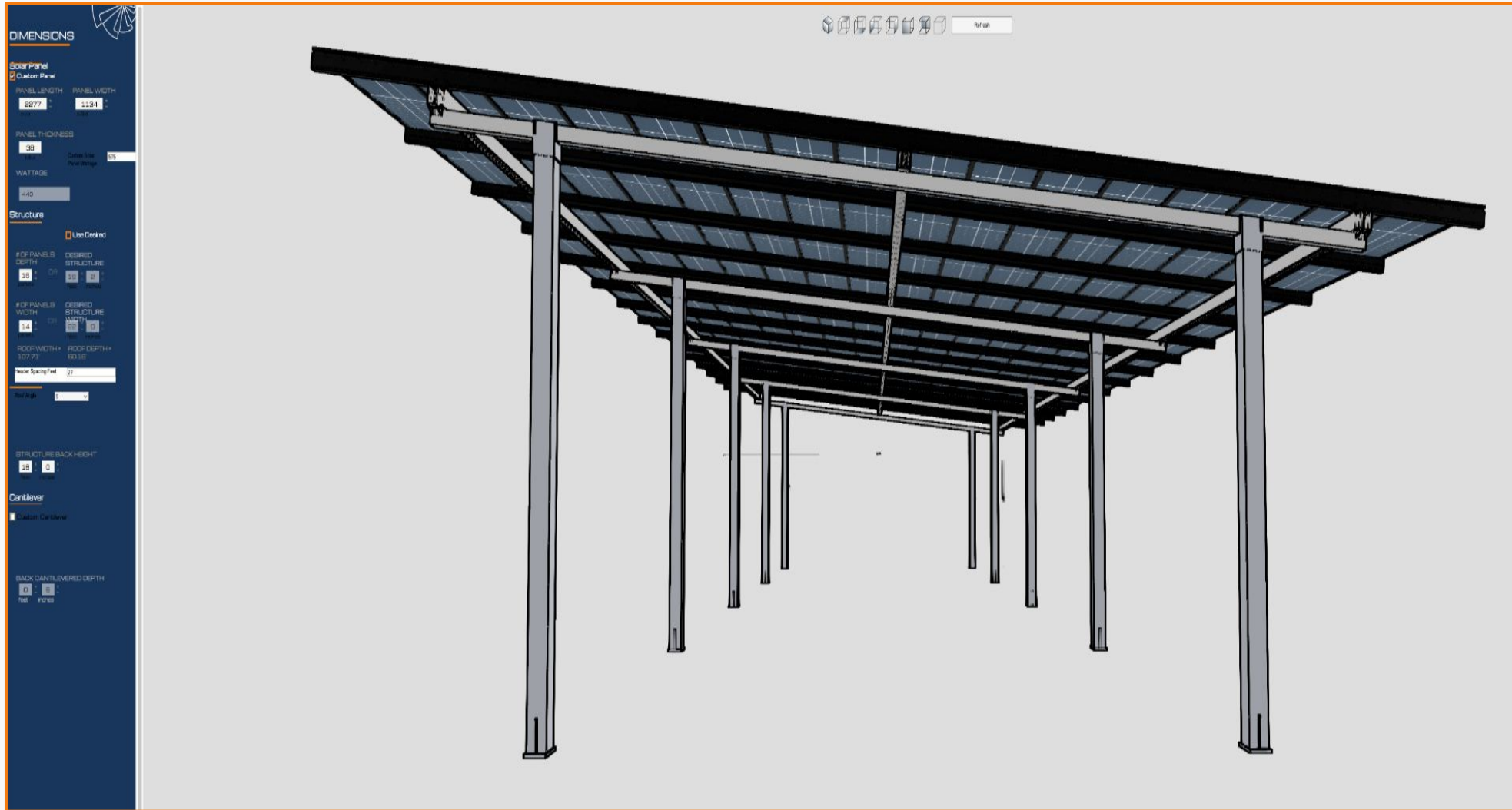
Cantilever

Custom Cantilever

BACK CANTILEVERED DEPTH: 0
Feet Inches

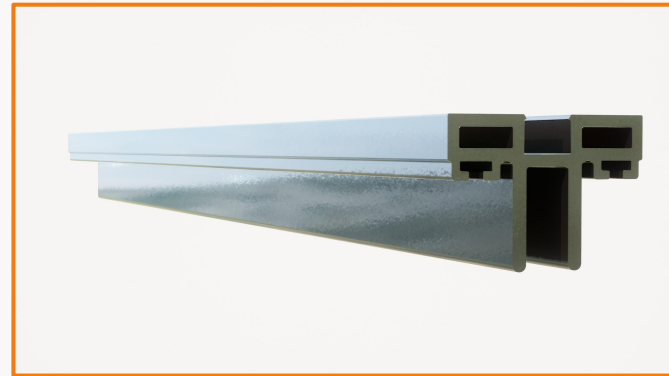
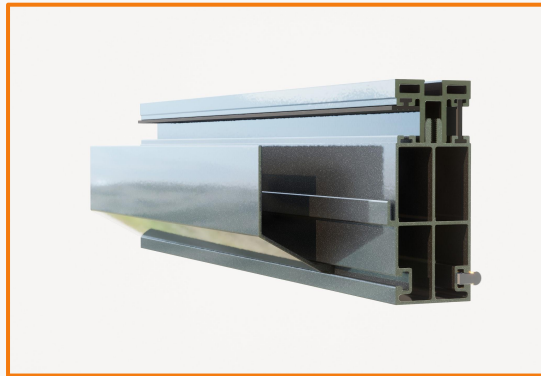
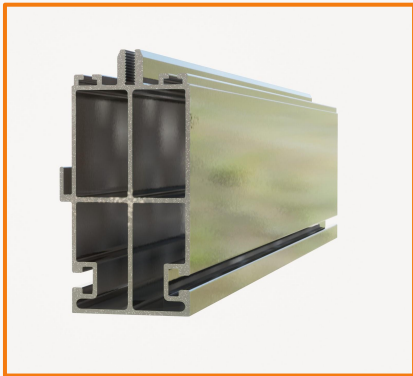


Configurator - Super Span



Roofbeam, Top Cap, Wire Trough, Gaskets

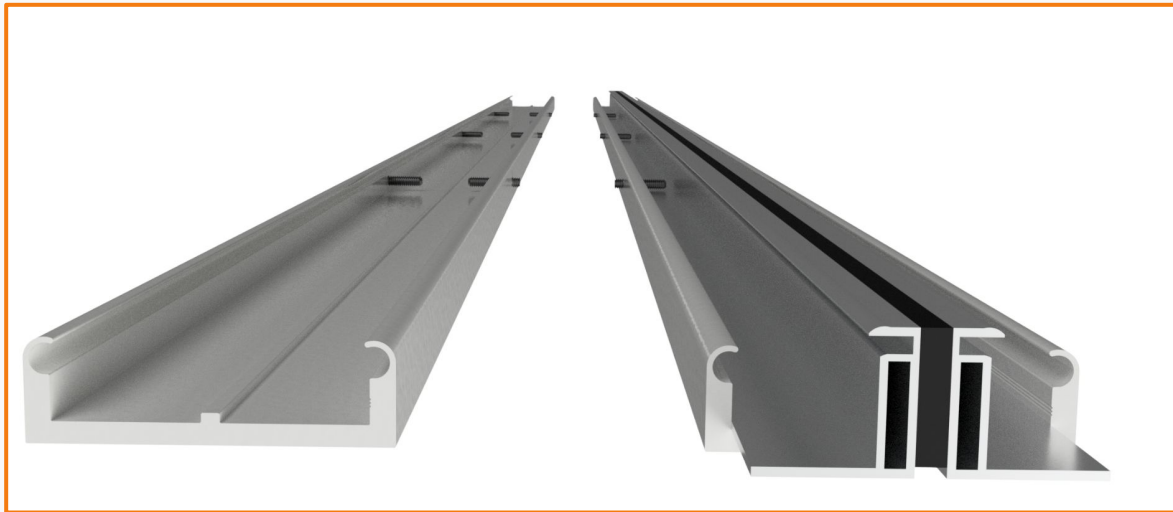
- ❖ **RoofBeam:** Our structural beam creates the rafter that holds solar modules when combined with the top cap and wire trough. Bonding jumpers bond the modules to the framing system using the bonding rail. Optimizers can be mounted to the bonding rail using the same brackets used for module frame mounting. Wire management clips can be clipped onto the bonding rail to keep wires hidden and organized. Our structural beam can span over 14 feet, needing only two points of attachment.
- ❖ **Top Cap:** EPDM gaskets slide into slots on the top cap to make a watertight seal against the solar modules. The Top Cap is then secured to the threaded channel in the SunBeam using 5/16 stainless hex bolts creating a very strong connection that secures modules in high winds.
- ❖ **Wire Trough:** Slides into the SunBeam to completely conceal wiring and optimizers leaving you with a clean look from below.
- ❖ **Gaskets:** Our H Gasket slides into the slots in the top cap and our adhesive ¼” gasket is adhered to the long edge of the modules and is pinched between the modules.



Horizontal Supports

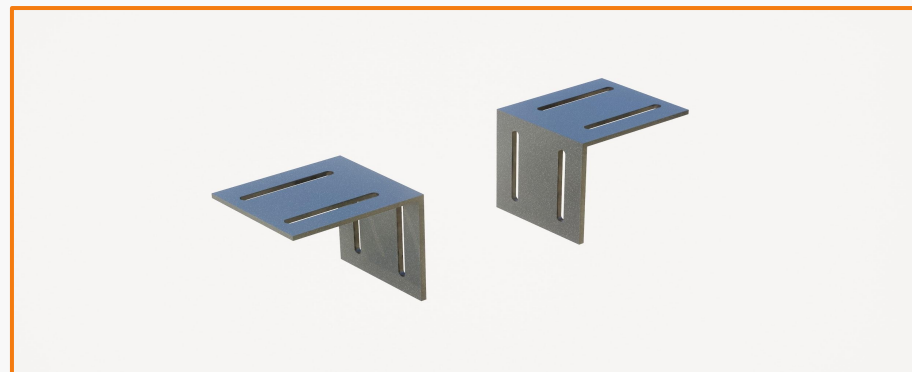
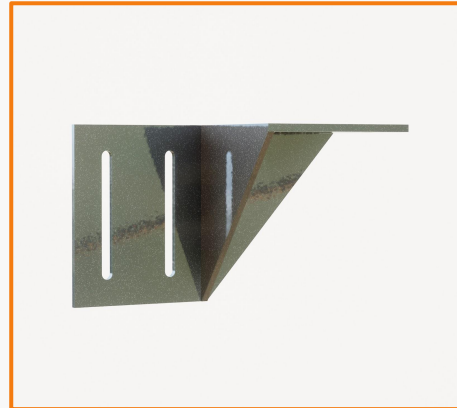
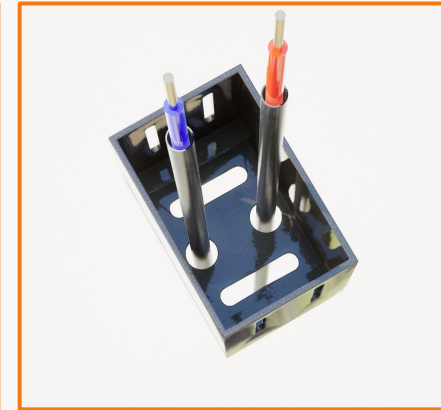
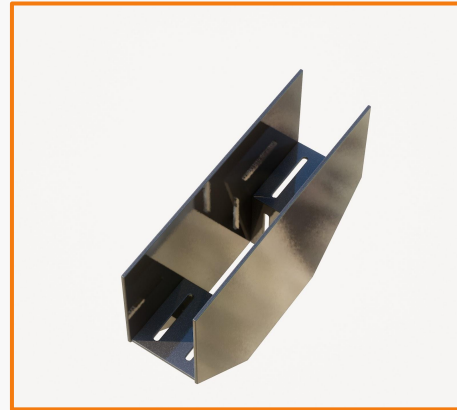
Our horizontal supports clamp the modules together on the horizontal gasket forming a heavy duty long lasting water tight seal that:

- ❖ Cover the module frames and match the structure color scheme.
- ❖ Provides wire management with our patent pending proprietary PV wire snap in slots.
- ❖ Provides structural support for the larger solar modules to increase wind and snow load capabilities. This component also means that the Infinity Rack system both supports and clamps the the module on all four sides.



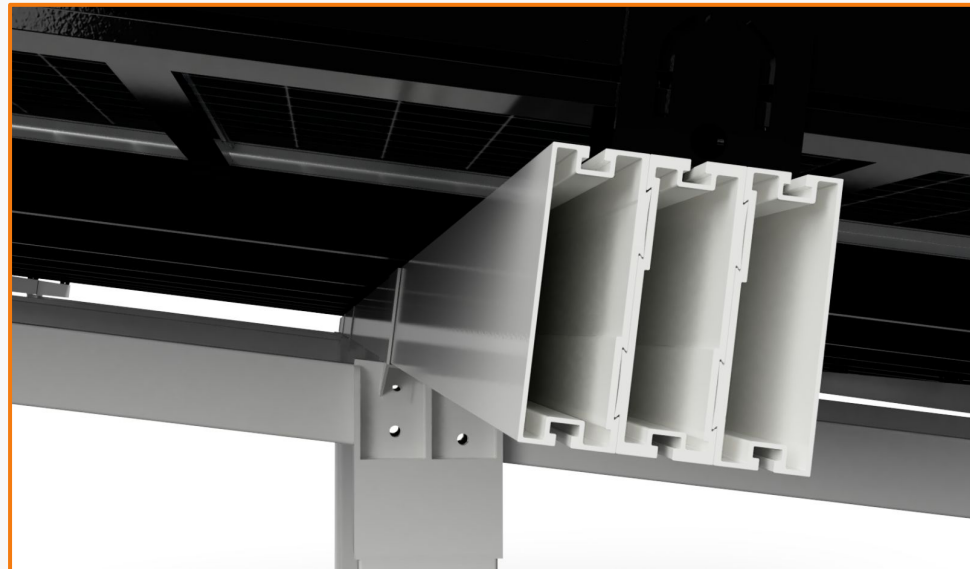
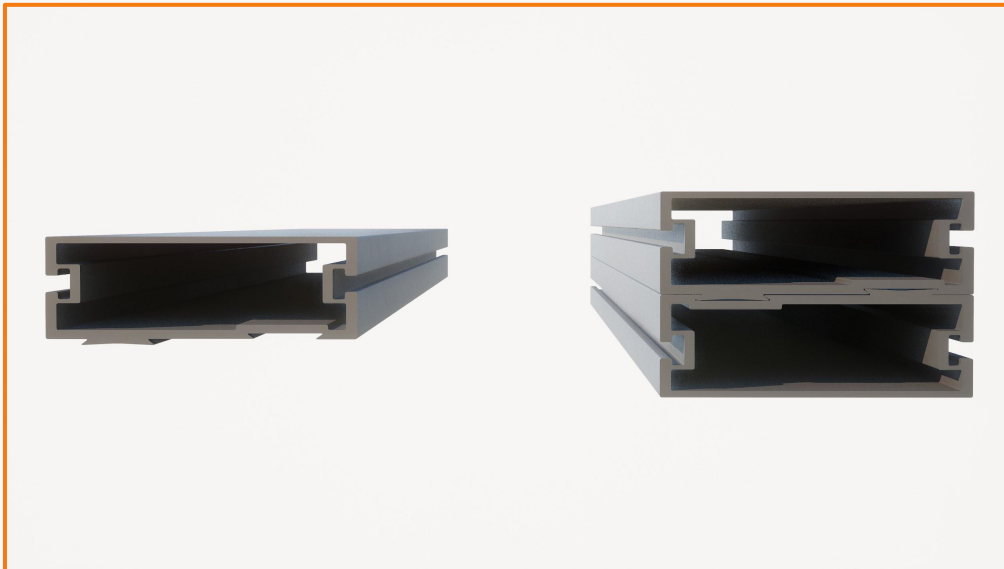
Brackets

- ❖ **Frame T:** Used to mount the Frame Beam columns to the Frame Beam headers where the two meet. We have 2 versions, one for areas without an NS brace, and one with a cutout to make room for the NS brace.
- ❖ **Post Base:** Our unique post bases are open to bring 2 x 1" conduits into the bottom of the Frame Beam columns to bring DC wiring from the array to the inverter. This brings AC power to the SunLounge for lighting, fans, and outlets. The 3/4" bolt slots allow for adjustability to ensure that the columns line up and are level.
- ❖ **NS Brace:** North/South Frame Beam braces that lock the structure and withstand strong the winds.
- ❖ **U Bracket:** The connection between the SunBeam and the Frame Beam with a built in opening large enough to slide 3/4" conduit into if needed or to pass wiring under the SunBeams along the top of the Frame Beam header.
- ❖ **L Brackets:** Used to mount the Frame Beam corner columns to the Frame Beam header.



Frame Beam

- ❖ **Frame Beams:** A two part structural beam system that has two large chaseway. One for AC wiring and the other for your DC home runs. All of your wiring can be concealed within the headers and posts assembled using these Frame Beams resulting in no exposed conduit. Our 8"x 5 ¼" assembled beam can span up 18 feet while supporting our SunBeams which means fewer columns to give you more open space.
- ❖ **T-bolt Slots:** M10 T-bolts can be used to mount a variety of accessories, from TV mounts, to fans, to wrapping the columns with Trex or any other type of outdoor building product to customize the look and feel of your outdoor living space.

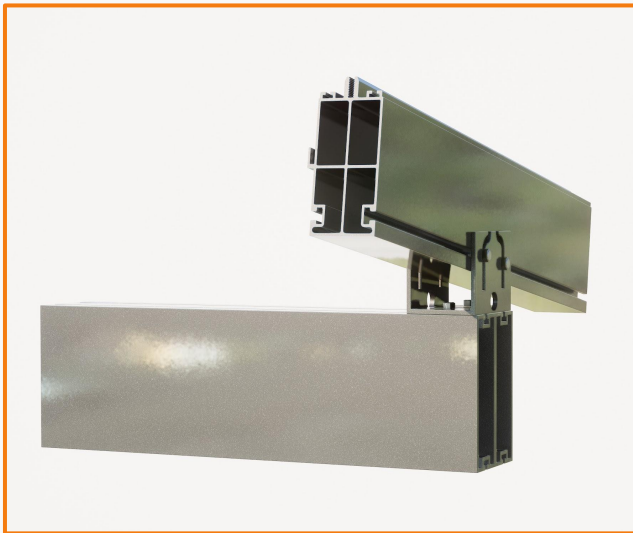
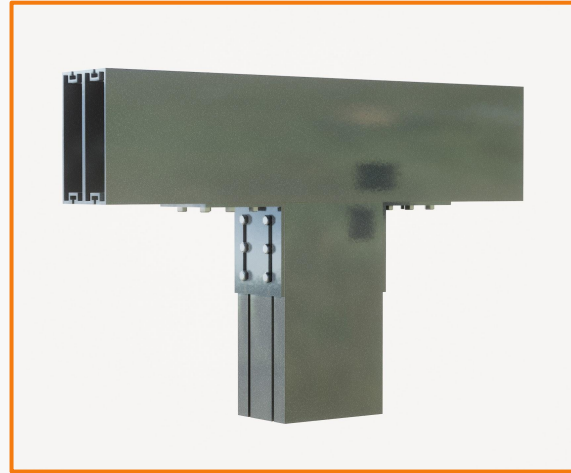


Assembled Brackets

Connections are all made with M10 T Bolts, an industry standard for solar racking connections.

Slotted brackets and T-slots in the beam give adjustability and ease of installation.

Standardized components and beam lengths allow for a modular design.



Cantilever Framing

- ❖ Column and T Top designed as wire chaseway to conceal wiring
- ❖ T Top has welded tube that slides into column locking it in to place upon placement making for a safe and easy installation
- ❖ Ability to use a set bolt to apply pressure to the down tube to adjust T-Tops to make sure they line up perfectly level down the row
- ❖ Using slotted horizontal framing makes it very forgiving for slight variations during installation



Questions?

Thank You!

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