SUNMODO®

Catalog

Mounts

Racking

Rail

Clamps

L-Feet

Systems

Pub. C10001-V016

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On behalf of our organization, thank you for considering SunModo for your racking needs.

At SunModo, we are dedicated to supporting the professional installer with robust and worry-free products, great technical support, and a complete line of innovative racking and mounting solutions.

We look forward to working with you!

SunModo Team

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Disclaimer

Due to continuous product optimization we reserve the right to change our products and this product catalog as well as individual product information at any time without prior notice. All previous product catalogs and individual product information become invalid upon the release of later publications.

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SUNMOD

EZ Roof Mounts

Standoff

Metal Roofs

Roof Attachment — Composite Shingle
EZ Roof Mount™ Kit w/ L-Foot

Save time, hassle, and callbacks by using EZ Roof Mount™ for any composite shingle roof.

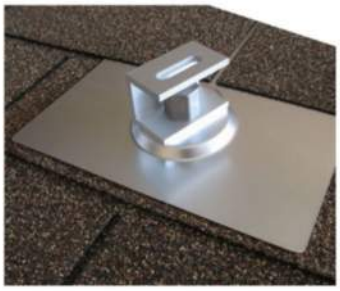
Specially designed with sealing point protected from elements, the kit (both lag bolt and decking screw version) is IAMPO certified for waterproofing and structural integrity.

The kit includes one flashing (10.00 x 12.48 x 0.04 inches) , one versatile aluminum base designed for multiple configurations, one EZ L-Foot and all hardware. U.S. Patent Number 8,122,648

Versatile aluminum base for multiple configurations.

Flashing designed to redirect water flow.

Available in black.



C Bracket

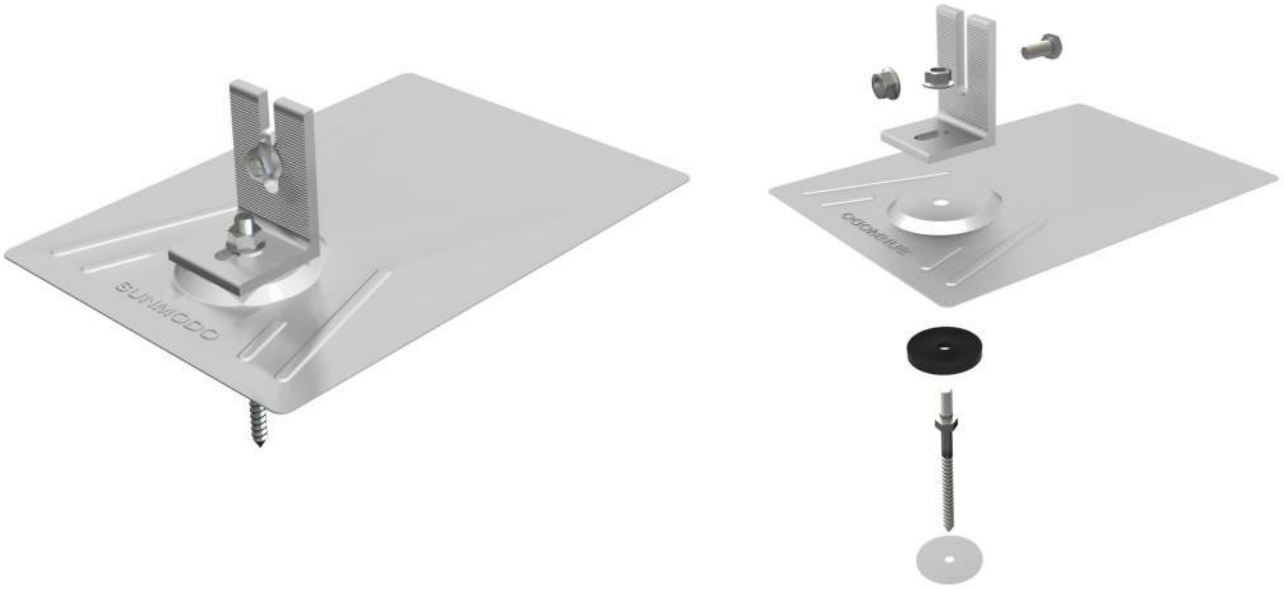
Part Number	Description
K10068-001	EZ Roof Mount Kit w/ L-Foot, Clear, Rafter
K10068-BK1	EZ Roof Mount Kit w/ L-Foot, Black, Rafter
K10068-020	EZ Roof Mount Kit w/ L-Foot, Clear, Decking
K10068-B20	EZ Roof Mount Kit w/ L-Foot, Black, Decking
K10068-002	EZ Roof Mount Kit w/ Tall L-Foot, Clear
K10068-BK2	EZ Roof Mount Kit w/ Tall L-Foot, Black
K10068-003	EZ Roof Mount Kit w/ L-Foot, 18” Flashing, Clear
K12005-001	EZ Roof Mount Kit w/ 2” C Bracket

Roof Attachment — Composite Shingle
EZR Roof Mount™ Kit w/ Open L-Foot

SunModo's best-selling EZ Roof Mount is the industry standard for PV system mounting on any composite shingle roof .

Now, SunModo introduces a smaller footprint EZR Roof Mount™ Kit where truss anchoring can be assured, embossed design minimizes bending, and only one tool is needed.

The kit includes one EZR flashing (8.00 x 11.38 x 0.03 inches) , one threaded hanger bolt for multi-use attachment, one open L-Foot and all hardware.



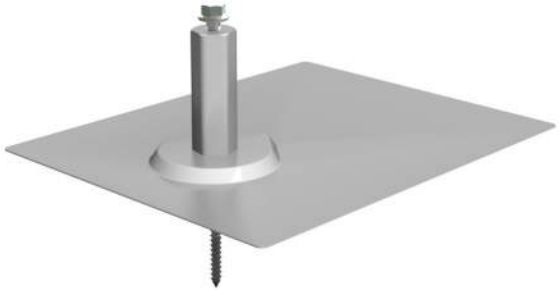
Part Number	Description
K10269-001	EZR Roof Mount Kit w/ open L-Foot, Clear
k10269-BK1	EZR Roof Mount Kit w/ open L-Foot, Black

Roof Attachment — Composite Shingle
EZ Roof Mount Kit w/ Standoff

Save time, hassle, and callbacks by using EZ Roof Mounts for any composite shingle roof.

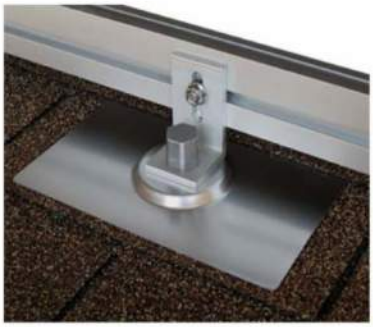
Specially designed with sealing point protected from elements, the kit provides exceptional resistance to corrosion and wear.

This kit includes one flashing, one versatile aluminum base designed for multiple configurations, one standoff of your chosen size (2", 3", 5" or 7") and all hardware. 18" size flashing also available. U.S. Patent Number 8,122,648



Perfect for top mounting rail.

Add a L Foot for side mounting rails.



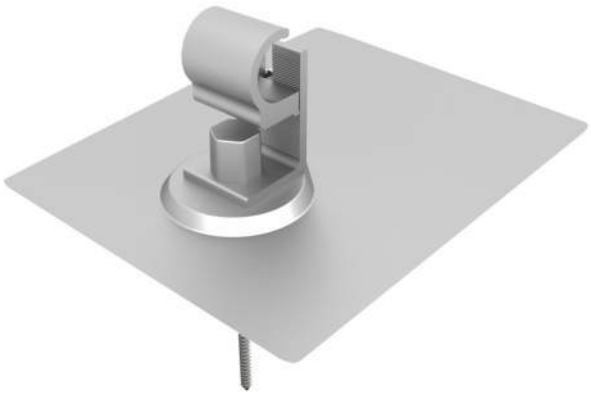
L Foot version available.

Part Number	Description
K10070-002	EZ Roof Mount Kit w/ 2" Standoff, Clear
K10070-BK2	EZ Roof Mount Kit w/ 2" Standoff, Black
K10070-005	EZ Roof Mount Kit w/ 5" Standoff, Clear
K10070-BK5	EZ Roof Mount Kit w/ 5" Standoff, Black
K10070-007	EZ Roof Mount Kit w/ 7" Standoff, Clear

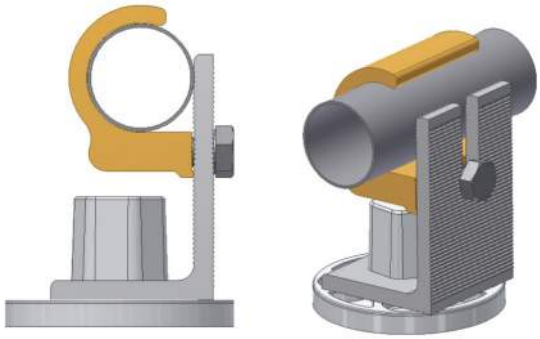
Roof Attachment — Composite Shingle
EZ Roof Mount Kit w/ Conduit Clamp

The EZ Roof Mount Kit w/ Conduit Clamp provides a quick and easy way to manage 3/4” and 1” diameter conduit on composition shingle roof tops.

This kit includes one flashing, one versa-tile aluminum base designed for multi-ple configurations, one open slot L-Foot, one conduit clamp of your chosen size and all hardware.



A20212-001



Conduit Clamp assembly

Part Number	Description
K10205-001	EZ Roof Conduit Mount Kit, 1" Conduit, Clear
A20212-001	1" Conduit Clamp
K10205-002	EZ Roof Conduit Mount Kit, 3/4" Conduit, Clear
A20213-001	3/4" Conduit Clamp

Roof Attachment — Metal
EZ Metal Roof Mount Kit w/ L-Foot

With few components and single penetration, the EZ Metal Roof Mount Kit with L-Foot allows for fast installation. Secures tightly into wood beams. Please talk to a sales rep for the right application.

The kit includes one EZ Metal Roof Shoe with a thick EPDM gasket for a water tight seal, one Hex Cap, one EZ L-Foot and all hardware.

U.S. Patent Number 8,136,311

Single penetration mount

Thick EPDM gasket for superior water tight seal.

L-Foot can swivel in any direction.

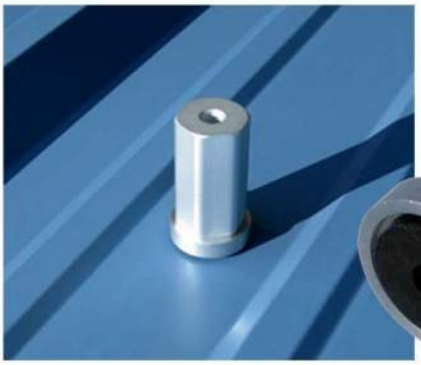
Part Number	Description
K10082-001	EZ Metal Roof Mount Kit w/ L-Foot, Clear
K10082-BK1	EZ Metal Roof Mount Kit w/ L-Foot, Black
K10082-002	EZ Metal Roof Mount Kit w/ Tall L-Foot, Clear
K10082-BK2	EZ Metal Roof Mount Kit w/ Tall L-Foot, Black

Roof Attachment — Metal
EZ Metal Roof Mount Kit w/ Standoff

With few components and single penetration, the EZ Metal Roof Mount Kit with Standoff allows for fast installation. Secures tightly into wood beams. Please talk to a sales rep for the right application.

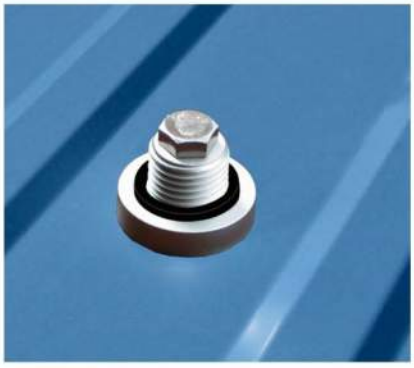
The kit includes one EZ Metal Roof Shoe with a thick EPDM gasket for a water tight seal, one standoff (available in 2, 3, 5, and 7") and all hardware.

U.S. Patent Number 8,136,311



Thick EPDM gasket for superior water tight seal.

Solid aluminum standoff that comes in different lengths.



Single penetration mount

Part Number	Description
K10064-002	EZ Metal Roof Mount Kit w/ 2” Standoff, Clear
K10064-BK2	EZ Metal Roof Mount Kit w/ 2” Standoff , Black
K10064-005	EZ Metal Roof Mount Kit w/ 5” Standoff, Clear
K10064-BK5	EZ Metal Roof Mount Kit w/ 5” Standoff, Black
K10064-007	EZ Metal Roof Mount Kit w/ 7” Standoff, Clear

Roof Attachment — Metal
EZ Metal Roof Mount Kit w/ Two-Screw

With few components and dual penetration, the EZ Metal Roof Mount Kit with Two-Screw allows for fast and secure installation into metal purlins. Please talk to sales rep for the right application.

We offer two choices of EZ Metal Roof Mount Kit with Two-Screw. The kit includes two EZ Metal Roof Shoes with thick EPDM gaskets for a water tight seal, two Hex Caps, one Two-Hole L-Foot/T-Foot and all hardware. ITW Teks Select screws (ITW PN 1126000) are used in the kit. We also offer a L Metal Roof Mount Kit (gasket included) if your prefer a low cost solution.

K10154-001

K10142-001

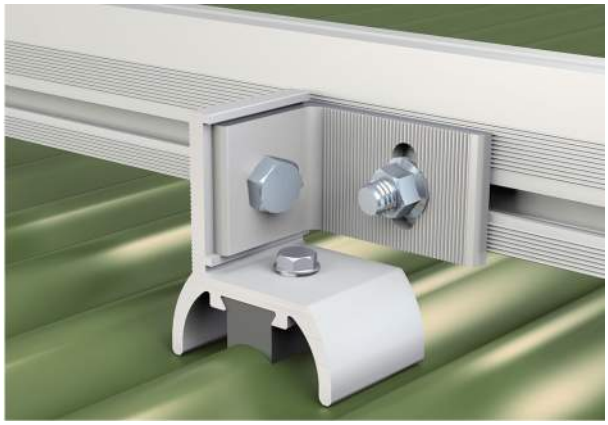
K10004-002

Part Number	Description
K10142-001	EZ Metal Roof Mount Kit w/Two-Screw, L-Foot
K10154-001	EZ Metal Roof Mount Kit w/Two-Screw, T-Foot
K10004-002	L Metal Roof Mount Kit w/ Gasket

Roof Attachment — Metal
RidgeBridge™ Mount Kit

Designed for maximum flexibility, the RidgeBridge™ Mount can be attached to most traditional or trapezoidal corrugated roof profiles. The kit can be combined with L-Adaptor to change the orientation of rail at right angles to corrugations

The RidgeBridge Mounts are compatible with corrugation pitch heights ranging from 3/4" to 1-1/2".



Part Number	Description
K10211-002	3/4 Pitch Height Ridge Bridge Mount Kit (no lag bolt)
K10212-002	1 Pitch Height Ridge Bridge Mount Kit (no lag bolt)
K10213-002	1-1/2Pitch Height Ridge Bridge Mount Kit (no lag bolt)
K10066-016	L-Adaptor Kit
A50011-001	Tool, RidgeBridge Mount Selection

Roof Attachment — Metal
EZ Corrugated Metal Mount Kit

The EZ Corrugated Roof Bracket is compatible with most common metal roofing materials and is mounted directly into the supporting structure of the roof.

The kit includes one EZ Corrugated Metal Mount with EPDM rubber gaskets and rail mounting nuts & bolts. Roof mounting bolts NOT supplied.

U.S. Patent Number 8,424,821

K12003-001

K12002-001

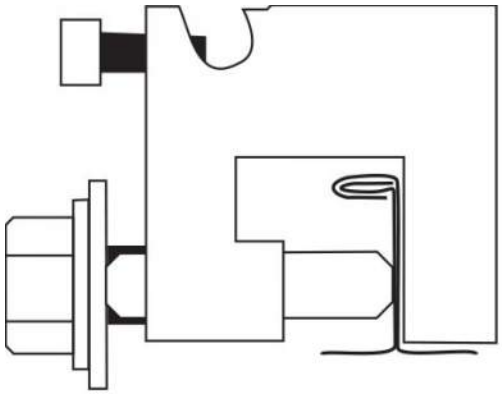
Part Number	Description
K12002-001	2-Screw Corrugated Roof Mount
K12003-001	4-Screw Corrugated Roof Mount

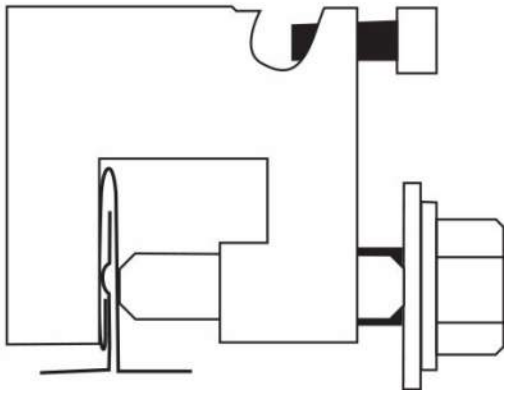
Roof Attachment — Standing Seam
Ace Clamp A2 Kit

The A-2™ AceClamp® is stronger than most single set-screw clamps. And won't scratch the roof panel when installed.

The A-2™ AceClamp® is designed with a grounding cable groove in the body of the clamp specifically for use with racking systems. A stainless steel sleeve and set screw hold the grounding wire in place.

No worries about torque back-out . The A-2™ AceClamp® Push-Pin and washer design locks into the clamp to prevent loosening when subjected to seismic or wind flutter vibration loads.





A2 Roof Profiles

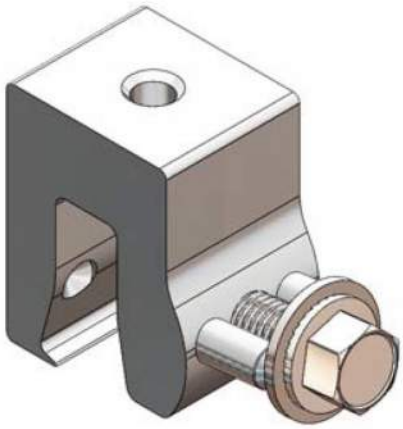
Part Number	Description
K12013-001	Standing Seam Ace Clamp A2 Kit

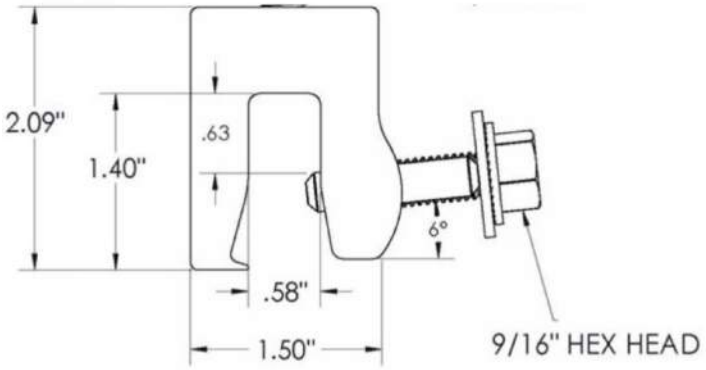
Roof Attachment — Standing Seam
Ace Clamp A2N Nail Down Kit

AceClamp® A2® N™ is designed just for nail down SSMR roofs, so you can be sure seams stay in place and nails stay under cover.

The clamp fits both the 1” and 1.5” nail down SSMR panels as well as several other Snap-Lock profiles. The A2® N roof clamp has a larger throat opening with a wider angle which makes the roof clamp more versatile than competing solutions.

The clamp’s patented “Sliding Pin” locking design and “Zero Penetration” process will not ruin the panel’s SSMR coating due to the fact that it does not use rotating setscrews against the standing seam roof.





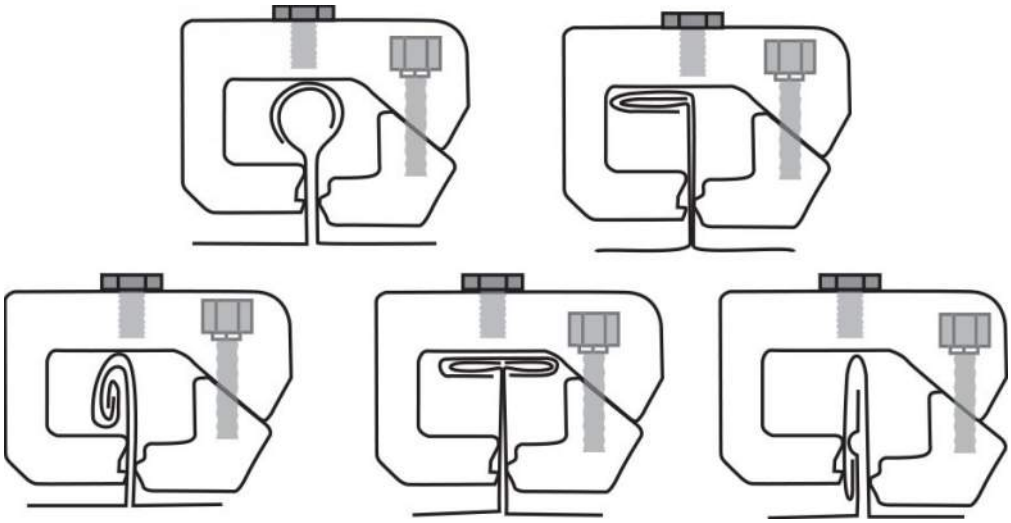
Part Number	Description
K50013-001	Standing Seam Ace Clamp A2N Nail Down Kit

Roof Attachment — Standing Seam
Ace Clamp ML Kit

The AceClamp® family of roof mounting innovations gives you stronger, more flexible mounting options for standing seam metal roofs - without damaging roof surfaces and risking roof warranties.

The AceClamp® ML was designed with the contractor in mind. Safety while on the job is the number one priority. All of the attachments are on top of the AceClamp® ML, not hidden on either side where it is hard to reach.

The patented two-piece design opens wide to fit all styles of commercial seamed panels.



ML Roof Profiles

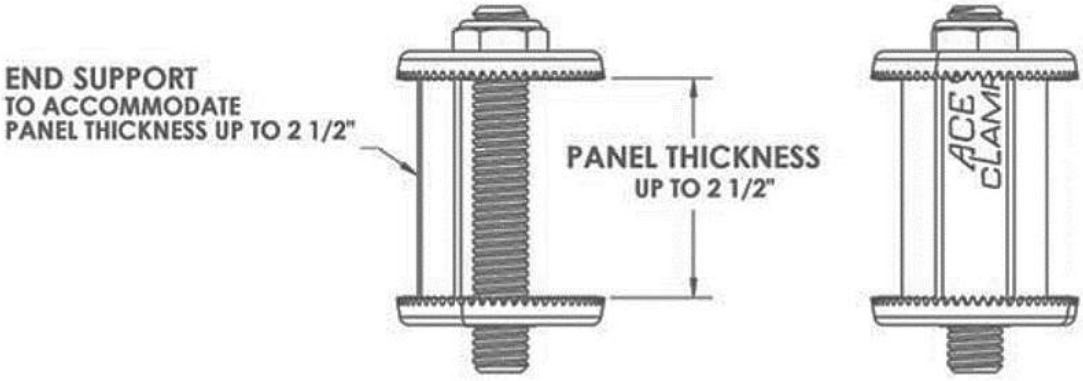
Part Number	Description
K12012-001	Standing Seam Ace Clamp ML Kit

Roof Attachment — Standing Seam
Ace Clamp Solar Kit

The AceClamp® family of roof mounting innovations gives you stronger, more flexible mounting options for standing seam metal roofs - without damaging roof surfaces and risking roof warranties.

The AceClamp® Solar Kit is fully assembled and ready to be installed. The patented designs allows installation at any point on the seam. The stainless steel serrated top and bottom flanges captures the PV panel and “bond” the panels frame-to-frame.

In addition, the solar kit can be adjusted even after accessories have been installed.



Part Number	Description
K50018-001	Standing Seam Ace Clamp Solar Kit
A50023-141	End Support, 1.41” (38.8 mm) Tall
A50023-155	End Support, 1.55” (39.7 mm) Tall
A50023-175	End Support, 1.75” (44.5 mm) Tall
A50023-200	End Support, 2.00” (50.8 mm) Tall
A50023-215	End Support, 2.15” (54.6 mm) Tall

Roof Attachment — Tile
EZ Tile Hook

The EZ Tile Hooks offer a strong, low-profile roof attachment solution for plain, flat or Spanish tile that eliminates the need for cutting and drilling of tile.

We offer 4 choices of tile hooks for vertical rail mounting and 4 choices of tile hooks for flat mounting for strut type rails. The hooks provide a nominal 110 pound load and uplift capability when mounted into roof trusses with two 1/4 x 3-1/2 inch long Roofing Screw (included).

Another feature of the tile hook is the tile hook base, which includes a gasket underneath.

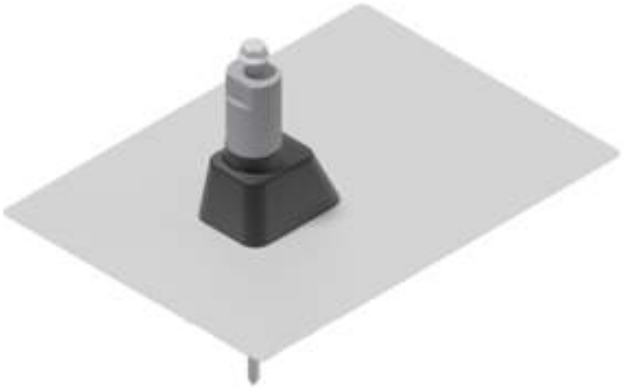
Part Number	Description
K10167-001	Strap Tile Hook Kit, Horizontal
K10168-001	Strap Tile Hook Kit, Vertical
K10169-001	Multi-Screw Tile Hook Kit, Horizontal
K10170-001	Multi-Screw Tile Hook Kit, Vertical
K10171-001	Spanish Tile Multi-Screw Hook Kit, Horizontal
K10172-001	Spanish Tile Multi-Screw Hook Kit, Vertical
K10173-001	Flat Tile Multi-Screw Hook Kit, Horizontal
K10174-001	Flat Tile Multi-Screw Hook Kit, Vertical

Roof Attachment — Tile
TopTile™ Mount

TopTile™ Mount is the world's first PV mounting system that is mounted entirely above the tiles. The mounting system spares an installer the need to deconstruct the tile roof. The system also allows installation on the ridges of curved tiles for superior water leak protection.

The TopTile™ Mount System features three mounting options that secure panels 4-7 inches above the tile surface, using stanchions with water-proof sealing washers and moldable flashing. Installers can choose either patented deck mounting system when anchoring into deck or a rafter mounting system. The system can also be mounted to a flat concrete surface with a customer supplied expansion anchor.

The TopTile Mounts can be attached to any concrete, clay, stone, fiberglass, rubber, or stone tile roofs per International Code Council (ICC) building codes.



K10206-005/007

K10207-105/107

Part Number	Description
K10206-005	5” Rafter TopTile Mount Kit
K10206-007	7” Rafter TopTile Mount Kit
K10207-105	5" Wood Deck TopTile Mount Kit
K10207-107	7" Wood Deck TopTile Mount Kit
K10290-005	5” Concrete Deck TopTile Mount Kit
K10290-007	5” Concrete Deck TopTile Mount Kit
A20230-001	1” Aluminum Spacer

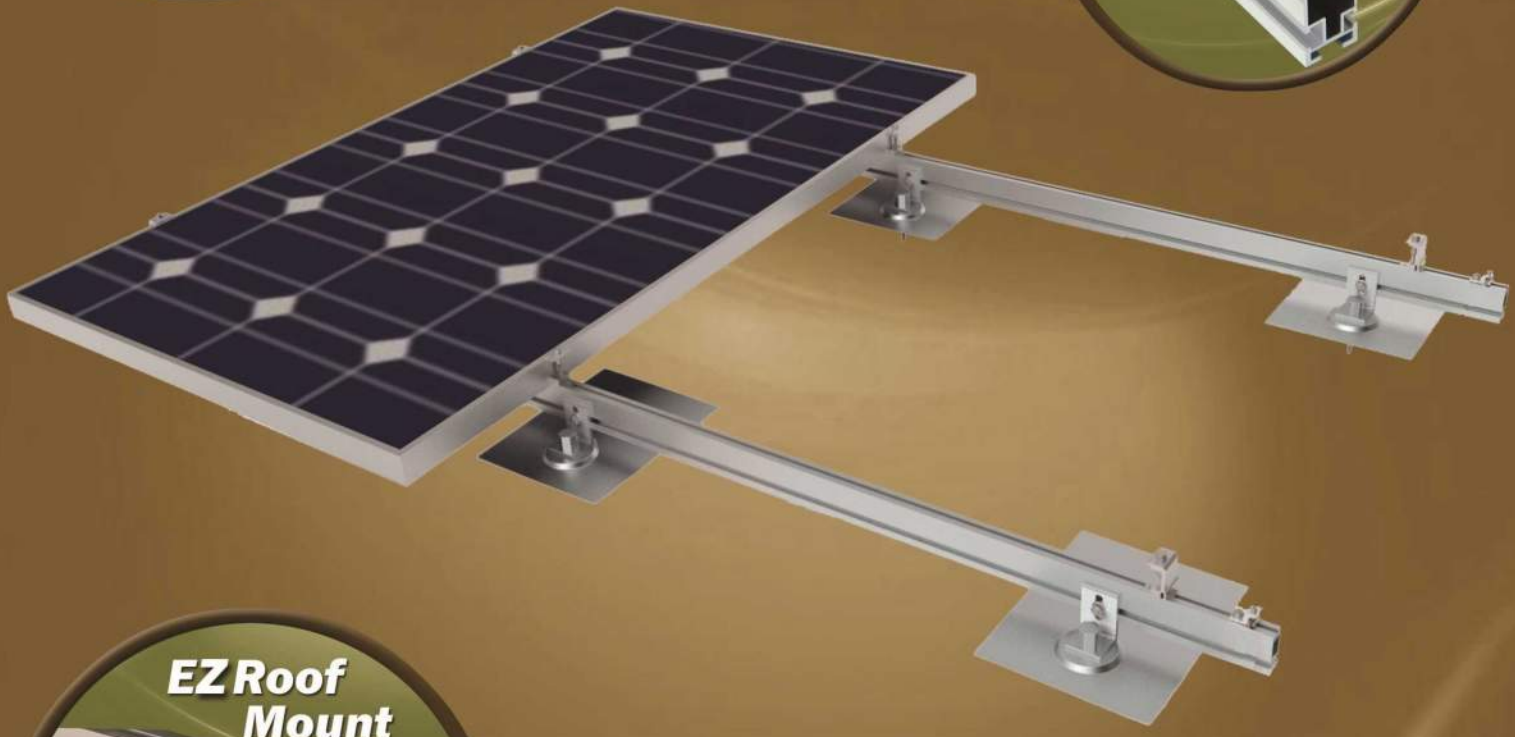
Pitched Roof System

Standard, Heavy or Super Rail,
4 standard lengths

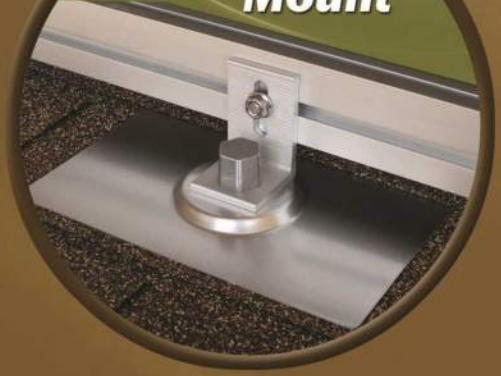
Clamps

Grounding Clamps
with unique built-in
grounding pins

Rail

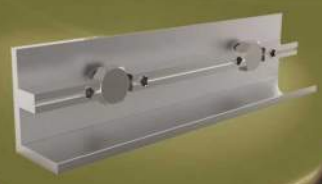


EZ Roof Mount



Our EZ Roof Mount for
composite shingles
is simple, versatile and
fast to install

Splice



Grounding Rail Splice
for longer rows of rail

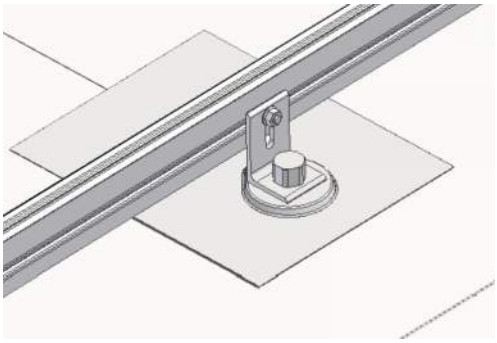
SUNMOD®

Roof Mount — Pitched Roof

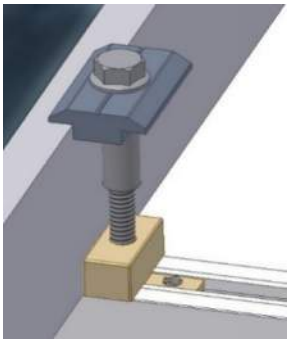
EZ Roof Mount System Overview (Panel Portrait)

With a full range of components, SunModo's self-grounding pitched roof system can be configured in an endless variety of designs. In addition, SunModo offers a variety of mounts to best fit your system needs and requirements. The system is IBC compliant for roof waterproofing tested by IAPMO, UL 1703 compliant for Class A Fire Rated for Type 1 and 2 PV Modules and UL 2703 compliant for electrical bonding tested by ETL.

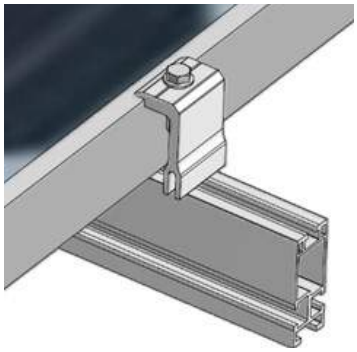
U.S. Patent Number 9,076,899



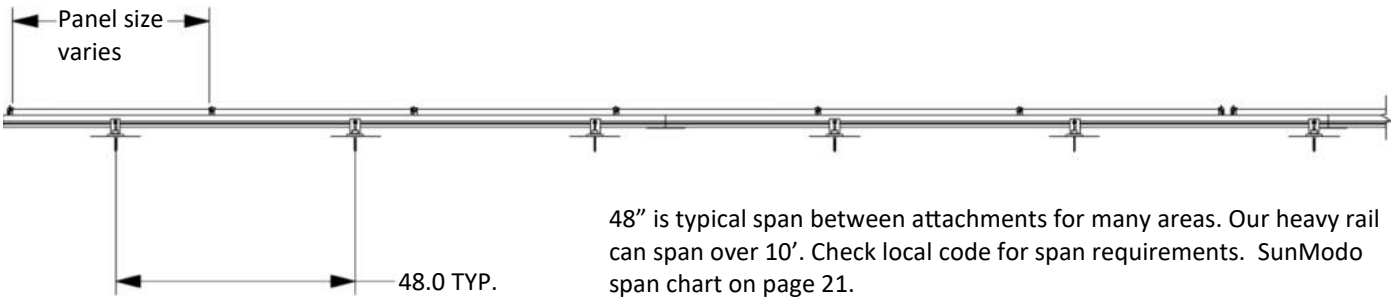
EZ Roof Mount to Rail. Variety of mounts available to best fit the system needs and requirements.
See our mounting selections starting page 3.



Grounding Mid Clamp to Rail. Clamp size is determined by panel frame size.
Portrait Mid clamp selections are on page 24.



End Clamp to Rail. Clamp size is determined by panel frame size.
Portrait End clamp selections are on page 24.



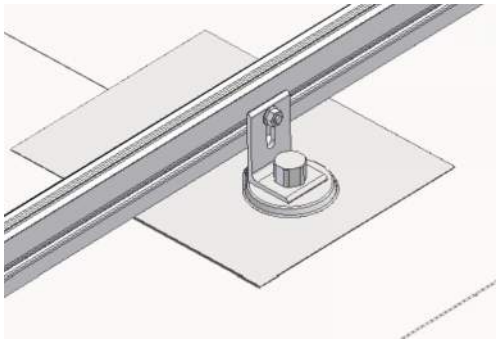
48" is typical span between attachments for many areas. Our heavy rail can span over 10'. Check local code for span requirements. SunModo span chart on page 21.

Roof Mount — Pitched Roof

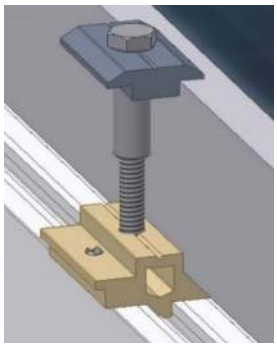
EZ Roof Mount System Overview (Panel Landscape)

With a full range of components, SunModo's self-grounding pitched roof system can be configured in an endless variety of designs. The system conveniently accommodates landscape configuration to minimize roof time and parts required. The system is IBC compliant for roof waterproofing tested by IAPMO, UL 1703 compliant for Class A Fire Rated for Type 1 and 2 PV Modules and UL 2703 compliant for electrical bonding tested by ETL.

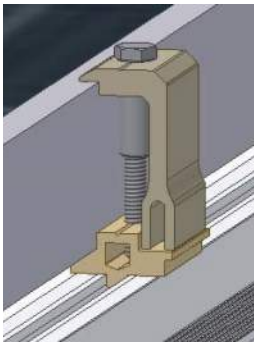
U.S. Patent Number 9,076,899



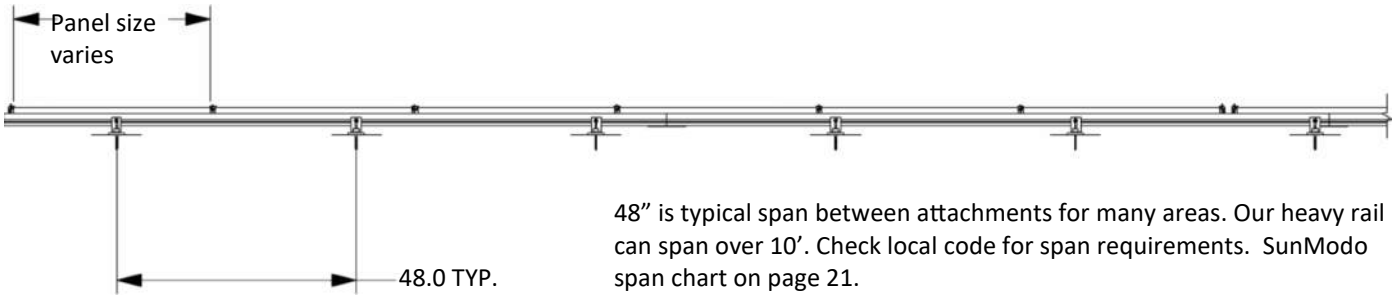
EZ Roof Mount to Rail. Variety of mounts available to best fit the system needs and requirements.
See our mounting selections starting page 3.



Grounding Mid Clamp to Rail. Clamp size is determined by panel frame size.
Landscape Mid clamp selections are on page 25.



End Clamp to Rail. Clamp size is determined by panel frame size.
Landscape End clamp selections are on page 25.



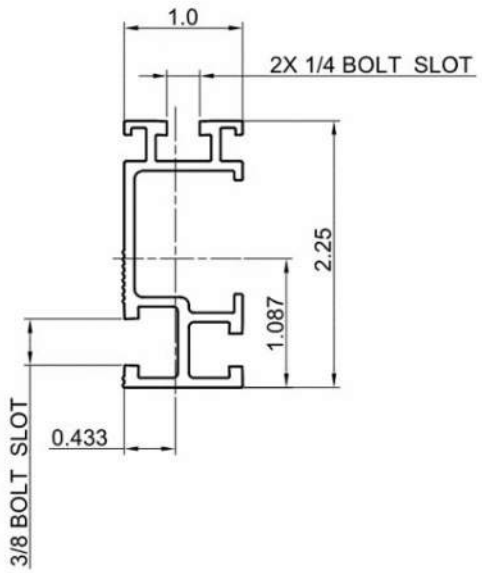
48" is typical span between attachments for many areas. Our heavy rail can span over 10'. Check local code for span requirements. SunModo span chart on page 21.

HR150 (Helio Open Rail)

SunModo's new HR150 Open Rail makes it easy to route PV wires inside rail channels with the cable management feature.
Rail Selection Tool on page 23

With two convenient 1/4" channels and a 3/8" slot available, HR150 can handle a variety of components such as mounts, rail splices, micro-inverters, and clamps.

Manufactured in 2 stock sizes in clear or black. HR150 is extruded 6005-T5 aluminum with anodized coating for lasting aesthetics. Mill finish options are also available.



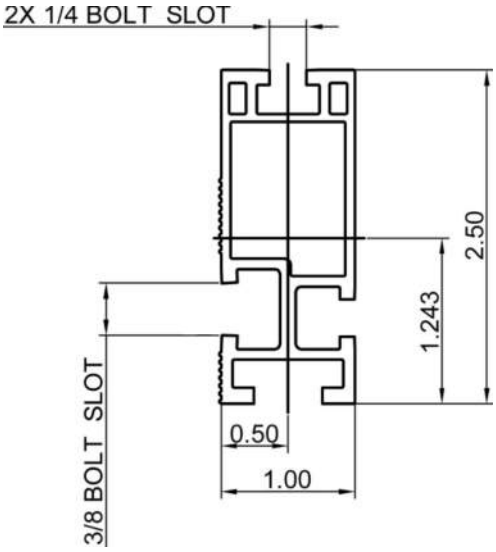
Part Number	Description	Length
A20242-124	HR150 (Helio Open Rail) 124", Clear	124"
A20242-124-BK	HR150 (Helio Open Rail) 124", Black	124"
A20242-166	HR150 (Helio Open Rail) 166", Clear	166"
A20242-166-BK	HR150 (Helio Open Rail) 166", Black	166"
A20242-206	HR150 (Helio Open Rail) 206", Clear	206"
A20242-206-BK	HR150 (Helio Open Rail) 206", Black	206"

HR250 (Helio Standard Rail)

SunModo's HR 250 Rail is a cost-effective rail especially designed for strength and versatility. ***Rail Selection Tool on page 23***

With two convenient 1/4" channels and a 3/8" slot available, the Helio standard Rail can handle a variety of components such as mounts, rail splices, micro-inverters, and clamps.

Manufactured in 2 stock sizes in clear or black. HR250 is extruded 6005-T5 aluminum with anodized coating for lasting aesthetics.



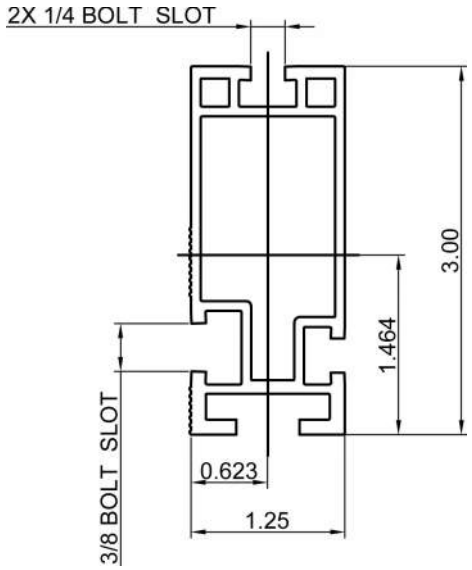
Part Number	Description	Length
A20144-124	HR250 (Helio Standard Rail) 124", Clear	124"
A20144-124-BK	HR250 (Helio Standard Rail) 124", Black	124"
A20144-166	HR250 (Helio Standard Rail) 166", Clear	166"
A20144-166-BK	HR250 (Helio Standard Rail) 166", Black	166"
A20144-206	HR250 (Helio Standard Rail) 206", Clear	206"
A20144-206-BK	HR250 (Helio Standard Rail) 206", Black	206"

HR350 (Helio Heavy Rail)

SunModo's HR 350 Rail is known for its heavy duty strength and spanning long distances between mounts.
Rail Selection Tool on page 23

With two convenient 1/4" channels and a 3/8" slot available, the Helio Heavy Rail can handle a variety of components such as mounts, rail splices, micro-inverters, and clamps.

Manufactured in 3 stock sizes in clear. HR350 is extruded 6005-T5 aluminum with anodized coating for lasting aesthetics.



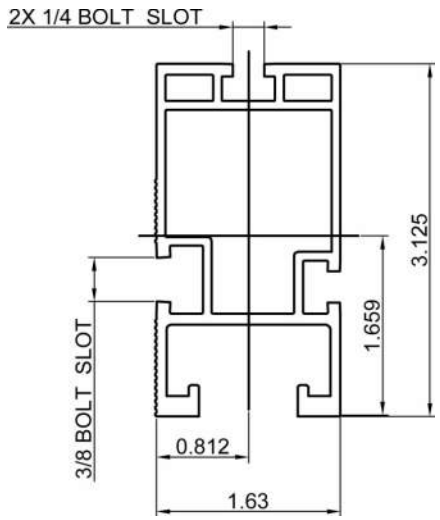
Part Number	Description	Length
A20145-124	HR350 (Helio Heavy Rail) 124", Clear	124"
A20145-166	HR350 (Helio Heavy Rail) 166", Clear	166"
A20145-212	HR350 (Helio Heavy Rail) 212", Clear	212"

HR500 (Helio Super Rail)

SunModo's HR 500 Rail is a high performance rail with super heavy duty strength and longest spanning distances between mounts among all new rails.
Rail Selection Tool on page 23

With two convenient 1/4" channels and a 3/8" slot available, the Helio Super Rail can handle a variety of components such as mounts, rail splices, micro-inverters, and clamps.

Manufactured in 212" stock size in clear. HR500 extruded 6005-T5 aluminum with anodized coating for lasting aesthetics.



Part Number	Description	Length
A20146-212	HR500 (Helio Super Rail) 212", Clear	212"

Helio Rail Selection Chart

The following table was prepared in compliance with applicable engineering codes and standards. Values are based on the following criteria: ASCE 7-10, Roof Zone 1, Exposure B, Roof Slope of 7 to 27 degrees and Mean Building Height of 30 feet.

Load		Rail Span					
SNOW (PSF)	WIND (MPH)	4 ft	5 ft	6 ft	8 ft	10 ft	12 ft
None	100						
	120						
	140						
	150						
	160						
	175						
20	100	HR150	HR250		HR350	HR500	
	120						
	140						
	150						
	160						
	175						
40	100						
	120						
	140						
	150						
	160						
	175						
50-70	100						
	120						
	140						
	150						
	160						
	175						
80-90	100						
	120						
	140						
	150						
	160						
	175						

Properties	Units	HR150 A20242	HR250 A20144	HR350 A20145	HR500 A20146
Material	N/A	Aluminum 6005-T5	Aluminum 6005-T5	Aluminum 6005-T5	Aluminum 6005-T5
Finish	N/A	Clear and Black	Clear and Black	Clear and Black	Clear and Black
Approx. Weight (per linear ft)	plf	.672	.850	1.143	1.388
Total Cross Section Area	in^2	.566	.723	.973	1.182
Section Modulus (X—Axis)	in^3	.299	.387	.683	.851
Section Modulus (Y—Axis)	in^3	.106	.190	.333	.542
Moment of Inertia (X—Axis)	in^4	.348	.486	1.049	1.412
Moment of Inertia (Y—Axis)	in^4	.060	.095	.209	.443
Radius of Gyration (X—Axis)	in	.785	.820	1.093	1.093
Radius of Gyration (Y—Axis)	in	.327	.363	.612	.612

L-Foot Kits

SunModo L-Foot Kits are heavy duty and can be used in a variety of ways for mounting. One long vertical slot for adjustment of rail when facing uneven roofing. Serrated on both sides for secure mounting on the rail. We also offer a Tall L-Foot version that gives you more flexibility on vertical adjustments.

Part Number	Description
K10066-001	L-Foot Kit, Clear
K10066-BK1	L-Foot Kit, Black
K10096-001	Tall L-Foot Kit, Clear
K10096-BK1	Tall L-Foot Kit, Black

Channel Clip (HR150)

PV electrical wires are routed in the channels of the HR150 (Helio Open Rail), retained with our Channel Clips snapped into place.

Part Number	Description
A20252-001	Cable Clip, HR150 Rail
A20252-BK1	Cable Clip, HR150 Rail

Cable Clip

Cable clips are compatible with HR250 (Helio Standard Rail), HR350 (Helio Heavy Rail) and HR500 (Helio Super Rail)

Part Number	Description
A20162-001	Cable Clip

Rail End Caps

HR150 rail end caps are made of aluminum and provide a clean finished look to the system. Available in Gray and Black.

Part Number	Description
A20250-001	End Cap, HR150, Gray
A20250-BK1	End Cap, HR150, Black
A20284-001	End Cap, HR250, Gray
A20284-BK1	End Cap, HR250, Black
A20285-001	End Cap, HR350, Gray
A20285-BK1	End Cap, HR350, Black
A20263-001	End Cap, HR500, Gray
A20263-BK1	End Cap, HR500, Black

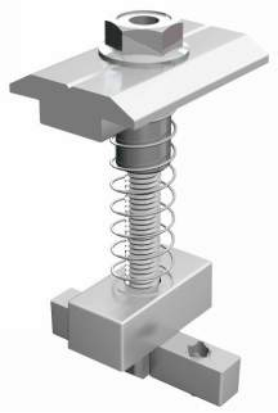
Grounding Lug

Completing our family of grounding products is our Grounding Lug, which self-grounds to the rail, ensuring proper grounding of the PV System per UL 2703 and NEC 690.47

Part Number	Description
K10179-001	Self-grounding Lug Kit

Bonding Mid Clamp Kit

Our Pre-Assembled Universal Mid Clamps have a unique T-Bolt locking feature that ensure the T-Bolt remains vertical and in full contact with rail to eliminate pull out. The spring-loaded top clamp and open collar nut accommodates module frames from 31 to 50mm.



Part Number	Description
K10180-001	Mid Clamp Kit 2.1" T-Bolt, 31-50mm, Clear
K10180-001-BK	Mid Clamp Kit 2.1" T-Bolt, 31-50mm, Black

Bonding Mid Clamp Kit with Shared Rail Adaptor

The shared rail adaptor conveniently converts standard rail to shared rail to allow landscape mounting of PV panels on E-W rails.

Part Number	Description
K10182-001	Mid Clamp Kit with Shared Rail Adaptor 2.1" T-Bolt, 31-50mm, Clear
K10182-001-BK	Mid Clamp Kit with Shared Rail Adaptor 2.1" T-Bolt, 31-50mm, Black

End Clamp Kit

Our Pre-Assembled End Clamps have added Loctite to easily engage the T-Bolt from the top of the collar nut.

Part Number	Description
K10224-1XX (31-50)	End Clamp Kit, 31-50mm, Clear
K10224-1XX (31-50)-BK	End Clamp Kit, 31-50mm, Black

Shared Rail Adaptor

The shared rail adaptor can be combined easily with end clamp kit to converts standard rail to shared rail to allow landscape mounting of PV panels on E-W rails.

Part Number	Description
K10176-001	Shared Rail Adaptor

Adjustable End Clamp Kit

Our new adjustable end clamps accommodates different PV module frame heights ranging from 30mm to 55mm, by simply changing the locking position of the upper clamp piece.

Part Number	Description
K10299-001	End Clamp Kit, 35-50mm, Clear
K10299-002	End Clamp Kit, 30-46mm, Black
K10299-002	End Clamp Kit, 30-46mm, Black
K10299-002	End Clamp Kit, 30-46mm, Black

Bonding Rail Splices

SunModo Rail Splices with unique built-in grounding pins deliver a stronger rack and a solid bond between rails. HR500 Splice Kit requires bonding jumper.

HR150 Rail Splice Kit Attaching to 1/4" rail slot

Part Number	Description
K10236-001	HR150 Rail Splice Kit, 1/4 Inch Slot, Clear
K10236-BK1	HR150 Rail Splice Kit, 1/4 Inch Slot, Black

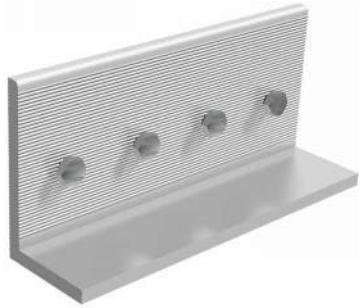
HR250 & HR350 Rail Splice Kit Attaching to 3/8" rail slot

Part Number	Description
K10178-001	Rail Splice Kit, HR250/HR350 3/8 Inch Slot, Clear
K10178-BK1	Rail Splice Kit, HR250/HR350 3/8 Inch Slot, Black

HR250 & HR350 Rail Splice Kit Attaching to 1/4" rail slot

Part Number	Description
K10177-001	Rail Splice Kit, HR250/HR350 1/4 Inch Slot, Clear
K10177-BK1	Rail Splice Kit, HR250/HR350 1/4 Inch Slot, Black

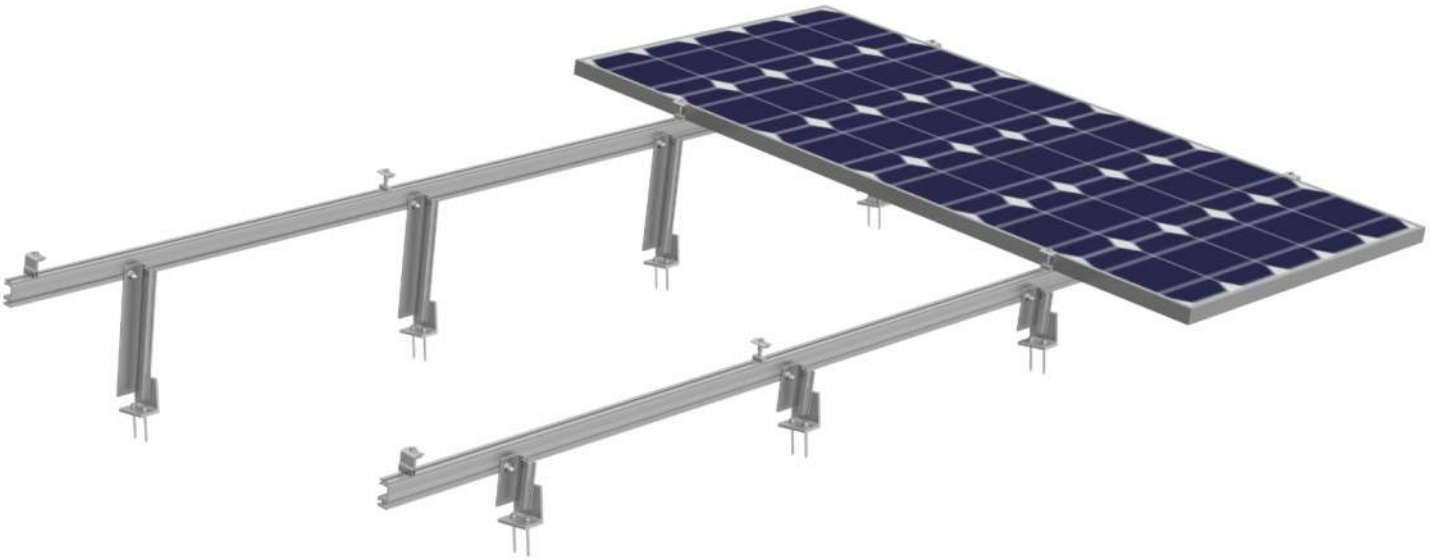
HR500 Rail Splice Kit Attaching to 1/4" rail slot



Part Number	Description
K10250-001	HR500 Rail Splice Kit, 1/4 Inch Slot, Clear

Roof Mount — Flat Roof
EZ Tilt-Up 2.0 System Overview

SunModo is proud to introduce EZ Tilt-up 2.0, an improved single row tilt-up system ideal for light roof structure application. The system offers various tilt degree options to maximize the power output at lower cost. Designed to meet the needs of a variety of roof structures, the installation is easy and quick to save your labor cost and time.



Flat and low-slope roof mounting L Foot, combined with tilt-up rails , provides versatile pitch angles. With a variety of attachment options, the system can be configured in endless ways to met your specific needs.

Roof Mount — Flat Roof
EZ Tilt-Up 2.0 System Components

SunModo offers three standard tilt-up rail lengths of 8,14 and 25 inches to achieve tilt angles of 10 and 20 degrees. A 10-foot full length tilt-up rail is also available for on-site cutting, allow maximum flexibility. The top mount and side mount standoffs are available in 3 lengths.

Tilt-Up Rail Kits

Part Number	Description
K10284-008	Tilt Up Rail Kit 8" Long (Front Leg)
K10284-014	Tilt Up Rail Kit 14" Long (Rear Leg)
K10284-025	Tilt Up Rail Kit 25" Long (Rear Leg)
A20276-120	Tilt Up Rail 120” Long

Top Mount Standoff

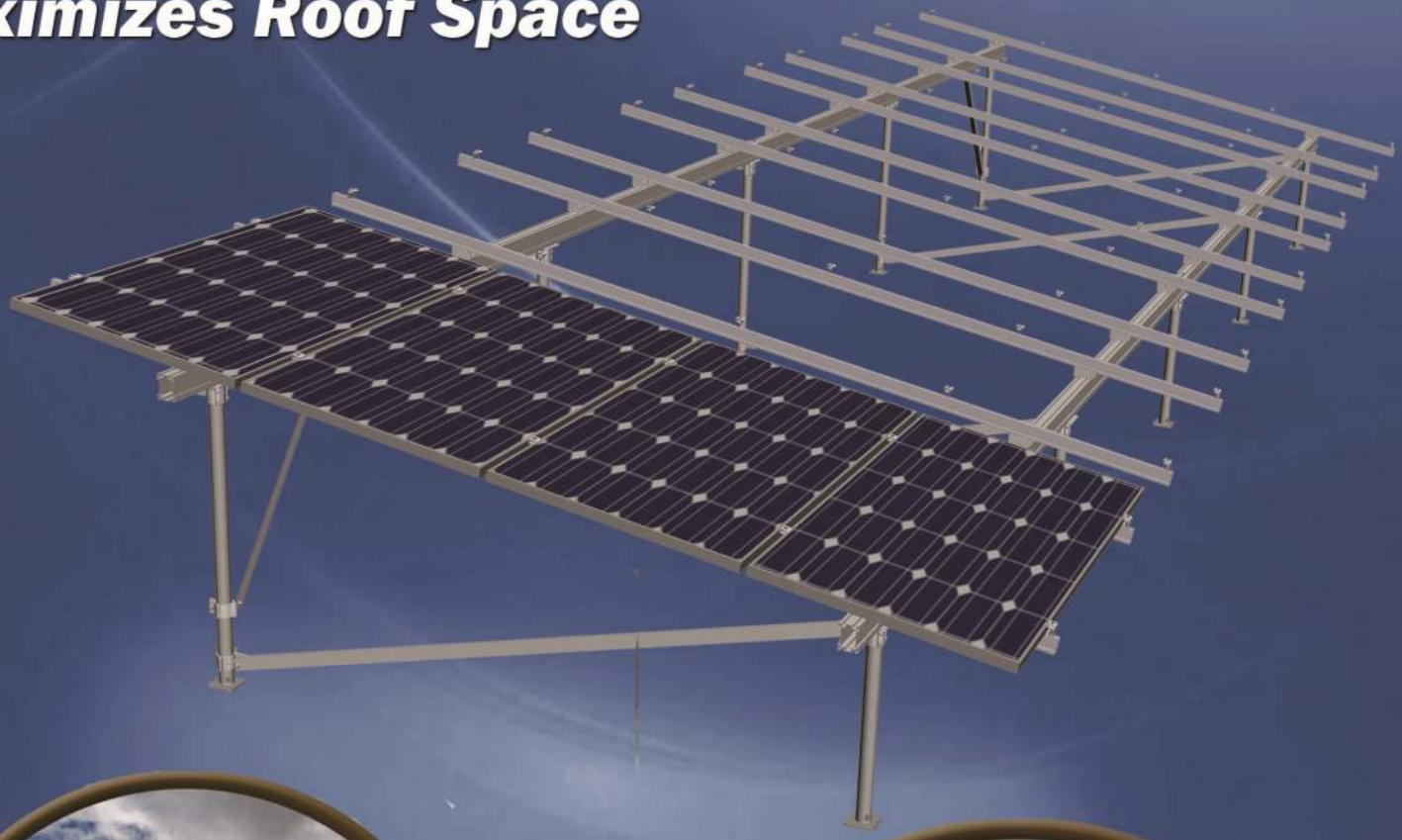
Part Number	Description
A20055-004	4" Top Mount Standoff
A20055-006	6" Top Mount Standoff
A20055-008	8" Top Mount Standoff

Side Mount Standoff

Part Number	Description
A20056-005	5" Side Mount Standoff
A20056-007	7" Side Mount Standoff
A20056-009	9" Side Mount Standoff

EZ SunBeam System

Maximizes Roof Space



Roof & Ground Mount

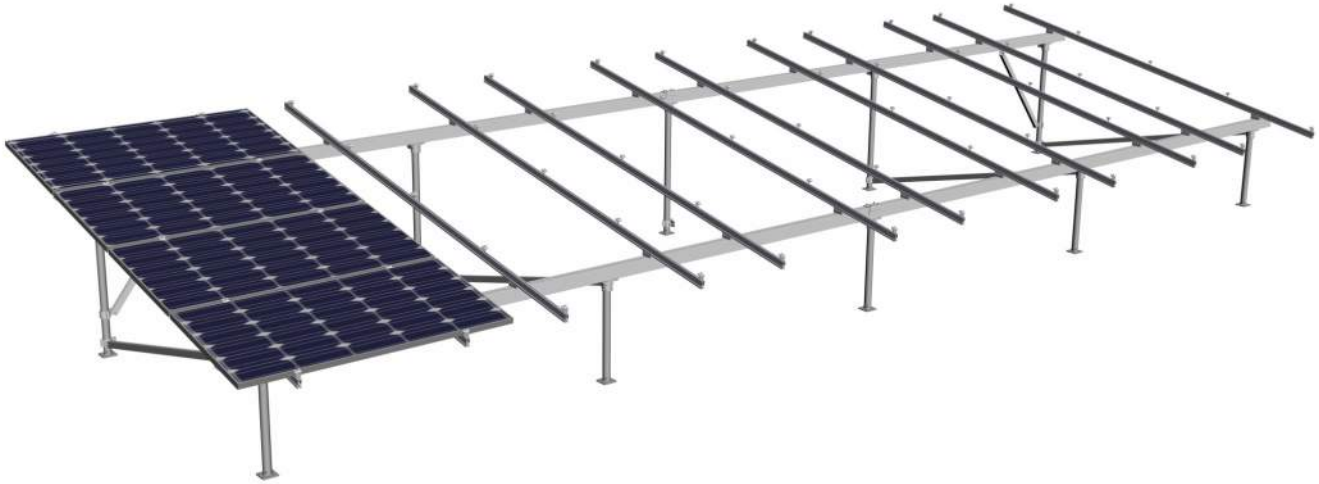
Light Weight & Tough

SUNMODO®

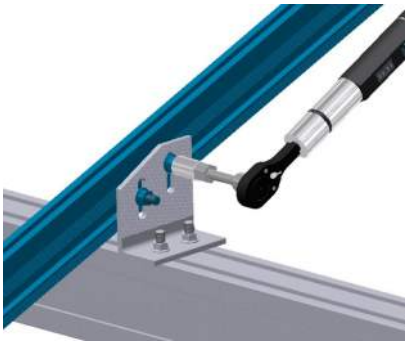
SunBeam System
Overview (Roof Mount)

The SunBeam system is robust, versatile, and specially engineered for multiple configurations. This system is perfect to elevate above obstructions like HVAC, Pipes and Vents. By spanning over obstacles, SunBeam takes full advantage of roof space to maximize system size, increasing the return on investment for your solar system. Its aluminum construction reduces stress on the building structure while withstanding wind loads and salty air.

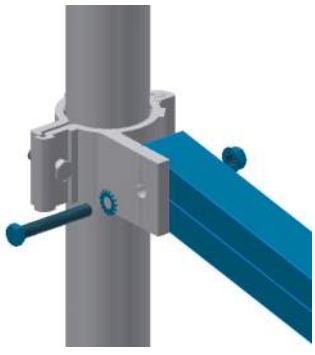
A heavy duty beam allows longer spans, which reduces the number of posts. This system can be easily adjusted to account for the multiple roof pitches on the site and is capable to withstand 150 MPH wind.



Install the SunBeam Rail on the Pipe Caps. ***See SunBeam are on page 31.***



Install the Angle Mount to the top of the SunBeam using hardware supplied with the angle mount. ***See angle mount on page 33.***



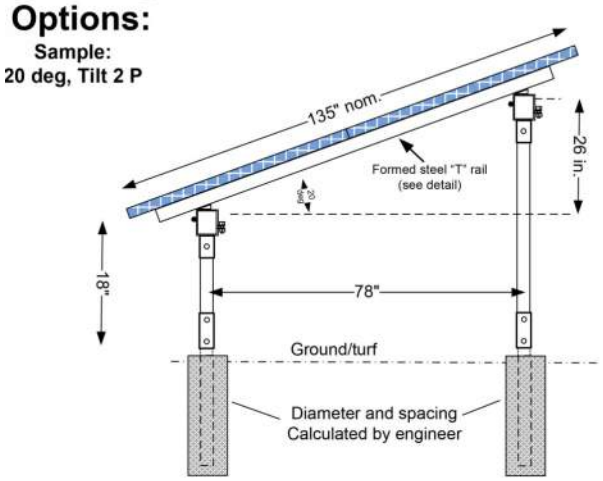
When bracing is required to a post, the pipe clamp kit is used. ***Pipe clamp selections are on page 34.***

SunBeam System
Overview (Ground Mount)

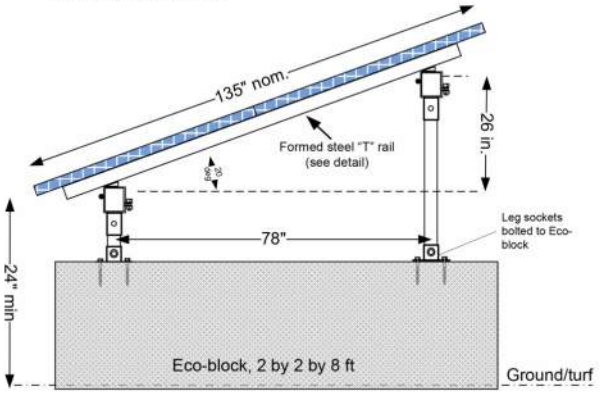
The SunBeam system can be integrated with steel support for a scalable and simple ground-mounted solution. Our unique drive-in earth anchors represent one of three choices for Ground Mounted Solar Arrays; your choice of traditional post and concrete, ballasted “Eco-block” mount, or the earth auger system. Configurations 10 to 50 deg. tilt, 2 to 5 up, Portrait or Landscape.

Mounting Options:

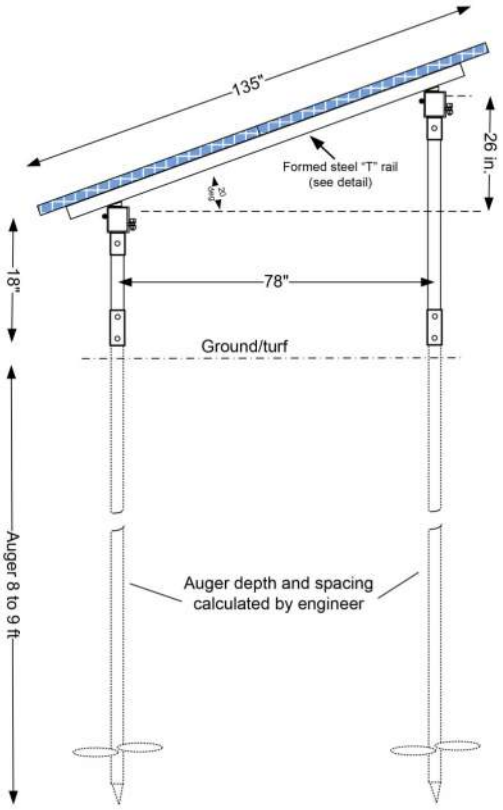
Sample:
20 deg, Tilt 2 P



Concrete and Post



Ballasted Ground Mount



Auger Ground Mount

EZ SunBeam System
Universal Components (Roof & Ground Mount)

SB2500 (SunBeam)

Heavy Duty SB2500 SunBeam is strong and tough for spans up to 12 feet. Manufactured in 2 stock sizes.

Part Number	Description
A20143-164	SB2500 (SunBeam), 3” x 4”, 164" long
A20143-206	SB2500 (SunBeam), 3” x 4”, 206" long

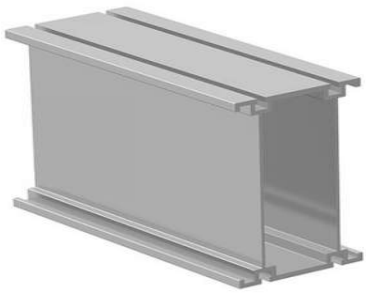
SB3500 (Triangular Beam)

Super Heavy Duty SB3500 Triangular Beam can be used for longer spans up to 25 feet.

Part Number	Description
A20243-206	SB3500 (Triangular Beam), 3.75"/6" x 9", 206" long
A20243-228	SB3500 (Triangular Beam), 3.75"/6" x 9", 228" long
A20243-288	SB3500 (Triangular Beam), 3.75"/6" x 9", 288" long

SB5000 (Box Beam)

SB5000 BoxBeam can be used for span up to 35 feet.

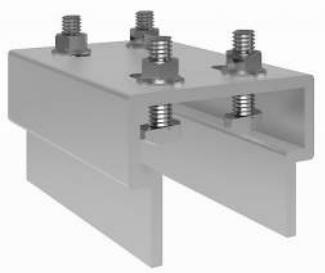


Part Number	Description
A20175-XXX	SB5000 (BoxBeam), 6” x 10.25”

EZ SunBeam System
Universal Components (Roof & Ground Mount)

SB2500 (SunBeam) Splice Kit

SunBeam Splice Kit provides bonding and strength between SunBeam when needed.



Part Number	Description
K10104-001	SB2500 (SunBeam) Splice Kit

SB3500 (Triangular Beam) Splice Kit

Triangular Beam Splice Kit provides bonding and strength between Triangular Beam when needed.

Part Number	Description
K10238-001	SB3500 (Triangular Beam) Splice Kit

SB5000 (BoxBeam) Splice Kit

BoxBeam Splice Kit provides bonding and strength between BoxBeam when needed.

Part Number	Description
K10240-001	SB5000 (BoxBeam) Splice Kit

EZ SunBeam System
Universal Components (Roof & Ground Mount)

Angle Mount Kit

Angle Mount joins SunBeam to Helio Rail. Rail can be tilted to any angle with angle mounts.

Part Number	Description
K10103-004	Angle Mount Kit

Pipe Cap Kit

The versatile powder coated cast aluminum post cap is made for easy vertical and horizontal adjustment of the heavy duty beam, available in 2.0” and 2.5”.

Part Number	Description
K10218-001	2" Pipe Cap Kit with Hex Cap Screws, Grounding
K10223-001	2.5" Pipe Cap Kit with Hex Cap Screws, Grounding

Pipe Clamp Kit

The powder coated cast aluminum 2 piece clamps allows for quick installation of the braces, available in 2.0” and 2.5”.

Part Number	Description
K10219-001	2" Pipe Clamp Kit with Hex Cap Screws, Grounding
K10222-001	2.5" Pipe Clamp Kit with Hex Cap Screws, Grounding

EZ SunBeam System
Universal Components (Roof & Ground Mount)

SB2500 End Cap

SB2500 (SunBeam) End Cap provides a clean finished look to the system. Clear anodized.

Part Number	Description
A20237-001	End Cap, SB2500 (SunBeam)

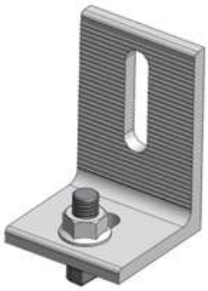
SB3500 End Cap

SB3500 (Triangular Beam) End Cap provides a clean finished look to the system. Clear anodized.

Part Number	Description
A20261-001	End Cap, SB3500 (Triangular Beam)

L-Foot Kit

The L-Foot Kit connects brace to underside of SunBeam.



Part Number	Description
K10066-010	L-Foot Kit with T-Bolt and flange nut

EZ SunBeam System
Specific Components (Roof Mount)

Aluminum Post Base Plate Kit

Post Base Kits for 2.0” and 2.5” Aluminum Schedule 10 Post.

Part Number	Description
K10253-001	2" Al Post Base Plate Kit with 3 screws
K10254-001	2.5" Al Post Base Plate Kit with 3 screws

Steel Post Base Plate Kit

The steel post base can be used where a more robust connection is needed to resist higher wind and seismic loads. Post Base for 2” and 2.5” nominal Steel Post.

Part Number	Description
K10268-001	2" OD Steel Post Base Plate Kit
K10268-002	2.5" OD Steel Post Base Plate Kit

Distribution Plate Kit

The distribution plate kit allows for a bigger footprint for better load distribution and allows for more anchor connections when necessary.

Part Number	Description
K10286-001	2” Distribution Plate Kit
K10287-001	2.5” Distribution Plate Kit

EZ SunBeam System
Specific Components (Roof Mount)

Diagonal Brace

The diagonal brace provide extra support as needed.

Part Number	Description
A20164-0XX	AL Tube Brace, XX" Long

Vertical Mount Pipe Cap Kit

The Vertical Mount Pipe Cap Kit is used when a cost effective solution is required for distributing point loads on the roof. Because it attaches to the Rail using one 3/8" T-Bolt, there is no more sliding the bolts down the length of the Rail.

Part Number	Description
K10184-001	2" AL Vertical Mount Pipe Cap Kit
K10184-002	2.5" AL Vertical Mount Pipe Cap Kit

Aluminum Post

2" or 2.5" anodized aluminum schedule 10 posts are offered in standard length 148".

Part Number	Description
A20189-148	2" Al Post
A20209-148	2.5" Al Post

EZ SunBeam System
Specific Components (Ground Mount)

Helical Earth Auger

Helical earth augers are suitable for use in weak to moderate strength soils and areas with a high water table.

Part Number	Description
A21094-084	10” Blade Auger, 84” Long
A21094-063	10” Blade Auger, 63” Long

Ground Screw Anchors

Ground screw anchors are suitable for use in hard packed earth or soils with large amounts of cobble and gravel.

Part Number	Description
A21095-084	Screw Anchor, 84” Long
A21095-063	Screw Anchor, 63” Long

Battered Anchor Adaptor

Battered anchor adaptor can be used to mate the drive head to fit earth auger and ground screws for easy installation.

Part Number	Description
A21031-003	Battered Anchor Adaptor

EZ SunBeam System
Specific Components (Ground Mount)

High Strength Steel Tube

SunModo provides either a 2.375X13 gauge or a 2.875X13 gauge tube. Both have a 50 ksi yield strength. Other tube geometries can be provided upon request.

Part Number	Description
A21022-288	XX" 2"x 13 ga (nominal), High Strength Steel Tube, Galvanized
A20254-288	XX" 2.5"x 13 ga (nominal), High Strength Steel Tube, Galvanized

Anchor Extension

SunModo also provides 36" anchor extension to splice two pipes together.

Part Number	Description
A21022-036	36" Anchor extension

Embedment Ring

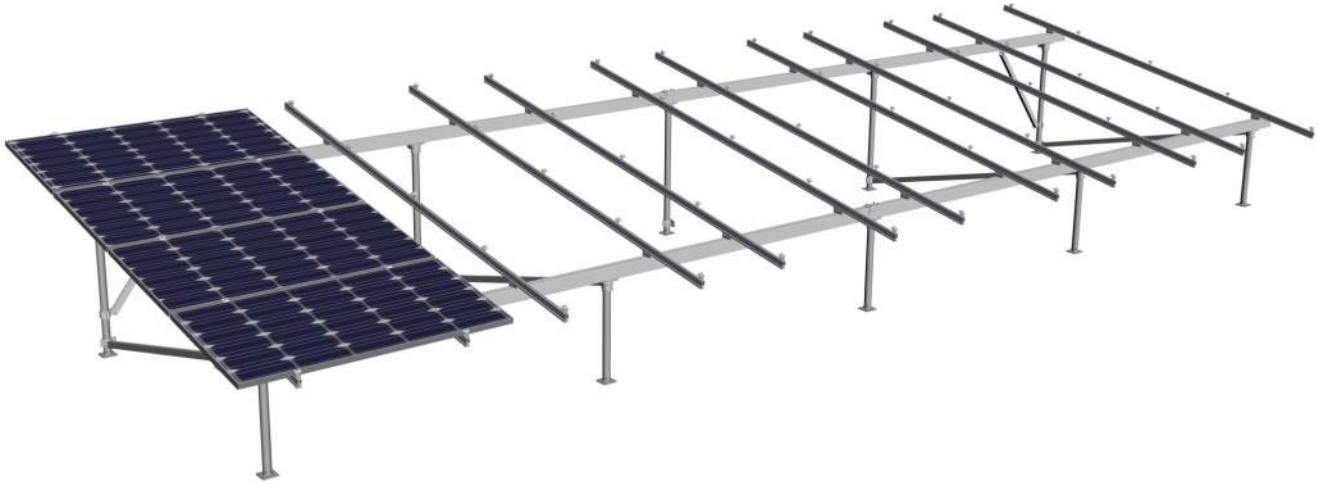
The concrete embedment rings are used to resist higher wind and seismic loads.

Part Number	Description
K10186-001	2" Embedment Ring Kit
K10186-002	2.5" Embedment Ring Kit

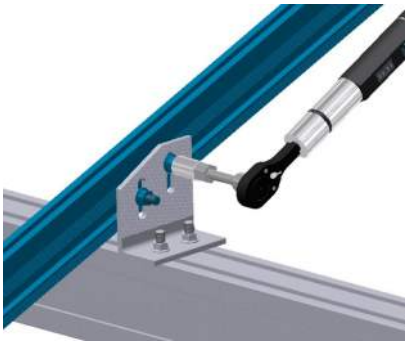
SunBeam System
Overview (Roof Mount)

The SunBeam system is robust, versatile, and specially engineered for multiple configurations. This system is perfect to elevate above obstructions like HVAC, Pipes and Vents. By spanning over obstacles, SunBeam takes full advantage of roof space to maximize system size, increasing the return on investment for your solar system. Its aluminum construction reduces stress on the building structure while withstanding wind loads and salty air.

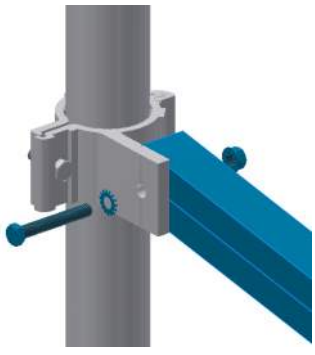
A heavy duty beam allows longer spans, which reduces the number of posts. This system can be easily adjusted to account for the multiple roof pitches on the site and is capable to withstand 150 MPH wind.



Install the SunBeam Rail on the Pipe Caps. ***See SunBeam are on page 31.***



Install the Angle Mount to the top of the SunBeam using hardware supplied with the angle mount. ***See angle mount on page 33.***



When bracing is required to a post, the pipe clamp kit is used. ***Pipe clamp selections are on page 34.***

SunShield™ Awning System Overview

SunModo is proud to introduce the SunShield™ awning system which offers an alternative solution. The system mounts solar panels to the side of homes or office buildings.

The SunShield™ System starts with the structural truss, our sturdy pre-assembled aluminum triangular frame. Once the triangular frame is attached, the SunModo Rails and Mounting Clamps are used to secure the solar panels to the wall. The triangle frame is shipped folded and flat; and expands to a 35 degree tilt angle structural truss. This compact triangle frame design accommodates both 60 and 72 cell solar panels in portrait or landscape orientations.

In addition, the system provides valuable shade for window or structure below and keeps the solar panel cooler and more efficient with constant airflow beneath the panels.

Part Number	Description
K10267-002	Folded Triangular Awning Kit, Clear
K10267-BK2	Folded Triangular Awning Kit, Black
C10034-001	Solar Panel Seam Gasket, 315 inch

Tool

We offer a variety of tools to help make installation of SunModo products easier and faster.

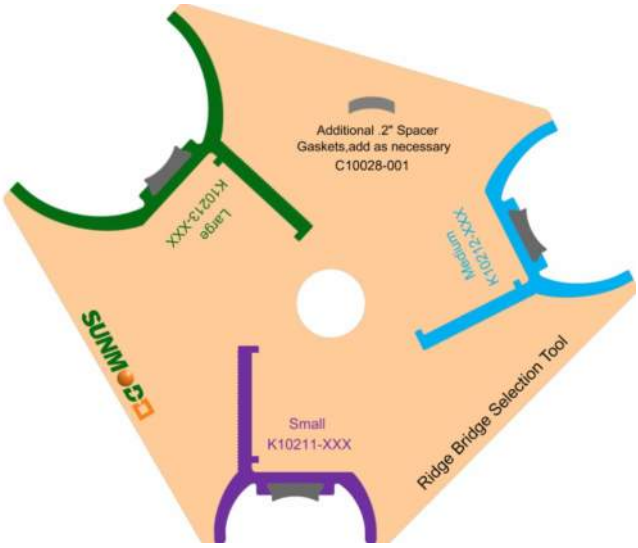
Roof Shoe Extraction Tool

The roof shoe extraction tool is used for easy removal of the EZ Roof Mount Roof Shoe.

Part Number	Description
A50008-001	Roof Shoe Extraction Tool

RidgeBridge Mount Selection Tool

The complimentary tool will help you easily choose the right RidgeBridge Mount.



Part Number	Description
A50011-001	RidgeBridge Mount Selection Tool

SUNMODO®

RACKING PARTNER OF PROFESSIONAL INSTALLERS

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Solar installation professionals prefer to rely upon a single partner for all their mounting and racking needs. **SunModo** is dedicated to providing innovative racking solutions that help you install systems quickly and painlessly. Our products already set the standard for durability, safety and security, and our R&D team is constantly engineering affordable, hassle-reducing innovations that meet industry standards. You can access our products directly or through our preferred distributors.

ABOUT SUNMODO

SunModo, meaning "***the way of the sun,***" is a private U.S. company focused on innovative racking and mounting solutions for professional installers in the fast-growing solar industry. We are energized every day by a desire to make solar installation easier, more reliable and more affordable. Our commitment to innovation can be seen across our entire product line, which includes 14 industry-shaping patents.