

## Catalog

### Mounts



### Racking

#### Rail



#### Clamps



#### L-Feet



### Systems



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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# ***EZ Roof Mounts***



# 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, 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

## 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.



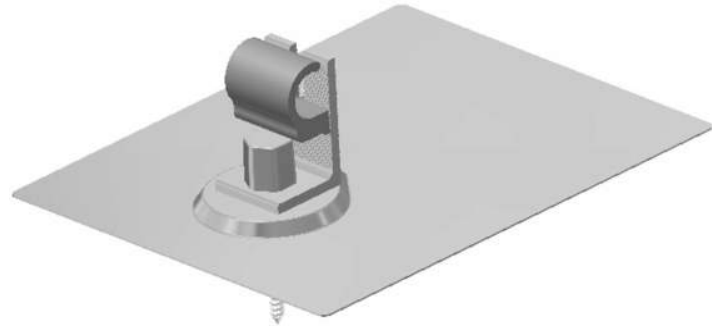
L Foot version available.

Part Number	Description
K10070-002	EZ Roof Mount Kit w/ 2" Standoff, Clear
K10070-BK2	EZ Roof Mount Kit w/ 2" Standoff, Black
K10070-003	EZ Roof Mount Kit w/ 3" Standoff, Clear
K10070-BK3	EZ Roof Mount Kit w/ 3" 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.

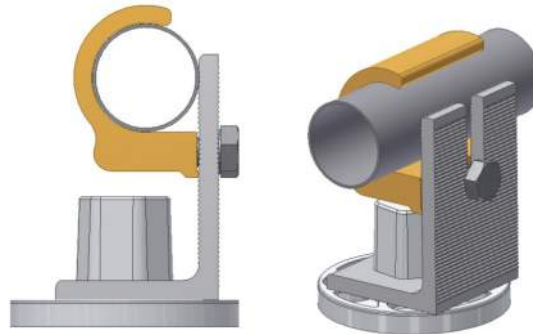
This kit includes one flashing, one versatile aluminum base designed for multiple configurations, one open slot L-Foot, one conduit clamp of your chosen size and all hardware.



**K10205-001**



**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

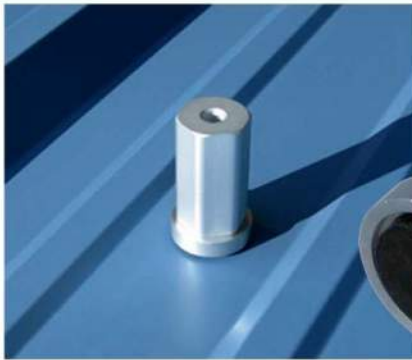
# Roof Attachment – Metal

## 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
K10064-003	EZ Metal Roof Mount Kit w/ 3" Standoff, Clear
K10064-BK3	EZ Metal Roof Mount Kit w/ 3" Standoff, Black
K10064-005	EZ Metal Roof Mount Kit w/ 5" Standoff, Clear
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.

We also offer a L Metal Roof Mount Kit (gasket included) if your prefer a low cost solution.



**K10154-001**



**K10142-001**



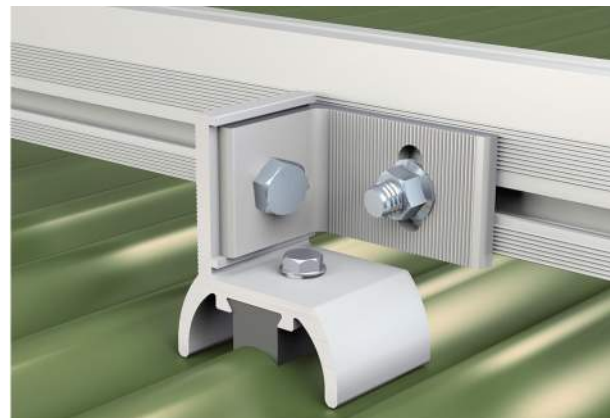
**K10004-002**

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
K10211-001	3/4 Pitch Height Ridge Bridge Mount Kit
K10212-001	1 Pitch Height Ridge Bridge Mount Kit
K10213-001	1-1/2Pitch Height Ridge Bridge Mount Kit
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**

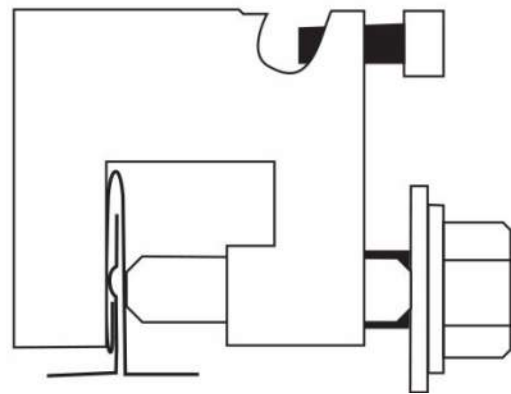
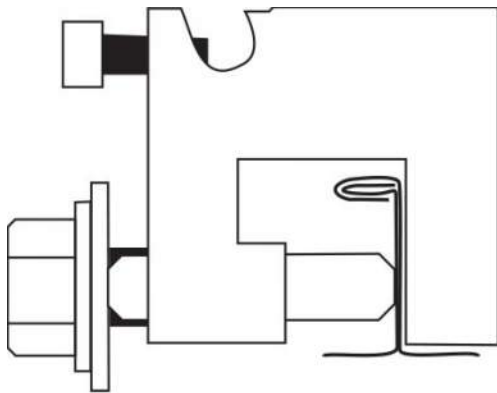
Part Number	Description
K12002-001	2-Screw Corrugated Roof Mount
K12003-001	4-Screw Corrugated Roof Mount

# 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

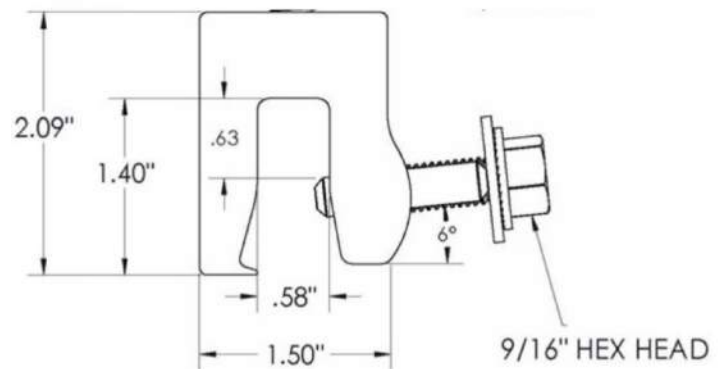
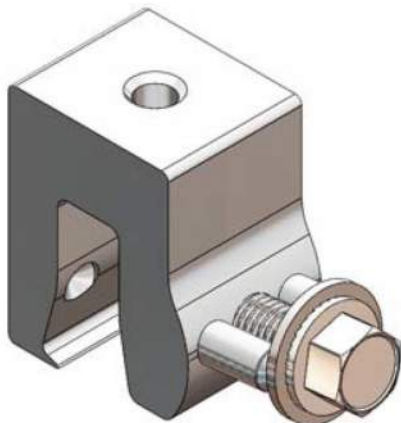
# Roof Attachment – Standing Seam

## 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

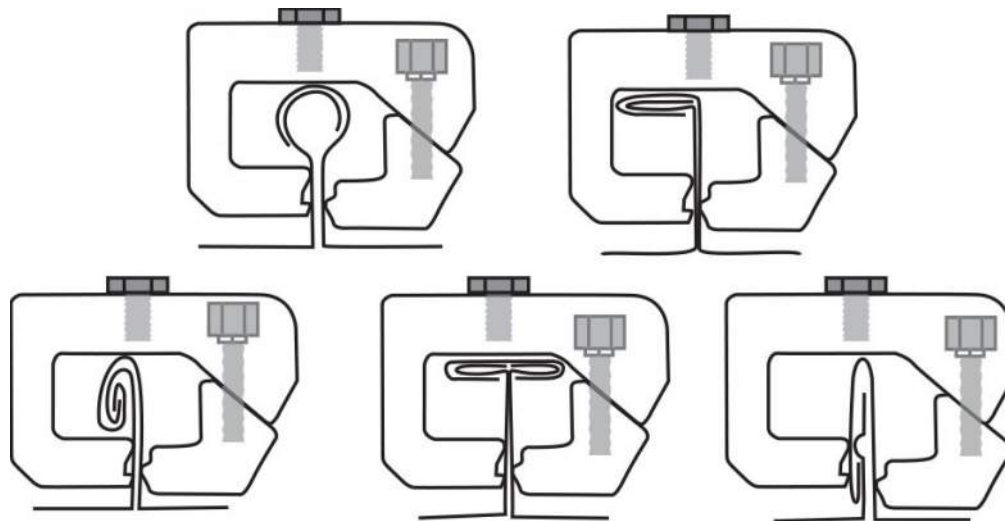
# Roof Attachment – Standing Seam

## 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**

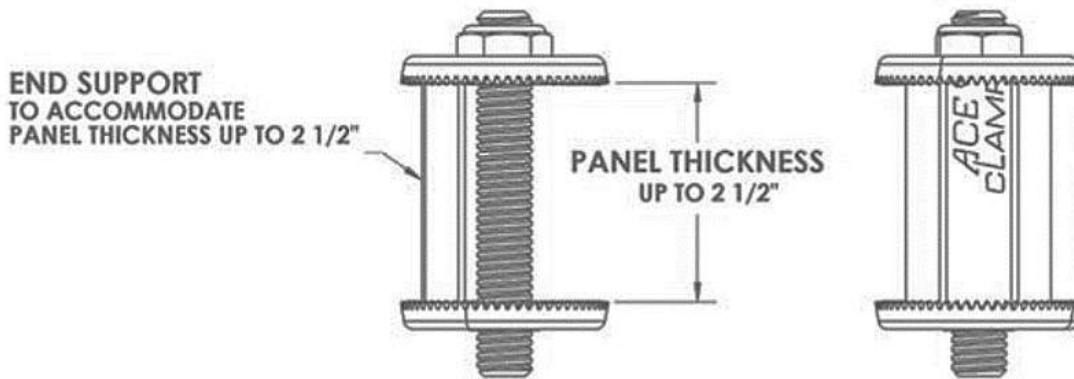
Part Number	Description
K12012-001	Standing Seam Ace Clamp ML Kit

# 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 design 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



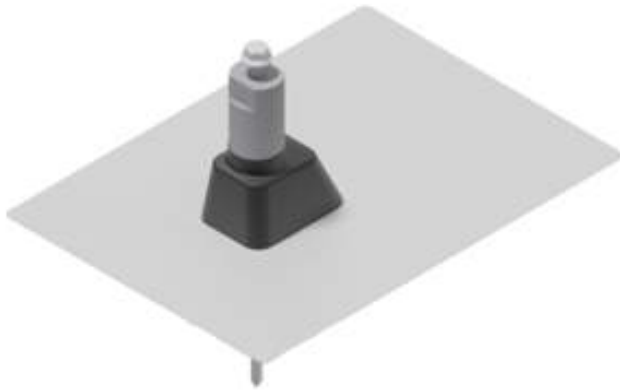
# Roof Attachment – Tile

## TopTile™ Mount

No more lifting roof tiles, broken tiles or finding rafters! The TopTile™ Mount is mounted entirely above the tiles. The flexibility of the mounting system allows installation on the ridge of the tiles, thereby providing superior waterproofing performance

The TopTile Mount System gives the installer the option of mounting to the rafter, or without locating the rafter mounting directly to deck.

The foremost advantage to using the TopTile Mounts is that well-constructed tile roofs are not deconstructed. No pulling tiles, unseating battens and no leaving unsealed fasteners in the membrane. The TopTile Mounts can be attached to any concrete, clay, stone, fiberglass, rubber, or stone tile roofs per International Code Council (ICC) building codes.



**K10206-004/006**



**K10207-005/007**

Part Number	Description
K10206-005	5" Rafter TopTile Mount Kit
K10206-007	7" Rafter TopTile Mount Kit
K10207-105	5" Tripod TopTile Mount Kit
K10207-107	7" Tripod TopTile Mount Kit
A20230-001	1" Aluminum Spacer

# Pitched Roof System

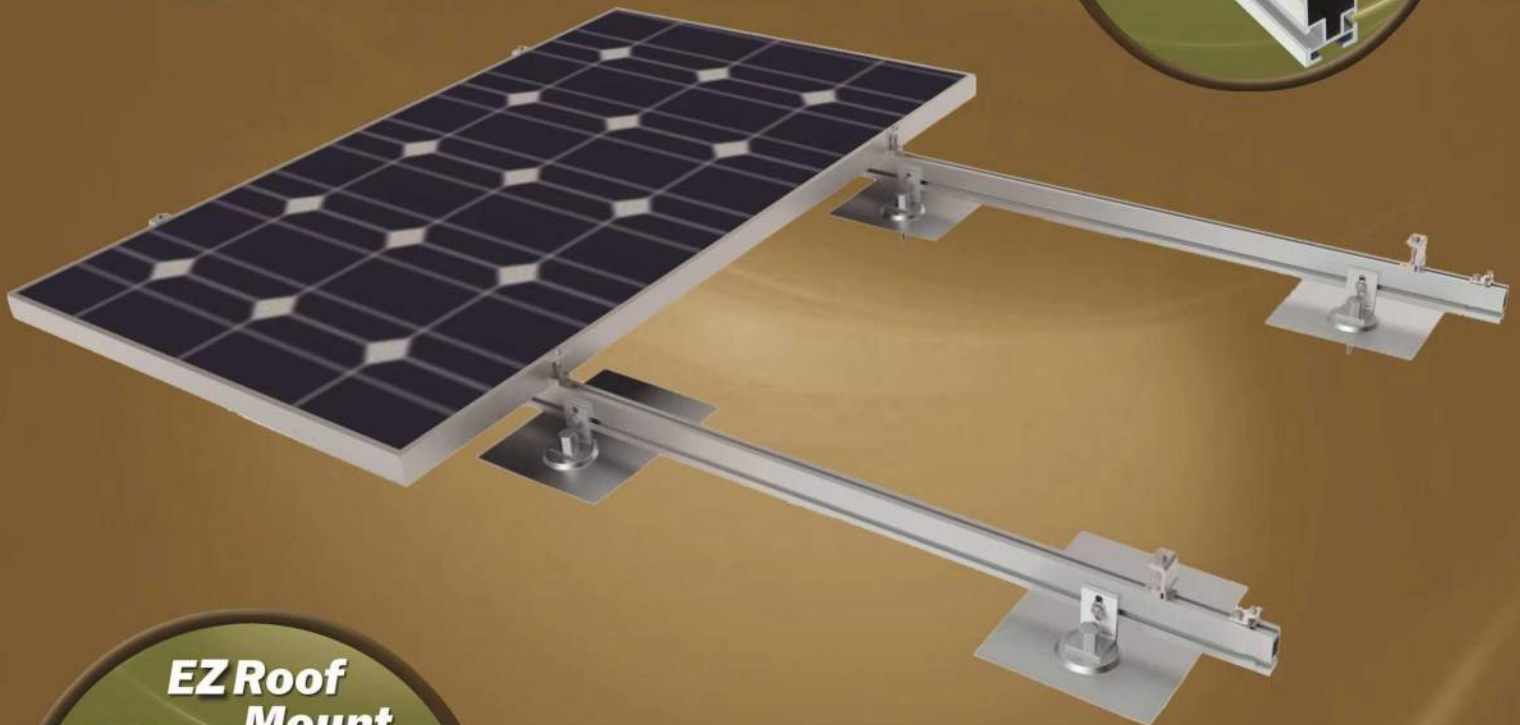
Standard, Heavy or Super Rail,  
4 standard lengths

## Clamps



Grounding Clamps  
with unique built-in  
grounding pins

## Rail

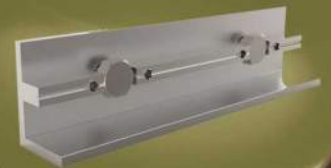


## EZ Roof Mount



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

## Splice



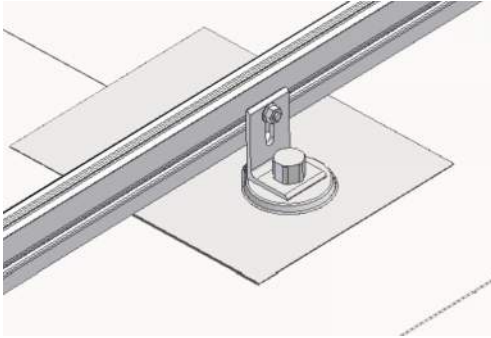
Grounding Rail Splice  
for longer rows of rail

# Roof Mount – Pitched Roof

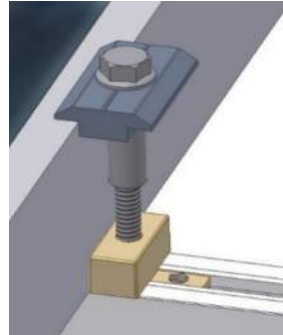
## EZ Roof Mount System Overview (Panel Portrait)

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.

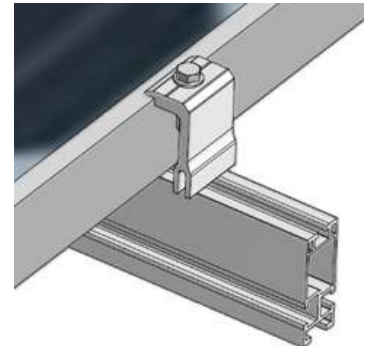
U.S. Patent Number 9,076,899



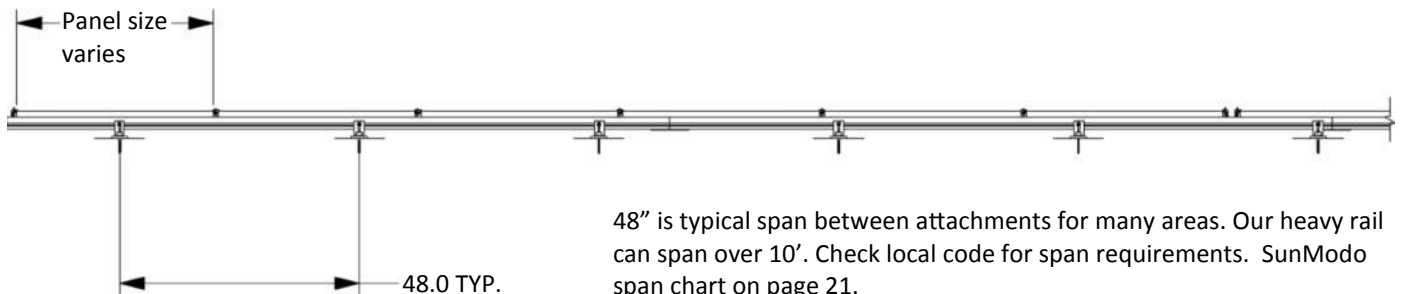
EZ Roof Mount to Rail. Variety of mounts available to best fit the system needs and requirements.  
*See our mounting selections starting page 3.*



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.*



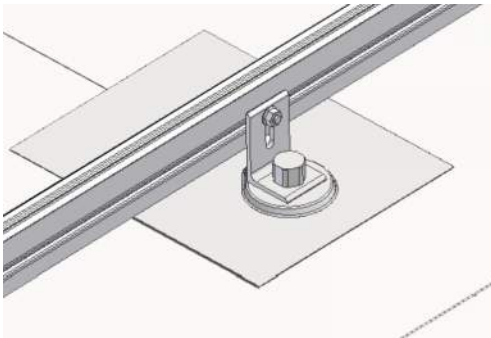
48" is typical span between attachments for many areas. Our heavy rail can span over 10'. Check local code for span requirements. SunModo span chart on page 21.

# Roof Mount – Pitched Roof

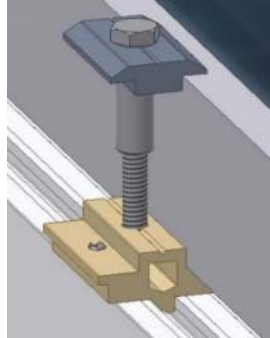
## EZ Roof Mount System Overview (Panel Landscape)

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.

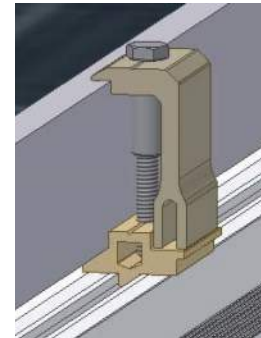
U.S. Patent Number 9,076,899



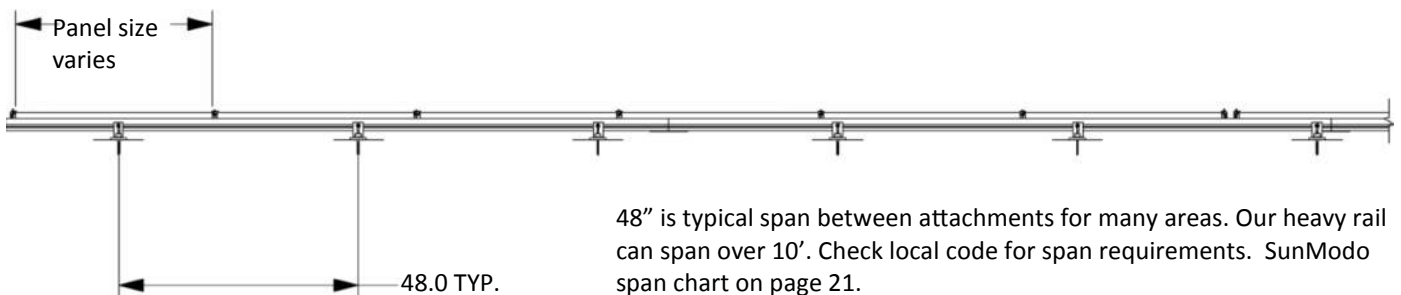
EZ Roof Mount to Rail. Variety of mounts available to best fit the system needs and requirements.  
*See our mounting selections starting page 3.*



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.

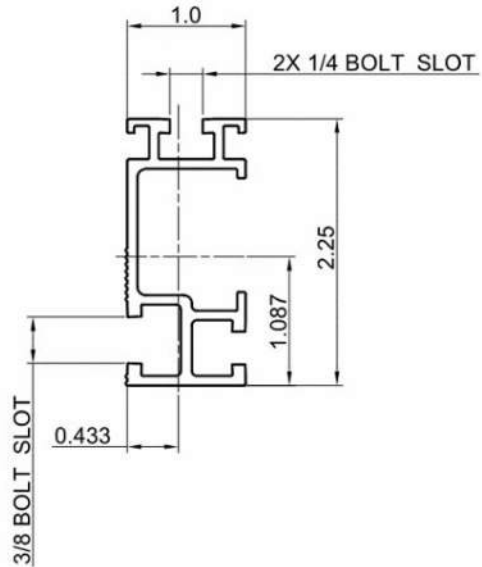
# HR150 (Helio Open Rail)

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.



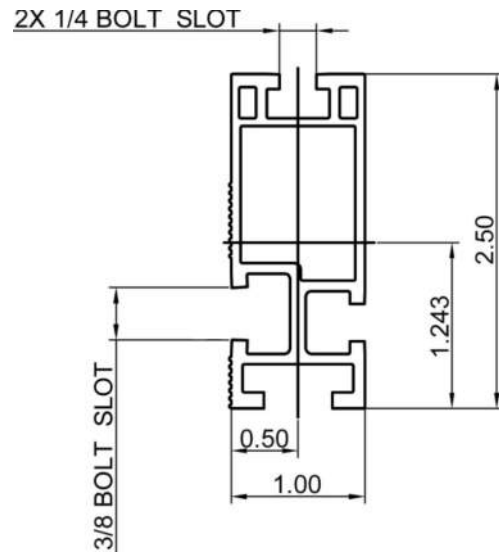
Part Number	Description	Length
A20242-124	HR150 (Helio Open Rail) 124”, Clear	124”
A20242-124-BK	HR150 (Helio Open Rail) 124”, Black	124”
A20242-166	HR150 (Helio Open Rail) 166”, Clear	166”
A20242-166-BK	HR150 (Helio Open Rail) 166”, Black	166”

# 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"

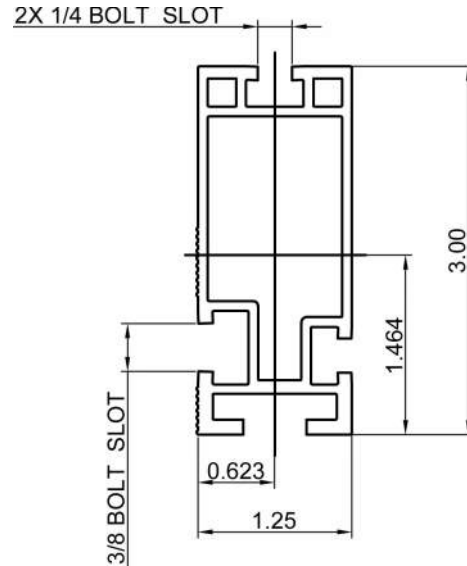
# HR350 (Helio Heavy Rail)

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"

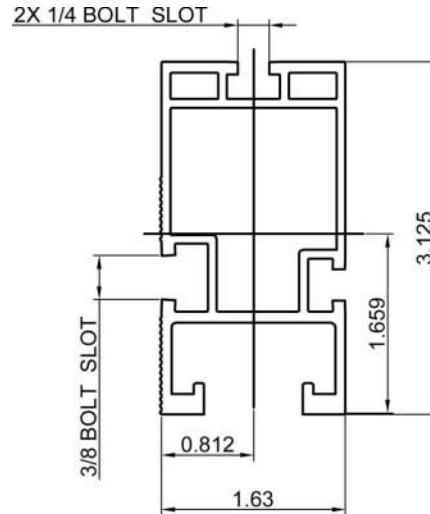
# HR500 (Helio Super Rail)

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	HR150	HR250	HR350	HR350	HR500	HR500
	120						
	140						
	150						
	160						
	175						
20	100	HR150	HR250	HR350	HR350	HR500	HR500
	120						
	140						
	150						
	160						
	175						
40	100	HR150	HR250	HR350	HR350	HR500	HR500
	120						
	140						
	150						
	160						
	175						
50-70	100	HR150	HR250	HR350	HR350	HR500	HR500
	120						
	140						
	150						
	160						
	175						
80-90	100	HR150	HR250	HR350	HR350	HR500	HR500
	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 <sup>2</sup>	.566	.723	.973	1.182
Section Modulus (X–Axis)	in <sup>3</sup>	.299	.387	.683	.851
Section Modulus (Y–Axis)	in <sup>3</sup>	.106	.190	.333	.542
Moment of Inertia (X–Axis)	in <sup>4</sup>	.348	.486	1.049	1.412
Moment of Inertia (Y–Axis)	in <sup>4</sup>	.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)

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

## Rail End Caps (HR250, HR350 and HR500)

Available for both HR250 (Helio Standard Rail) and HR350 (Helio Heavy Rail), end caps are made of durable ABS material and provide a clean finished look to the system.



Part Number	Description
C10017-001-GR	End Cap, HR250, Grey
C10017-001	End Cap, HR250, Black
C10021-001-GR	End Cap, HR350, Grey
C10021-001	End Cap, HR350, Black
A20263-001	End Cap, HR500, Grey

## 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

# Clamp Kits

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. The added Loctite easily engages the T-Bolt from the top of the collar nut. The shared rail adaptor conveniently converts standard rail to shared rail to allow landscape mounting of PV panels on E-W rails. U.S. Patent Number 9,097,8442.

## Bonding Mid Clamp Kit



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



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

# Clamp Kits

Our Pre-Assembled End Clamps have added Loctite to easily engage the T-Bolt from the top of the collar nut. The shared rail adaptor conveniently converts standard rail to shared rail to allow landscape mounting of PV panels on E-W rails.

U.S. Patent Number 9,097,8442.

## End Clamp Kit



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

## Bonding End Clamp Kit with Shared Rail Adaptor



Part Number	Description
K10183-1XX (31-50)	End Clamp Kit with Shared Rail Adaptor, 31-50mm, Clear
K10183-1XX (31-50)-BK	End Clamp Kit with Shared Rail Adaptor, 31-50mm, 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



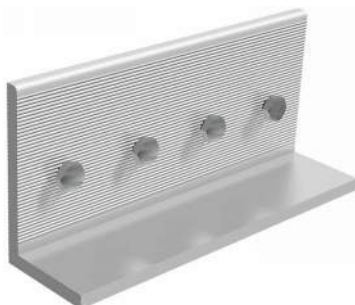
Part Number	Description
K10178-001	Rail Splice Kit, HR250/HR350 3/8 Inch Slot, Clear
K10178-BK1	Rail Splice Kit, HR250/HR350 3/8 Inch Slot, Black

## 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

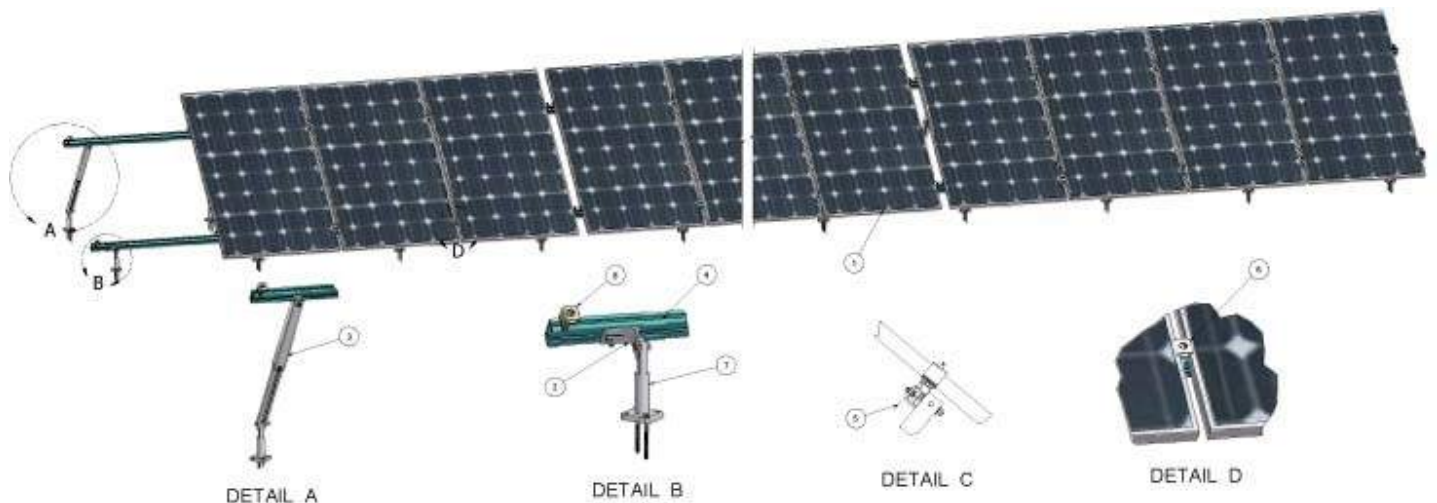


Part Number	Description
K10250-001	HR500 Rail Splice Kit, 1/4 Inch Slot, Clear

# Roof Mount – Flat Roof EZ Tilt-Up System Overview



SunModo EZ Tilt up system is an adjustable single module row and low point load system that is ideal for light roof structure application. The design has an adjustable tilt leg that offers maximum flexibility and tilt degree options that maximize power output production. The installation is easy and quick to save you labor cost and time.



# Roof Mount – Flat Roof EZ Tilt-Up System Components

Flat Roof Mount Standoffs combined with an L-Foot can give your system any required pitch.

These standoffs are available in 3 lengths. Stainless Steel and anodized aluminum design help to prevent corrosion (rust) and maintain high strength.



## 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



# Roof Mount – Flat Roof EZ Tilt-Up System Components



## Tilt Leg Rail

SunModo offers a variety of sizes and sells length by the inch. You can also buy a 10' piece for self cutting on site.



Part Number	Description
A20011-XXX	XX" Square 33mm Aluminum Rail
A20011-120	120" Square 33mm Aluminum Rail

## Adjustable Tilt Leg Kit

Each Tilt Leg assembly comes with a telescoping square aluminum rail, outer sleeve, and all the necessary hardware.



Part Number	Description
K10043-012	Adjustable Tilt Leg Kit, 13" to 21"
K10043-020	Adjustable Tilt Leg Kit, 21" to 37"

# ***EZ SunBeam System***

***Maximizes Roof Space***



***Roof & Ground Mount***



***Light Weight & Tough***



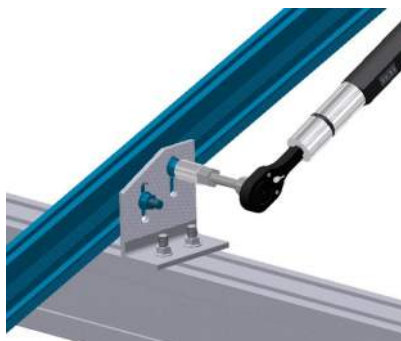
# **EZ SunBeam System Overview (Roof Mount)**

The EZ 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, EZ 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.

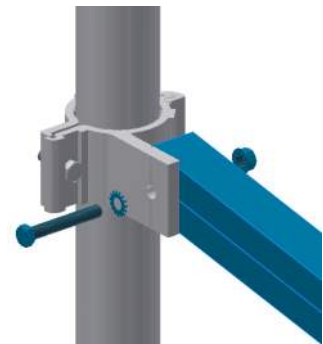
A heavy duty beam allows longer spans, which reduces the number of posts. This system can be easily adjusted to account for the multiple roof pitches on the site and is capable to withstand 150 MPH wind.



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.*

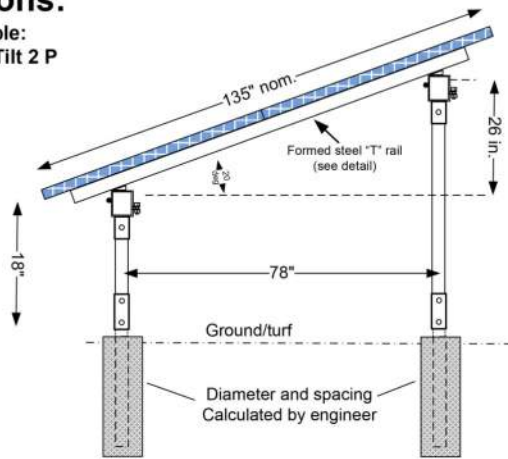
# EZ SunBeam System Overview (Ground Mount)

The EZ 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.

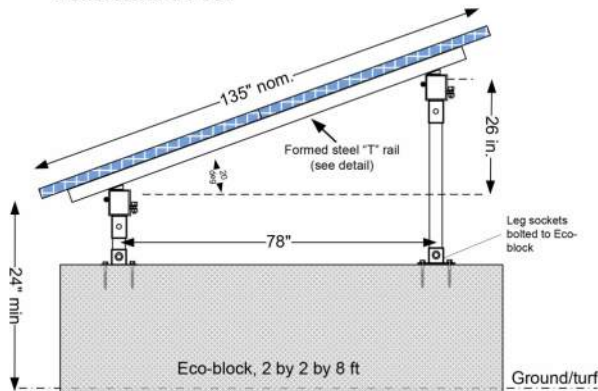


## Mounting Options:

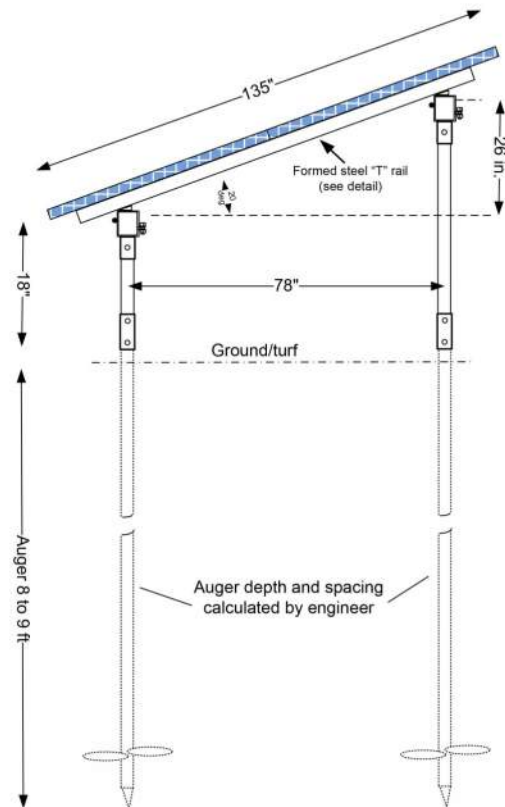
Sample:  
20 deg, Tilt 2 P



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.



Part Number	Description
A20143-124	SB2500 (SunBeam), 3" x 4", 124" long
A20143-164	SB2500 (SunBeam), 3" x 4", 164" long
A20143-206	SB2500 (SunBeam), 3" x 4", 206" long
A20143-228	SB2500 (SunBeam), 3" x 4", 228" long

### **SB3500 (Triangular Beam)**

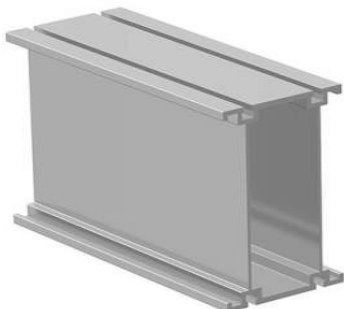
Super Heavy Duty SB3500 Triangular Beam can be used for longer spans up to 25 feet.



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 longer than 25 feet.



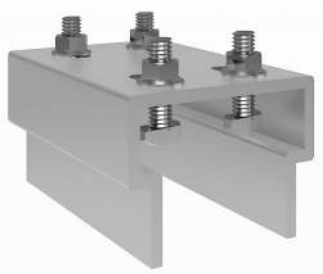
Part Number	Description
A20175-XXX	SB5000 (BoxBeam), 6" x 10.25"

# **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
<b>K10103-004</b>	<b>Angle Mount Kit</b>

### **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
<b>K10218-001</b>	<b>2" Pipe Cap Kit with Hex Cap Screws, Grounding</b>
<b>K10223-001</b>	<b>2.5" Pipe Cap Kit with Hex Cap Screws, Grounding</b>

### **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
<b>K10219-001</b>	<b>2" Pipe Clamp Kit with Hex Cap Screws, Grounding</b>
<b>K10222-001</b>	<b>2.5" Pipe Clamp Kit with Hex Cap Screws, Grounding</b>

# **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
<b>A20237-001</b>	<b>End Cap, SB2500 (SunBeam)</b>

### **SB3500 End Cap**

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



Part Number	Description
<b>A20261-001</b>	<b>End Cap, SB3500 (Triangular Beam)</b>

### **L-Foot Kit**

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



Part Number	Description
<b>K10066-010</b>	<b>L-Foot Kit with T-Bolt and flange nut</b>



# **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 206".



Part Number	Description
A20189-206	2" Al Post
A20209-206	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
<b>A21022-288</b>	<b>XX" 2"x 13 ga (nominal), High Strength Steel Tube, Galvanized</b>
<b>A20254-288</b>	<b>XX" 2.5"x 13 ga (nominal), High Strength Steel Tube, Galvanized</b>

### **Anchor Extension**

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



Part Number	Description
<b>A21022-036</b>	<b>36" Anchor extension</b>

# 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
K10267-001	Folded Triangular Awning Kit

# Tool

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

## Roof Shoe Extraction Tool

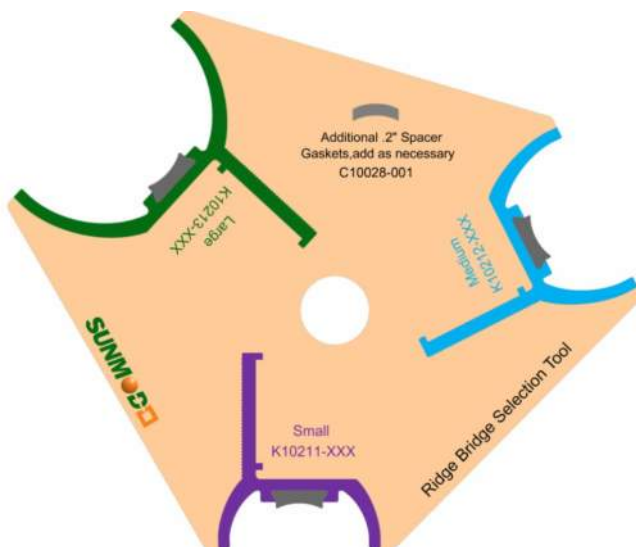
The roof shoe extraction tool is used for easy removal of the EZ Roof Mount Roof Shoe.



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.



Additional  
Spacer  
Gage

Select leg  
spacing,  
then add  
spacers as  
necessary  
to close gap

1. C10028-001
2. C10028-001
3. C10028-001

Part Number	Description
A50011-001	RidgeBridge Mount Selection Tool



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**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.