SUNMODO®

Catalog

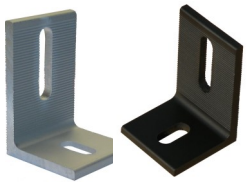
Mounts

Racking

Rail

Clamps

L-Feet



Systems

Pub. C10001-V003

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On behalf of our organization, thank you for considering SunModo Corporation 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

Contact Information

Phone: 1-360-844-0048
Fax: 1-503-863-3878
General: info@sunmodo.com
Sales: sales@sunmodo.com
Website: www.sunmodo.com

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

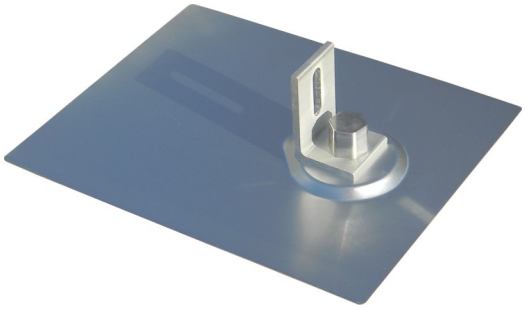
Standoff

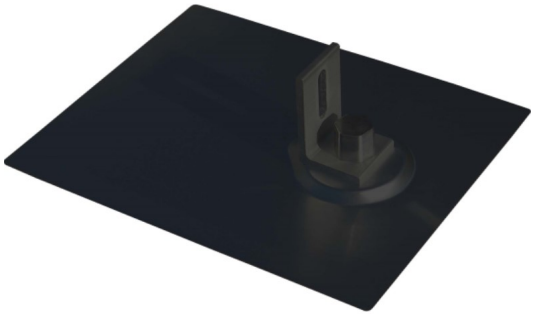
Metal Roofs

Roof Attachment — Composite Shingle

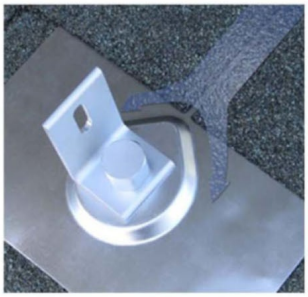
EZ Roof Mount Kit w/ L-Foot

The EZ Roof Mount Kit with L-Foot for shingle roofs, exceeds the competition in quality, reliability and price. The kit has been certified under IAPMO ES for 100% compliance with International Building Code (IBC), International Residential Code (IRC) as well as watertight compliance UL 441 criteria. It 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.

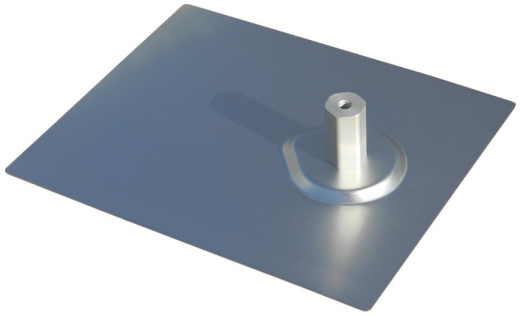
Available in black anodized.

C Bracket

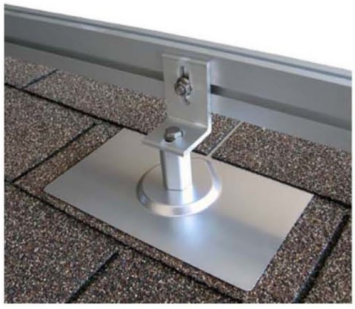
Part Number	Description
K10068-001	EZ Roof Mount Kit w/ L-Foot, Clear, Rafter
K10068-BK1	EZ Roof Mount Kit w/ L-Foot, Black, Rafter
K10068-020	EZ Roof Mount Kit w/ L-Foot, Clear, Decking
K10068-B20	EZ Roof Mount Kit w/ L-Foot, Black, Decking
K10068-002	EZ Roof Mount Kit w/ Tall L-Foot, Clear
K10068-BK2	EZ Roof Mount Kit w/ Tall L-Foot, Black
K10068-003	EZ Roof Mount Kit w/ L-Foot, 18” Flashing, Clear
K10068-BK3	EZ Roof Mount Kit w/ L-Foot, 18” Flashing, Black
K12005-001	EZ Roof Mount Kit w/ 2” C Bracket

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

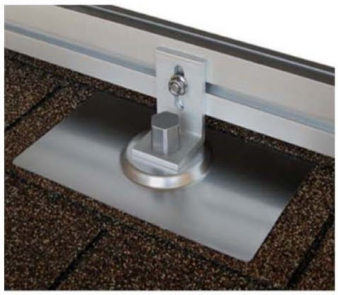
The EZ Roof Mount Kit with Standoff for shingle roofs, exceeds the competition in quality, reliability and price. This kit includes one flashing, one versatile aluminum base designed for multiple configurations, one standoff of your chosen size and all hardware. 18" size flashing also available. U.S. Patent Number 8,122,648



Perfect for top mounting rail.



Add a L Foot for side mounting rails.



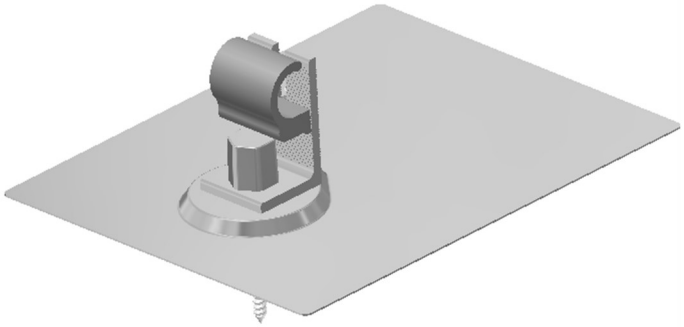
L Foot version available.

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

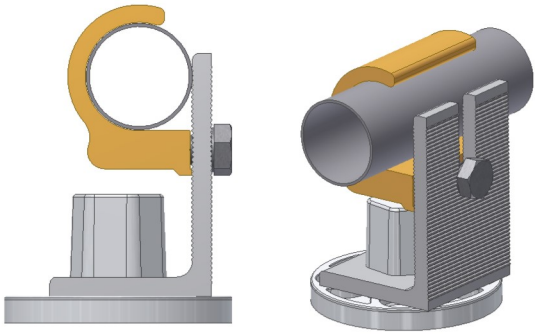
The EZ Roof Mount Kit w/ Conduit Clamp provides a quick and easy way to manage 3/4” and 1” diameter conduit on composition shingle roof tops.

This kit includes one flashing, one versa-tile aluminum base designed for multi-ple 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
K10205-BK1	EZ Roof Conduit Mount Kit, 1" Conduit, Black
A20212-001	1" Conduit Clamp
K10205-002	EZ Roof Conduit Mount Kit, 3/4" Conduit, Clear
K10205-BK2	EZ Roof Conduit Mount Kit, 3/4" Conduit, Black
A20213-001	3/4" Conduit Clamp

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

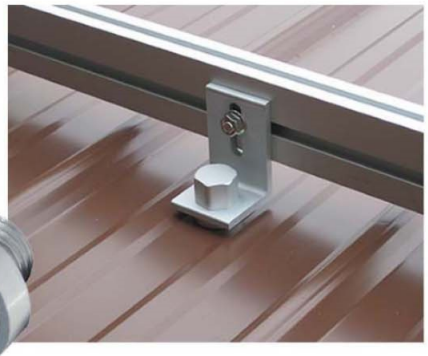
With few components and single penetration, the EZ Metal Roof Mount Kit with L-Foot allows for fast installation. Secures tightly into wood beams. Please talk to a sales rep for the right application.

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

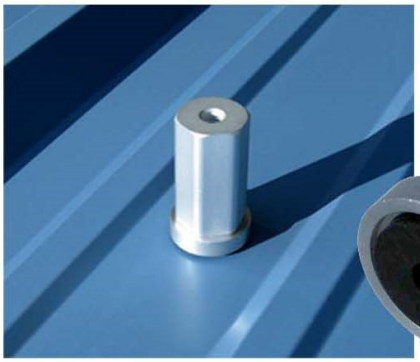
Roof Attachment — Metal

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.

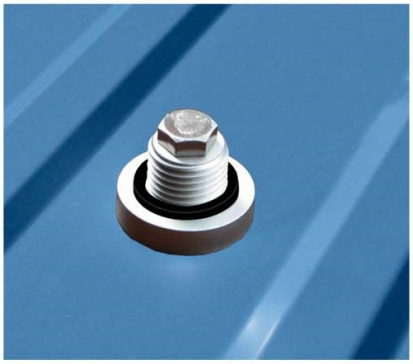
The kit includes one EZ Metal Roof Shoe with a thick EPDM gasket for a water tight seal, one standoff (available in 2, 3, 5, and 7") and all hardware.

U.S. Patent Number 8,136,311



Thick EPDM gasket for superior water tight seal.

Solid aluminum standoff that comes in different lengths.



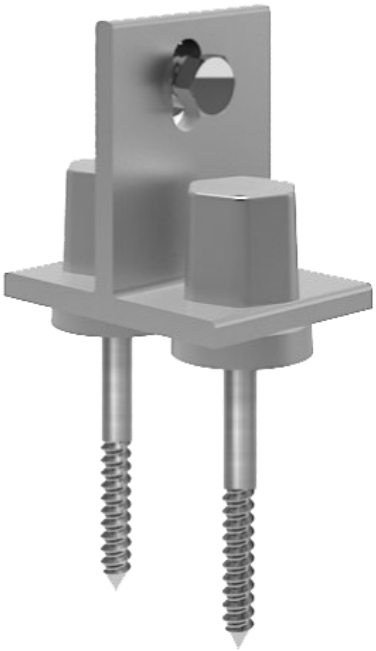
Single penetration mount

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-BK5	EZ Metal Roof Mount Kit w/ 5” Standoff, Black
K10064-007	EZ Metal Roof Mount Kit w/ 7” Standoff, Clear

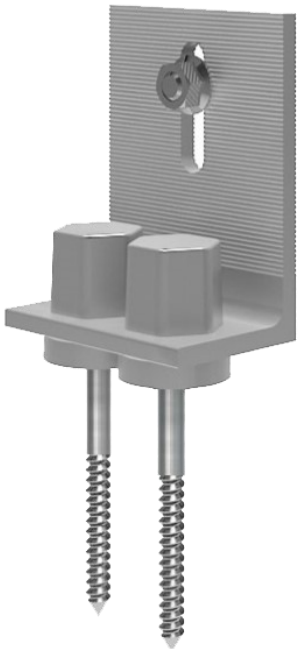
Roof Attachment — Metal
EZ Metal Roof Mount Kit w/ Two-Screw

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.



K10154-001



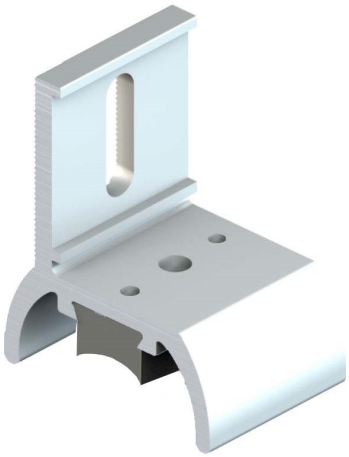
K10142-001

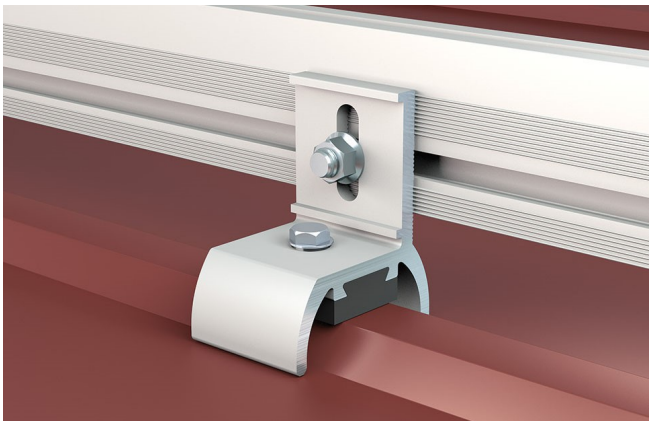
Part Number	Description
K10142-001	EZ Metal Roof Mount Kit w/Two-Screw, L-Foot
K10154-001	EZ Metal Roof Mount Kit w/Two-Screw, T-Foot

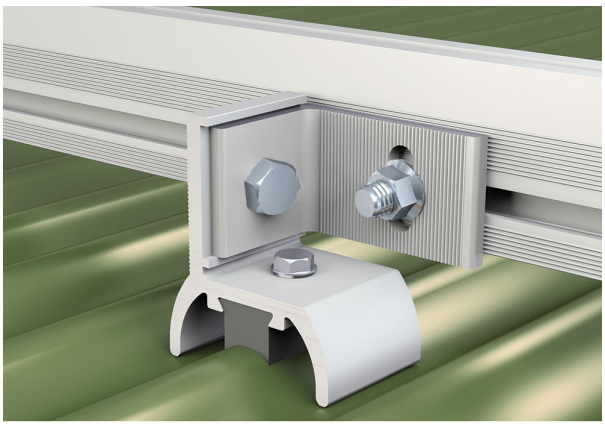
Roof Attachment — Metal
RidgeBridge Mount Kit

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".







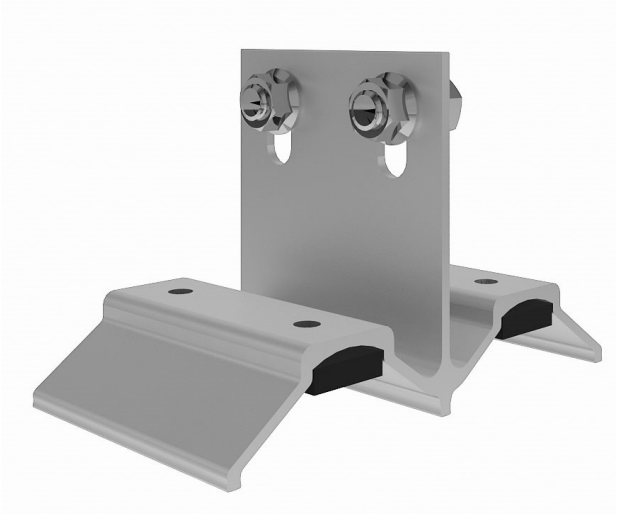
Part Number	Description
K10211-001	3/4 Pitch Height Ridge Bridge Mount Kit
K10212-001	1 Pitch Height Ridge Bridge Mount Kit
K10213-001	1-1/2Pitch Height Ridge Bridge Mount Kit
K10066-016	L-Adaptor Kit

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

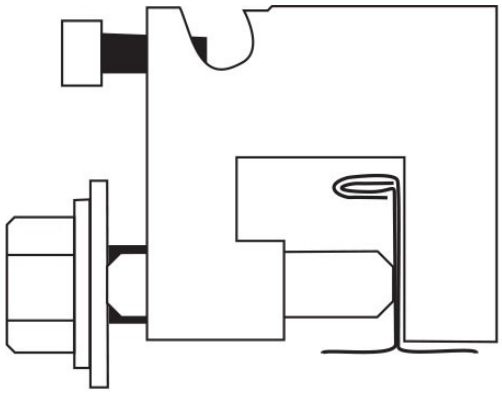
Part Number	Description
K12002-001	2-Screw Corrugated Roof Mount
K12003-001	4-Screw Corrugated Roof Mount

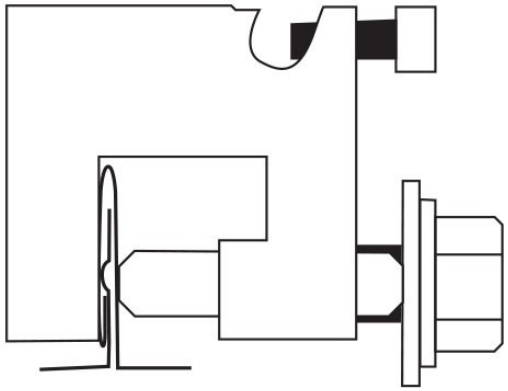
Roof Attachment — Standing Seam
Ace Clamp A2 Kit

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

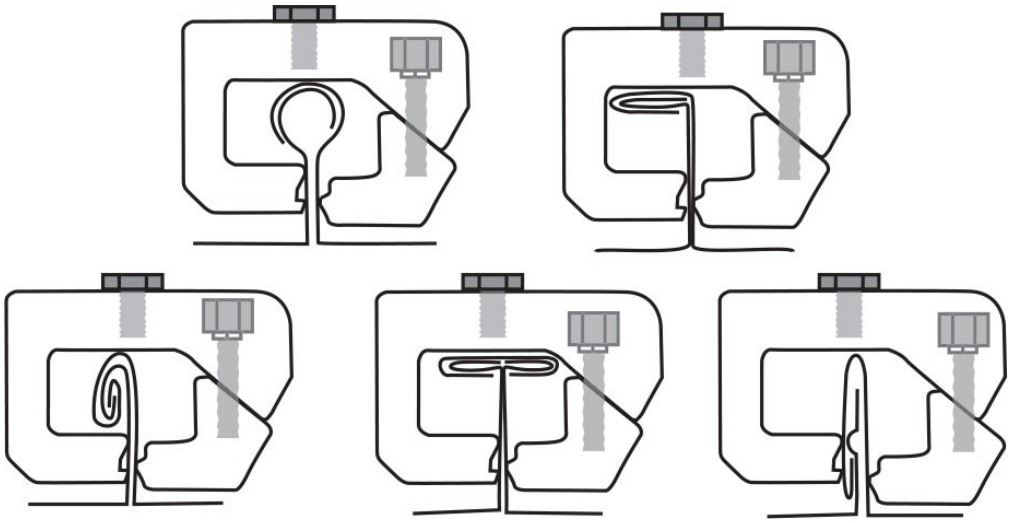
Part Number	Description
K12013-001	Standing Seam Ace Clamp A2 Kit

Roof Attachment — Standing Seam
Ace Clamp 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 — 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 roofing screws. 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

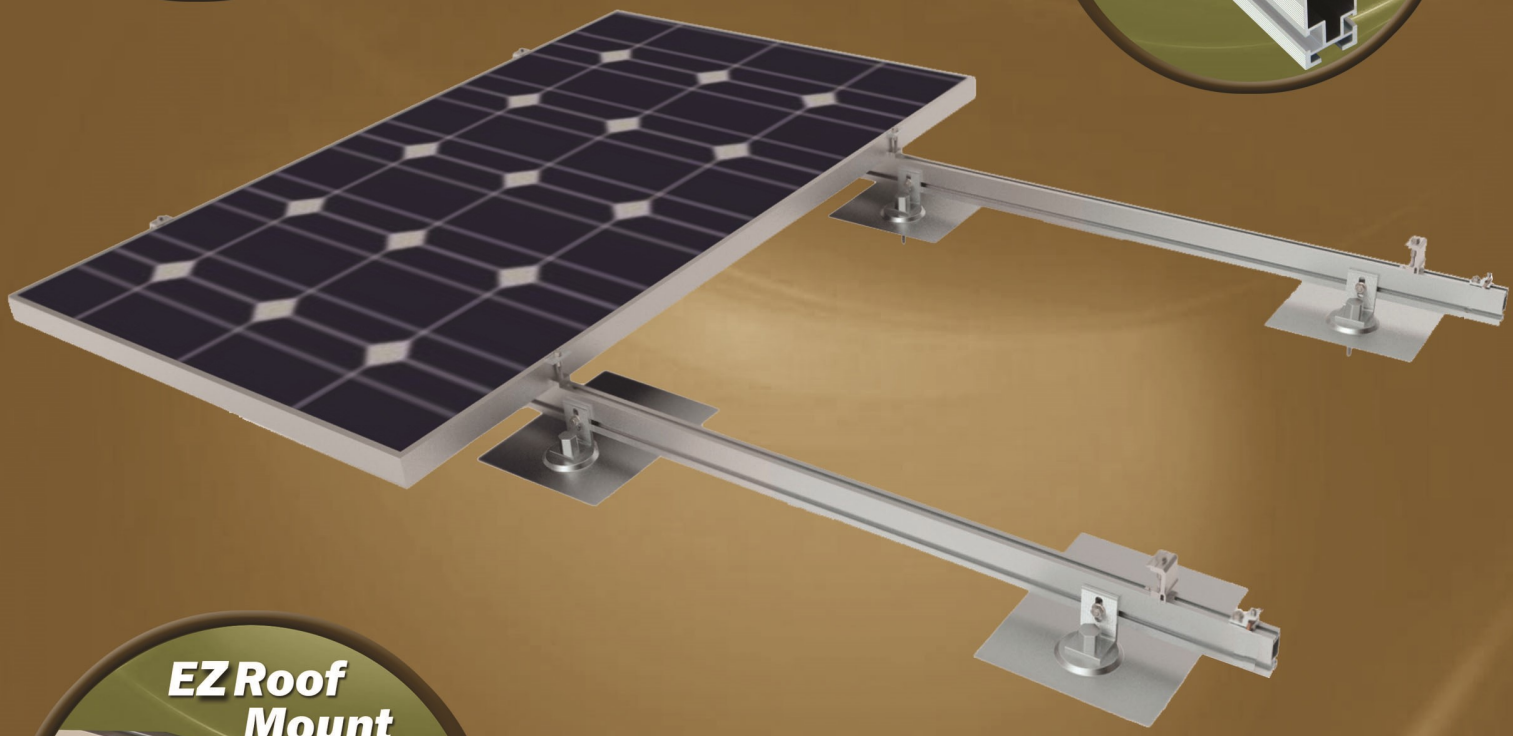
Pitched Roof System

Standard, Heavy or Super Rail, 4 standard lengths

Clamps

Grounding Clamps with unique built-in grounding pins

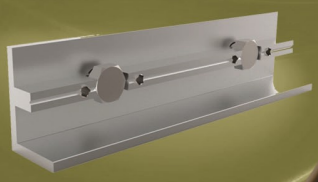
Rail



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

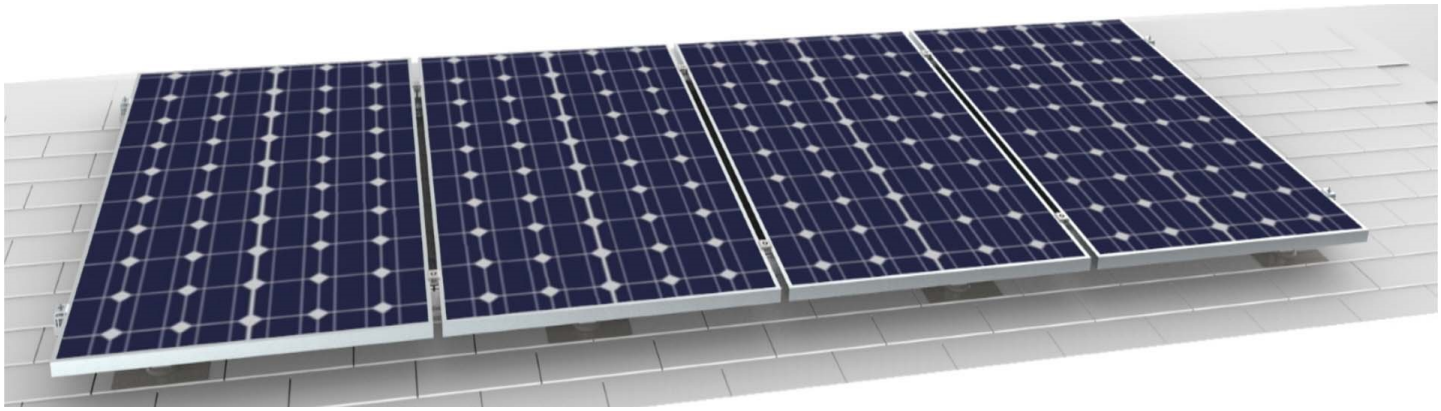
SUNMOD®

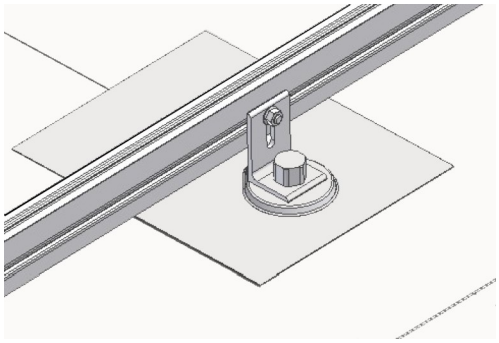
Roof Mount — Pitched Roof

EZ Roof Mount System Overview (Panel Portrait)

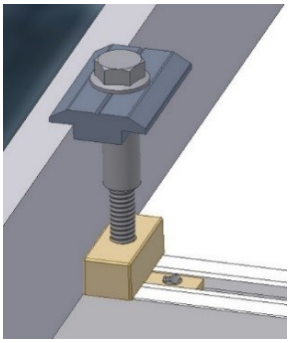
With a full range of components, SunModo's self-grounding pitched roof system can be configured in an endless variety of designs. In addition, SunModo offers a variety of mounts to best fit your system needs and requirements. The system is UL 2703 certified for electrical bonding, IBC for roof waterproofing, and IFC for roof system fire ratings.

U.S. Patent Number 9,076,899

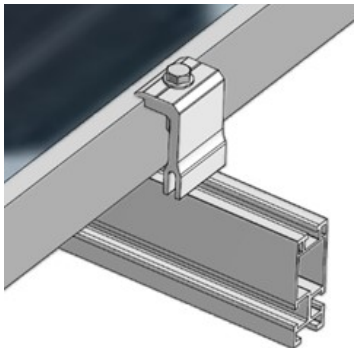




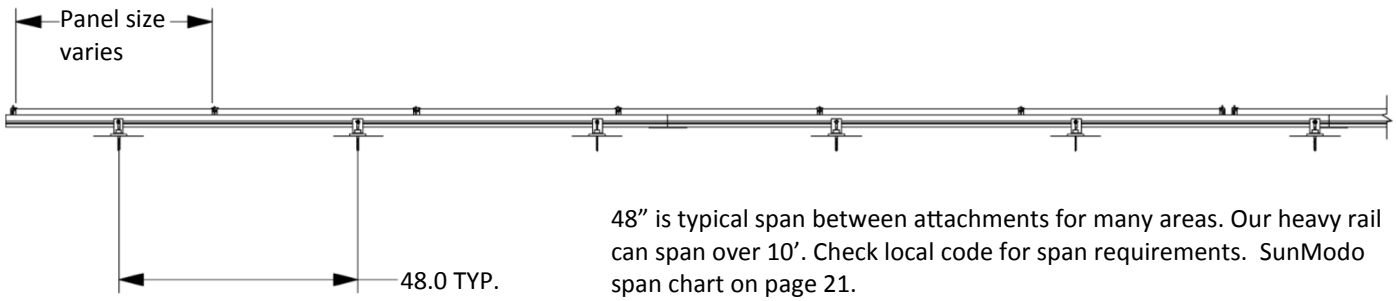
EZ Roof Mount to Rail. Variety of mounts available to best fit the system needs and requirements.
See our mounting selections starting page 3.



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.



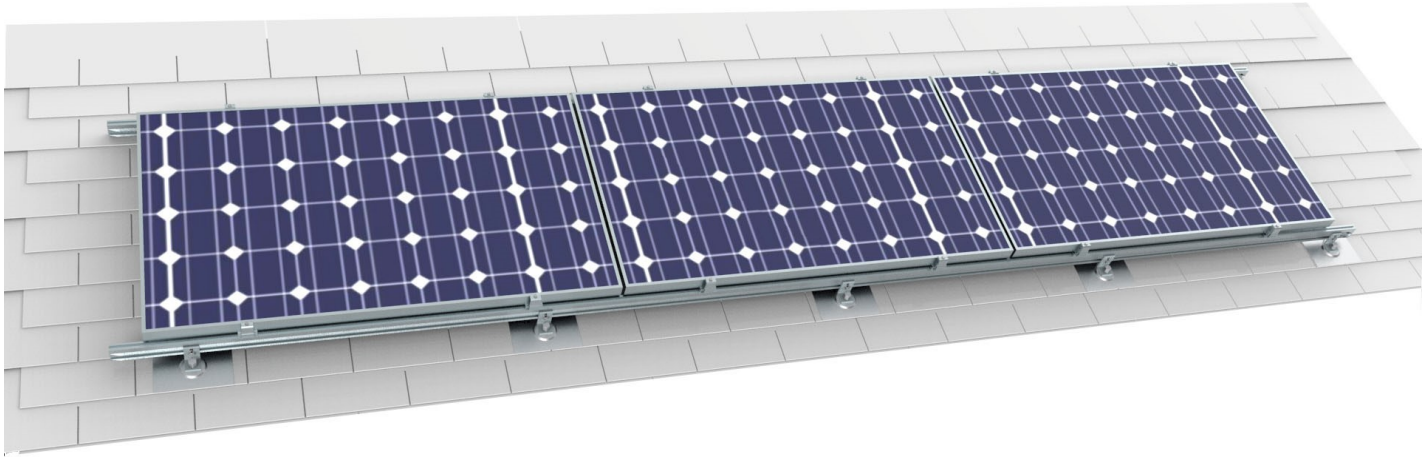
48" is typical span between attachments for many areas. Our heavy rail can span over 10'. Check local code for span requirements. SunModo span chart on page 21.

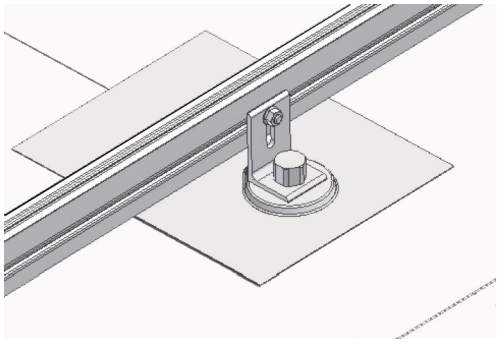
Roof Mount — Pitched Roof

EZ Roof Mount System Overview (Panel Landscape)

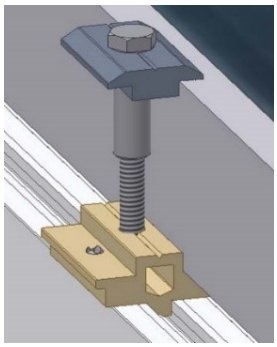
With a full range of components, SunModo's self-grounding pitched roof system can be configured in an endless variety of designs. The system conveniently accommodates landscape configuration to minimize roof time and parts required. The system is UL 2703 certified for electrical bonding, IBC for roof waterproofing, and IFC for roof system fire ratings.

U.S. Patent Number 9,076,899

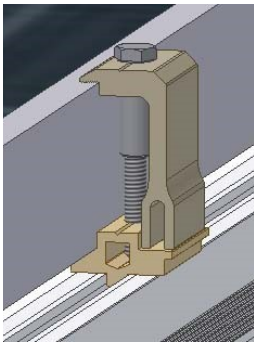




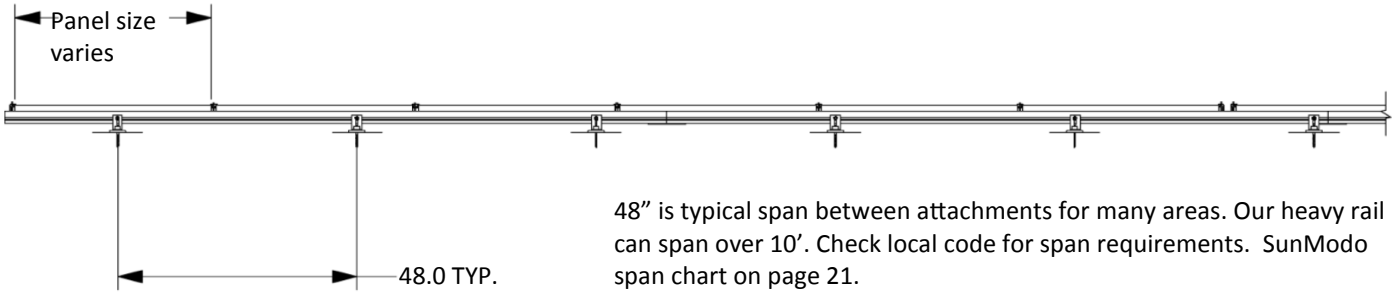
EZ Roof Mount to Rail. Variety of mounts available to best fit the system needs and requirements.
See our mounting selections starting page 3.



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.



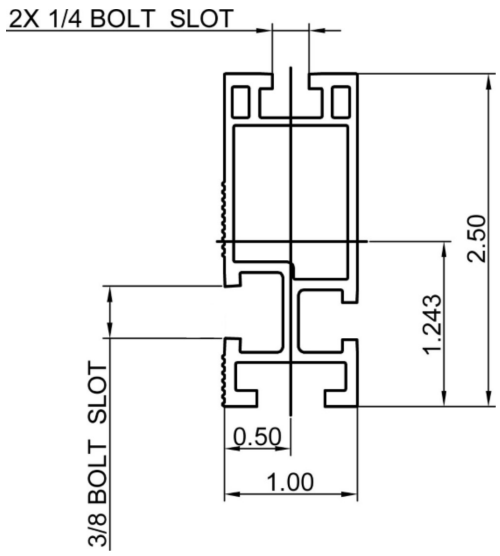
48" is typical span between attachments for many areas. Our heavy rail can span over 10'. Check local code for span requirements. SunModo span chart on page 21.

Helio Rails — Standard Rail

SunModo's Helio Standard Rail is a cost-effective rail especially designed for strength and versatility.
Calculated Span Chart on page 22

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 4 stock sizes in clear or black. SunModo Rail is extruded 6005-T5 aluminum with anodized coating for lasting aesthetics.



Part Number	Description	Length
A20144-084	Standard Rail 84", Clear	84"
A20144-124	Standard Rail 124", Clear	124"
A20144-164	Standard Rail 164", Clear	164"
A20144-206	Standard Rail 206", Clear	206"

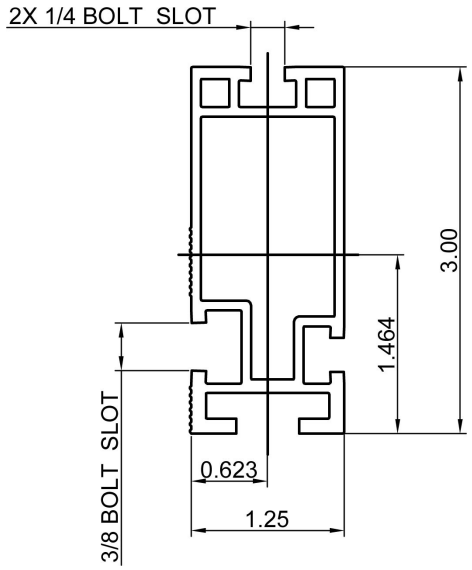
Part Number	Description	Length
A20144-084-BK	Standard Rail 84", Clear	84"
A20144-124-BK	Standard Rail 124", Clear	124"
A20144-164-BK	Standard Rail 164", Clear	164"
A20144-206-BK	Standard Rail 206", Clear	206"

Helio Rails — Heavy Rail

SunModo's Helio Heavy Rail is known for its heavy duty strength and spanning long distances between mounts.
Calculated Span Chart on page 22

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 4 stock sizes in clear or black. SunModo Rail is extruded 6005-T5 aluminum with anodized coating for lasting aesthetics.



Part Number	Description	Length
A20145-084	Heavy Rail 84", Clear	84"
A20145-124	Heavy Rail 124", Clear	124"
A20145-164	Heavy Rail 164", Clear	164"
A20145-206	Heavy Rail 206", Clear	206"

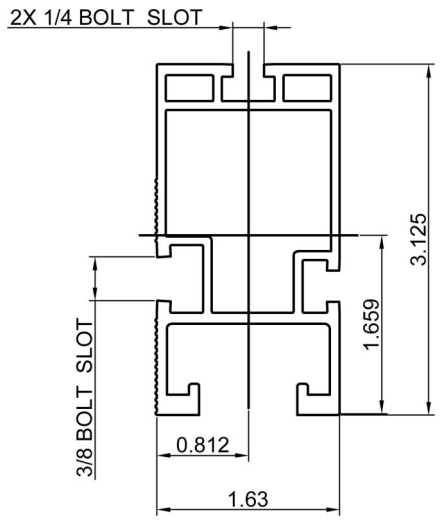
Part Number	Description	Length
A20145-084-BK	Heavy Rail 84", Clear	84"
A20145-124-BK	Heavy Rail 124", Clear	124"
A20145-164-BK	Heavy Rail 164", Clear	164"
A20145-206-BK	Heavy Rail 206", Clear	206"

Helio Rails — Super Rail

SunModo's Helio Super Rail is a high performance rail with super heavy duty strength and longest spanning distances between mounts among all new rails.
Calculated Span Chart on page 22

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 4 stock sizes in clear or black. SunModo Rail is extruded 6005-T5 aluminum with anodized coating for lasting aesthetics.



Part Number	Description	Length
A20146-084	Super Rail 84", Clear	84"
A20146-124	Super Rail 124", Clear	124"
A20146-164	Super Rail 164", Clear	164"
A20146-206	Super Rail 206", Clear	206"

Part Number	Description	Length
A20146-084-BK	Super Rail 84", Black	84"
A20146-124-BK	Super Rail 124", Black	124"
A20146-164-BK	Super Rail 164", Black	164"
A20146-206-BK	Super Rail 206", Black	206"

Helio Rail — Span Chart Notes

1. Calculations assume the following support conditions:

A) Two standard rails and two heavy rails are used to support modules perpendicular to the long edge of the modules.
B) The shared rail supports the modules parallel to the long edge of the modules.
C) Module size assumed as approximately 66" x 40" with approximate weight of 48LB.
D) Tributary width = 2.75' for standard and heavy rails, and 3.33' for shared rail.

2. The following load combinations are used:

A) D + W (controls in shaded area on left)
B) D + 0.75S + 0.75W (controls in un-shaded area)
C) D + S (controls in shaded area on right)

3. Rail section properties shown on Sunmodo drawings

A20144, A20145, A20146 and A20149.

4. Span lengths shown is:

Between support points. Simple span conservatively assumed for lengths over 4'6" and continuous span condition used for lengths 4'6" and under.

5. Allowable cantilever length past last support:

May be up to 1/3 the span shown in the table.

6. Wind and snow loads:

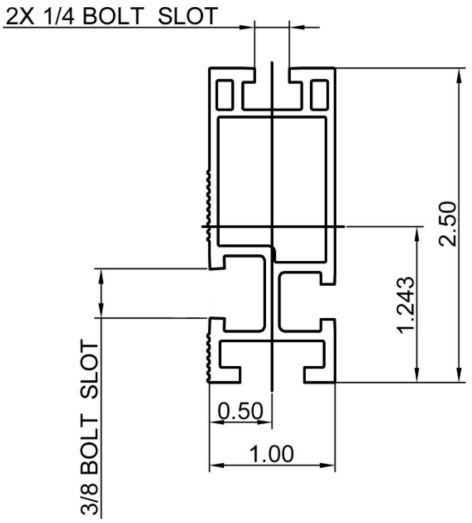
To be determined based on site specific and local code criteria.

Properties	Units	Standard Rail A20144	Heavy Rail A20145	Super Rail A20146
Material	N/A	Aluminum 6005-T5	Aluminum 6005-T5	Aluminum 6005-T5
Finish	N/A	Clear and Black	Clear and Black	Clear and Black
Approx. Weight (per linear ft)	plf	.850	1.143	1.388
Total Cross Section Area	in^2	.723	.973	1.182
Section Modulus (X—Axis)	in^3	.387	.683	.851
Section Modulus (Y—Axis)	in^3	.190	.333	.542
Moment of Inertia (X—Axis)	in^4	.486	1.049	1.412
Moment of Inertia (Y—Axis)	in^4	.095	.209	.443
Radius of Gyration (X—Axis)	in	.820	1.093	1.093
Radius of Gyration (Y—Axis)	in	.363	.612	.612

Helio Rail — Span Chart Notes

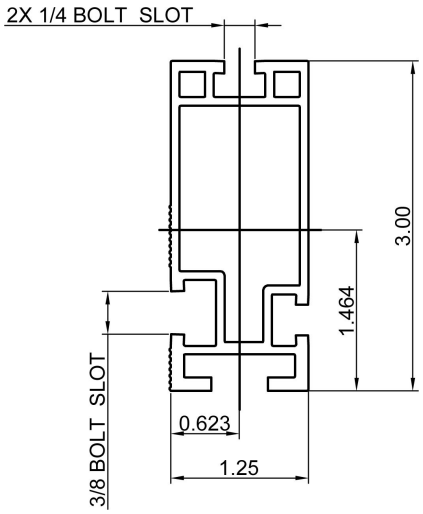
Helio Standard Rail A20144

Wind Load (psf) \ Snow Load (psf)	0	10	20	30	40	50	60	70	80
10	8' 9"	8' 0"	7' 3"	6' 9"	6' 0"	5' 3"	5' 0"	4' 6"	4' 3"
15	8' 0"	7' 9"	7' 0"	6' 6"	6' 0"	5' 3"	5' 0"	4' 6"	4' 3"
20	7' 6"	7' 3"	6' 9"	6' 3"	5' 9"	5' 3"	5' 0"	4' 6"	4' 3"
25	7' 3"	7' 0"	6' 6"	6' 0"	5' 6"	5' 0"	4' 9"	4' 6"	4' 3"
30	6' 9"	6' 9"	6' 3"	5' 9"	5' 3"	5' 0"	4' 9"	4' 6"	4' 3"
35	6' 3"	6' 3"	6' 0"	5' 6"	5' 0"	4' 9"	4' 6"	4' 3"	4' 0"
40	6' 0"	6' 0"	5' 9"	5' 3"	5' 0"	4' 9"	4' 6"	4' 3"	4' 0"
45	5' 9"	5' 9"	5' 6"	5' 0"	4' 9"	4' 6"	4' 3"	4' 0"	4' 0"
50	5' 3"	5' 3"	5' 3"	5' 0"	4' 9"	4' 6"	4' 3"	4' 0"	4' 0"
55	5' 0"	5' 0"	5' 0"	4' 9"	4' 6"	4' 3"	4' 0"	4' 0"	4' 0"
60	5' 0"	5' 0"	5' 0"	4' 9"	4' 6"	4' 3"	4' 0"	4' 0"	4' 0"
65	4' 9"	4' 9"	4' 9"	4' 6"	4' 3"	4' 0"	4' 0"	4' 0"	4' 0"
70	4' 6"	4' 6"	4' 6"	4' 6"	4' 3"	4' 0"	4' 0"	4' 0"	4' 0"
75	4' 6"	4' 6"	4' 6"	4' 3"	4' 0"	4' 0"	4' 0"	4' 0"	3' 9"
80	4' 3"	4' 3"	4' 3"	4' 3"	4' 0"	4' 0"	4' 0"	4' 0"	3' 9"



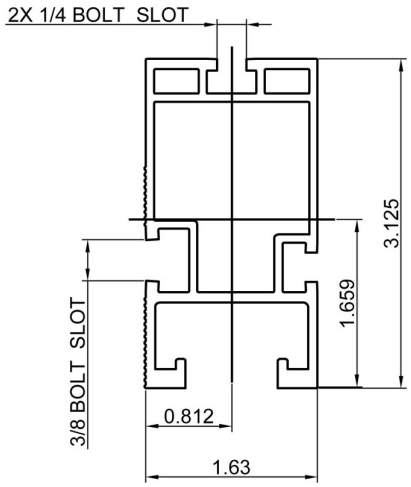
Helio Heavy Rail A20145

Wind Load (psf) \ Snow Load (psf)	0	10	20	30	40	50	60	70	80
10	10' 6"	9' 9"	9' 0"	8' 3"	7' 9"	7' 3"	6' 6"	6' 0"	5' 9"
15	9' 9"	9' 3"	8' 6"	8' 3"	7' 9"	7' 3"	6' 6"	6' 0"	5' 9"
20	9' 3"	9' 0"	8' 3"	8' 0"	7' 6"	7' 0"	6' 6"	6' 0"	5' 9"
25	8' 9"	8' 6"	8' 3"	7' 9"	7' 3"	6' 9"	6' 3"	6' 0"	5' 9"
30	8' 3"	8' 3"	8' 0"	7' 6"	7' 0"	6' 6"	6' 3"	6' 0"	5' 6"
35	8' 0"	8' 0"	7' 9"	7' 3"	6' 9"	6' 3"	6' 0"	5' 9"	5' 6"
40	7' 9"	7' 9"	7' 6"	7' 0"	6' 6"	6' 3"	6' 0"	5' 6"	5' 6"
45	7' 6"	7' 6"	7' 3"	6' 9"	6' 3"	6' 0"	5' 9"	5' 6"	5' 3"
50	7' 3"	7' 3"	7' 0"	6' 6"	6' 3"	6' 0"	5' 6"	5' 6"	5' 3"
55	6' 9"	6' 9"	6' 9"	6' 3"	6' 0"	5' 9"	5' 6"	5' 3"	5' 0"
60	6' 6"	6' 6"	6' 6"	6' 3"	6' 0"	5' 6"	5' 6"	5' 3"	5' 0"
65	6' 3"	6' 3"	6' 3"	6' 0"	5' 9"	5' 6"	5' 3"	5' 0"	5' 0"
70	6' 0"	6' 0"	6' 0"	6' 0"	5' 6"	5' 6"	5' 3"	5' 0"	4' 9"
75	6' 0"	6' 0"	6' 0"	5' 9"	5' 6"	5' 3"	5' 0"	5' 0"	4' 9"
80	5' 9"	5' 9"	5' 9"	5' 6"	5' 6"	5' 3"	5' 0"	4' 9"	4' 9"



Helio Super Rail A20146

Wind Load (psf) \ Snow Load (psf)	0	10	20	30	40	50	60	70	80
10	11' 6"	10' 6"	9' 6"	9' 0"	8' 6"	8' 0"	7' 3"	6' 9"	6' 3"
15	10' 6"	10' 0"	9' 3"	8' 9"	8' 3"	8' 0"	7' 3"	6' 9"	6' 3"
20	9' 9"	9' 6"	9' 0"	8' 6"	8' 3"	7' 9"	7' 3"	6' 9"	6' 3"
25	9' 6"	9' 3"	8' 9"	8' 3"	8' 0"	7' 6"	7' 0"	6' 9"	6' 3"
30	9' 0"	9' 0"	8' 6"	8' 3"	7' 9"	7' 3"	7' 0"	6' 6"	6' 3"
35	8' 9"	8' 9"	8' 3"	8' 0"	7' 6"	7' 0"	6' 9"	6' 6"	6' 3"
40	8' 6"	8' 6"	8' 3"	7' 9"	7' 3"	7' 0"	6' 6"	6' 3"	6' 0"
45	8' 3"	8' 3"	8' 0"	7' 6"	7' 0"	6' 9"	6' 6"	6' 3"	6' 0"
50	8' 0"	8' 0"	7' 9"	7' 3"	7' 0"	6' 6"	6' 3"	6' 0"	5' 9"
55	7' 9"	7' 9"	7' 6"	7' 0"	6' 9"	6' 6"	6' 3"	6' 0"	5' 9"
60	7' 3"	7' 3"	7' 3"	7' 0"	6' 6"	6' 3"	6' 0"	5' 9"	5' 6"
65	7' 0"	7' 0"	7' 0"	6' 9"	6' 6"	6' 3"	6' 0"	5' 9"	5' 6"
70	6' 9"	6' 9"	6' 9"	6' 6"	6' 3"	6' 0"	5' 9"	5' 6"	5' 6"
75	6' 6"	6' 6"	6' 6"	6' 6"	6' 3"	6' 0"	5' 9"	5' 6"	5' 3"
80	6' 3"	6' 3"	6' 3"	6' 3"	6' 0"	5' 9"	5' 6"	5' 6"	5' 3"



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

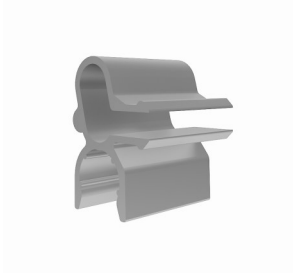
Rail End Caps

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

Part Number	Description
C10017-001	Helio Standard Rail End Cap, Black
C10021-001	Helio Heavy Rail End Cap, Black
C10017-001-GR	Helio Standard Rail End Cap, Grey
C10021-001-GR	Helio Heavy Rail End Cap, Grey

Cable Clip

Cable clips are compatible with Helio Rails.



Part Number	Description
A20162-001	Cable Clip

Grounding Clamp Kits
Portrait Orientation

Our self-grounding 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 clamp has a half inch spacing. U.S. Patent Number 9,097,8442

Grounding Mid Clamp Kit

Part Number	Description
K10180-125	Portrait 31-36mm Mid Clamp Kit 1.57” T-Bolt, Clear
K10180-157	Portrait 40-46mm Mid Clamp Kit 1.57” T-Bolt, Clear
K10180-210	Portrait 50mm Mid Clamp Kit 2.1” T-Bolt, Clear
K10180-125-BK	Portrait 31-36mm Mid Clamp Kit 1.25” T-Bolt, Black
K10180-157-BK	Portrait 40-46mm Mid Clamp Kit 1.57” T-Bolt, Black
K10180-210-BK	Portrait 50mm Mid Clamp Kit 2.1” T-Bolt, Black

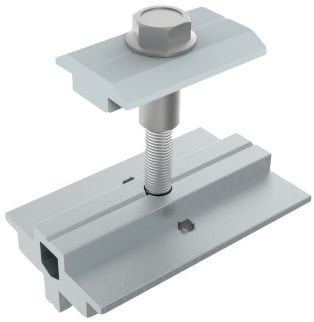
End Clamp Kit

Part Number	Description
K10224-0XX (31-50)	Portrait 31-50mm End Clamp Kit, Clear
K10224-BXX (31-50)	Portrait 31-50mm End Clamp Kit, Black

Grounding Clamp Kits
Landscape Orientation

Our system conveniently accommodates either portrait or landscape configuration to minimize roof time and parts required. The shared rail adaptor converts standard rail to shared rail to allow landscape mounting of PV panels on E-W rails. U.S. Patent Number 9,097,8442

Grounding Mid Clamp Kit



Part Number	Description
K10182-157	Landscape 31-40mm Mid Clamp Kit 1.57" T-Bolt
K10180-210	Landscape 42-50mm Mid Clamp Kit 2.10" T-Bolt
K10182-157-BK	Landscape 31-40mm Mid Clamp Kit 1.57" T-Bolt, Black
K10180-210-BK	Landscape 31-40mm Mid Clamp Kit 2.10" T-Bolt, Black

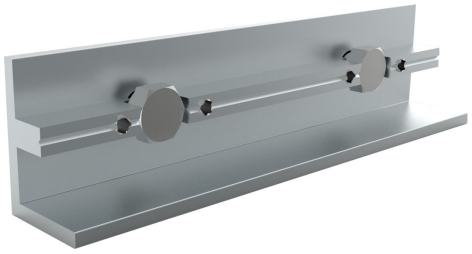
Grounding End Clamp Kit

Part Number	Description
K10183-0XX (31-50)	Landscape 31-50mm End Clamp Kit, Clear
K10183-BXX (31-50)	Landscape 31-50mm End Clamp Kit, Black

Grounding Rail Splices

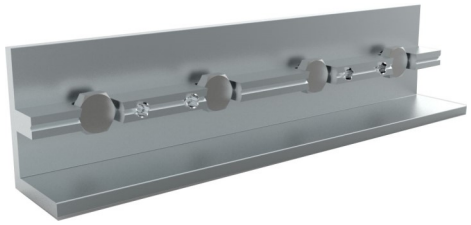
SunModo Rail Splices with unique built-in grounding pins deliver a stronger rack and a solid bond between rails. Available in Clear or Black.

Rail Splice Kit Attaching to 3/8" rail slot



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

Rail Splice Kit Attaching to 1/4" rail slot



Part Number	Description
K10177-001	Rail Splice Kit, 1/4 Inch Slot, Clear
K10177-BK1	Rail Splice Kit, 1/4 Inch Slot, 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
C10017-001	Self-Grounding Lug Kit

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

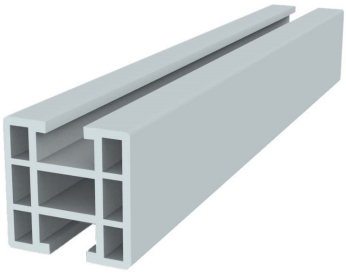
Part Number	Description
A20055-004	4" Top Mount Standoff
A20055-006	6" Top Mount Standoff
A20055-008	8" Top Mount Standoff

Tilt Leg Standoff

Part Number	Description
A20056-005	5" Tilt Leg Standoff
A20056-007	7" Tilt Leg Standoff
A20056-009	9" Tilt Leg 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

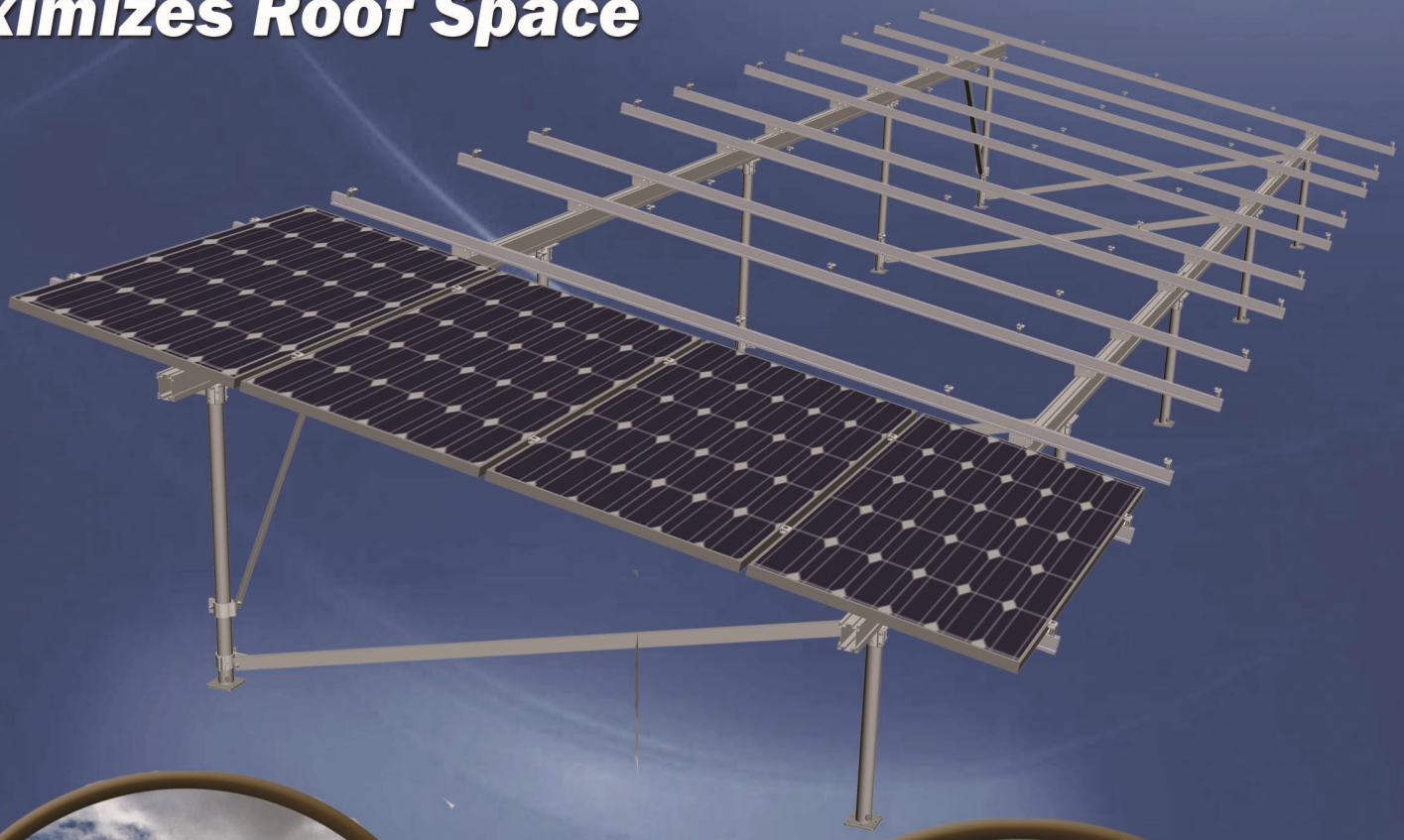
Adjustable Tilt Leg Kit

Each Adjustable Tilt Leg assembly comes with a telescoping square aluminum rail and 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

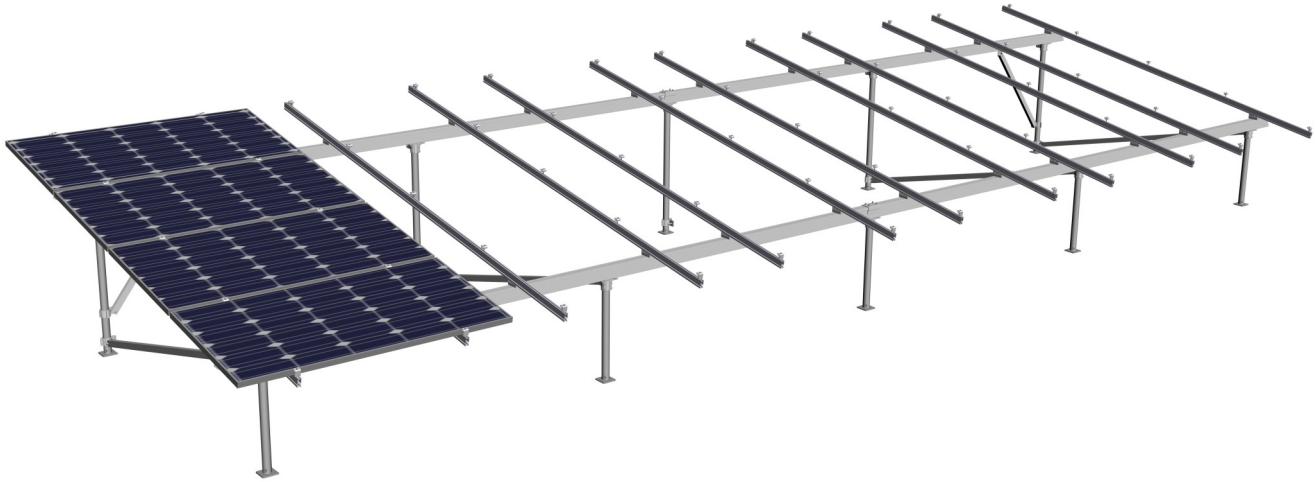
Light Weight & Tough

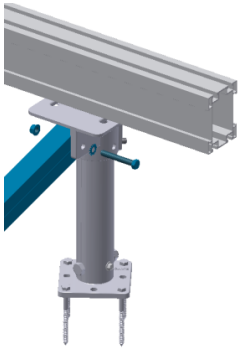
SUNMODO®

EZ SunBeam System
Overview (Roof Mount)

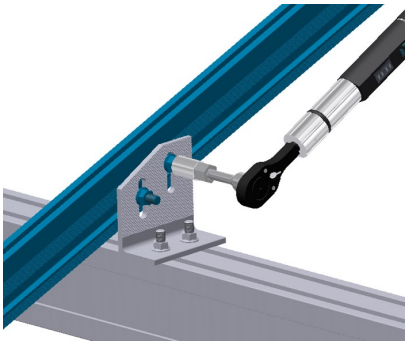
The EZ SunBeam system is robust, versatile, and specially engineered for multiple configurations. This system is perfect to elevate above obstructions like HVAC, Pipes and Vents. By spanning over obstacles, EZ SunBeam takes full advantage of roof space to maximize system size, increasing the return on 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.

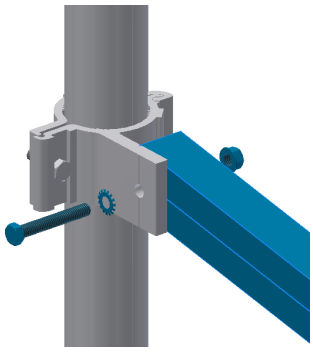




Install the SunBeam Rail on the Pipe Caps. ***See SunBeam are on page 31.***



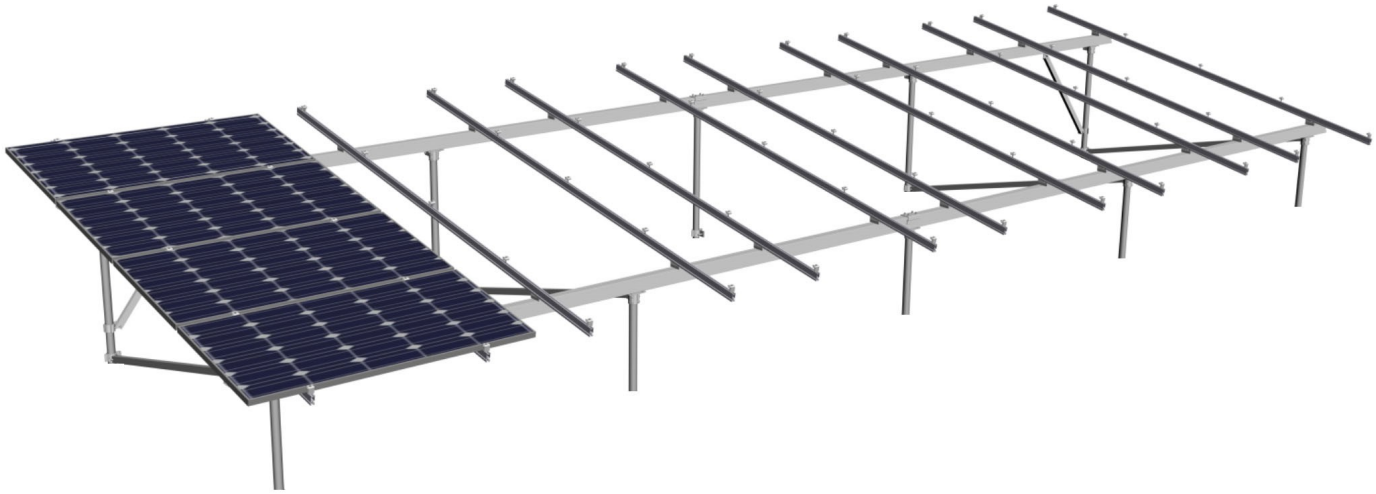
Install the Angle Mount to the top of the SunBeam using hardware supplied with the angel kit. ***See angle mount on page 33.***



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

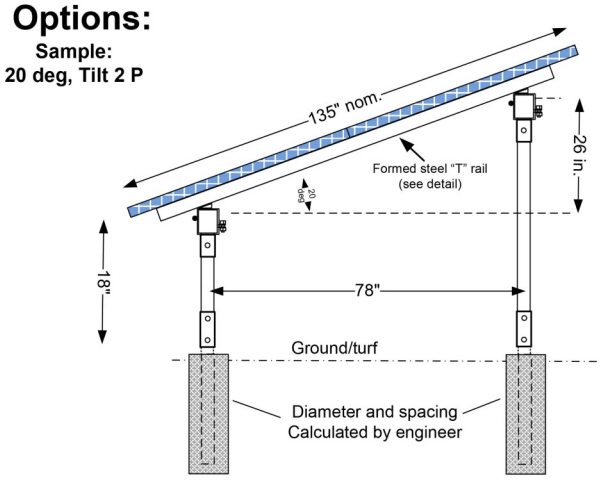
EZ SunBeam System
Overview (Ground Mount)

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.

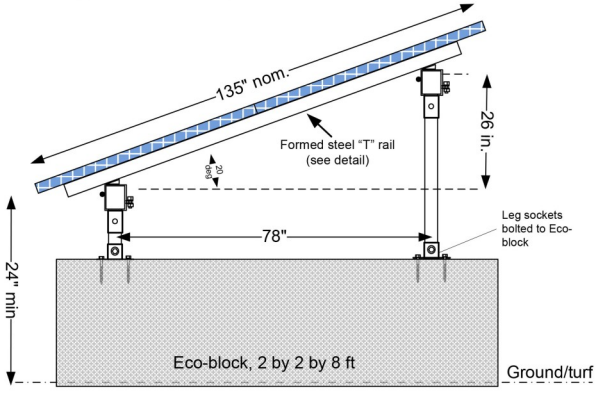


Mounting Options:

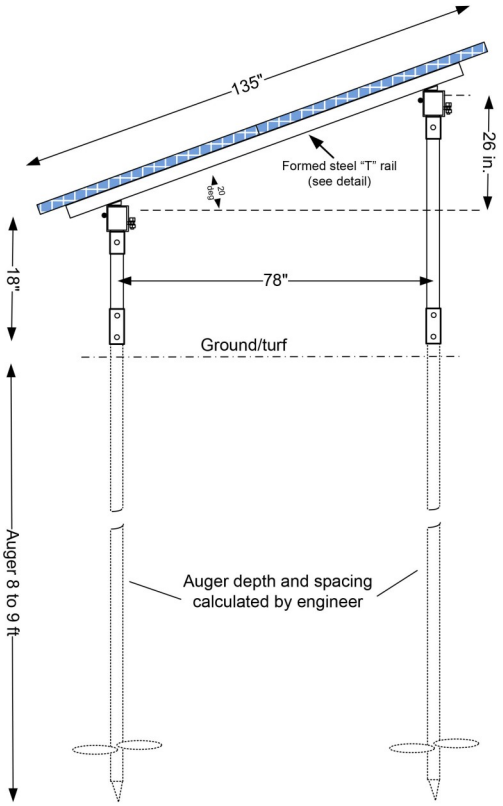
Sample:
20 deg, Tilt 2 P



Concrete and Post



Ballasted Ground Mount

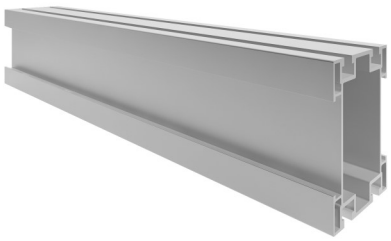


Auger Ground Mount

EZ SunBeam System
Universal Components (Roof & Ground Mount)

SunBeam

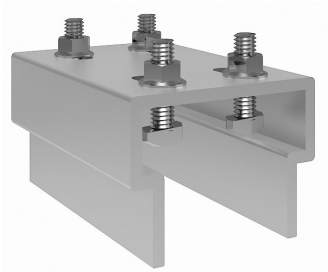
Heavy Duty SunBeam is strong and tough for wider spans.



Part Number	Description
A20143-124	SunBeam AL Rail, 124" long
A20143-164	SunBeam AL Rail, 164" long
A20143-206	SunBeam AL Rail, 206" long
A20143-228	SunBeam AL Rail, 228" long

SunBeam Splice Kit

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



Part Number	Description
K10104-001	SunBeam Splice Kit

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

EZ SunBeam System
Universal Components (Roof & Ground Mount)

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

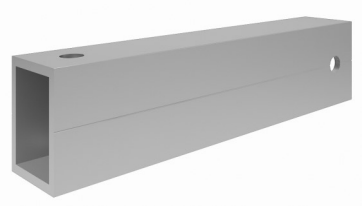
The powder coated cast aluminum 2 pieces clamps allows for quick installation of the braces, available in 2.0” and 2.5”.

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)

Diagonal Brace

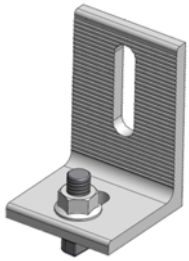
The diagonal brace provide extra support as needed.



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

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

SunBeam Cover

SunBeam cover (optional) provides a clean finished look to the system. Clear anodized.

Part Number	Description
A20237-001	SunBeam Cover

EZ SunBeam System
Specific Components (Roof Mount)

Post Base Kit

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

Part Number	Description
K10200-001	2.375" OD POST BASE PLATE, Grounding
K10200-002	2.875" OD POST BASE PLATE, Grounding

Aluminum Post

2” or 2.5” anodized aluminum schedule 10 post can be cut to various lengths for your array design.

Part Number	Description
A20189-XXX	Al Post, 2.375" OD
A20209-XXX	Al Post, 2.87" OD

EZ SunBeam System
Specific Components (Ground Mount)

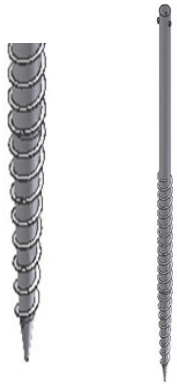
Helical Earth Anchors

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

Part Number	Description
A20194-084	10” Blade Anchor, 84” Long
A20194-063	10” Blade Anchor, 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
A20195-084	Screw Anchor, 84” Long
A20195-063	Screw Anchor, 63” Long

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
A21022-0XX	XX” High Strength Steel Tube 2X13, Galvanized

SUNMODO®

RACKING PARTNER OF PROFESSIONAL INSTALLERS

SunModo, Corp.
Vancouver, Wash., USA
www.sunmodo.com
360.844.0048
info@sunmodo.com

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.